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**The personal and social impact of men's sheds:
A realist investigation, review and synthesis**

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Abstract

Introduction: “Men’s Sheds” – environments where men spend time on utilitarian activities – are hailed as a health promotion exemplar. Despite the popularity of community-based sheds there is a paucity of robust evidence to evaluate assumptions that men’s sheds enhance health and wellbeing. This thesis examines three men’s sheds to explore “what characteristics of men’s sheds enhance the health and wellbeing of men, in what circumstances, how and why?”.

Methods: A realist inquiry framework investigated programmes within “Context”, to ask what “Mechanisms” are acting to produce which “Outcomes”; represented as *CMO configurations*. This involved four distinct stages: first, tacit knowledge of Public Health, men’s shed support agencies and literature were used to generate *initial* programme theories (*iPT*); second, *iPT* were explored with literature and refined with primary realist investigation data from three case studies to produce *refined* programme theories (*rPT*); third, *rPT* were tested using realist reviews to formulate realist syntheses and *tested* programme theories (*tPT*); finally, *tPT* were linked to middle-range theories. Data was analysed retroductively; an iterative process moving between primary and secondary data.

Findings: Three *tPT* explain which characteristics of men’s sheds enhance participant health and wellbeing, in what circumstances, how and why. **1. Organisational arrangements:** The strategic and operational leadership of men’s sheds influence the control participants exert on their men’s shed and on health-related behaviour. **2. Shed-based resources:** Men’s sheds offer a safe place for men with material, social and cognitive resources by which they can engage in meaningful occupation. **3. Human-based resources:** Social, cultural and economic capital is shared within men’s shed communities to enhance participant capital. Social capital includes *bonding* within groups and *bridging* out to other individuals and organisations. Participation in men’s sheds facilitates social interaction, social acceptance and the pooling and exchange of resources. These support participant health and wellbeing.

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Declaration

I, Steven Markham, confirm that the Thesis is my own work. I am aware of the University's Guidance on the Use of Unfair Means (www.sheffield.ac.uk/ssid/unfair-means). This work has not been previously presented for an award at this, or any other, university.

Acronyms and abbreviations

AIDS = Acquired Immune Deficiency Syndrome

BSA = British Sociological Association

CDW = Community Development Worker

CHD = Coronary Heart Disease

CMO = Context, Mechanism, Outcome

CMOc = Context, Mechanism, Outcome configuration

CVD = Cardiovascular Disease

dO = *distal* Outcome

GDPR = General Data Protection Regulation (2018)

HIV = Human Immunodeficiency Viruses

HRM = Human Resource Management

HSE = Health and Safety Executive

iPT = *initial* Programme Theory or *initial* Programme Theories

LEB = Life Expectancy at Birth

LMX = Leader-Member Exchange

MRT = Middle-Range Theory or Middle-Range Theories

NCDs = Noncommunicable Diseases

n.d. = no date

NEF = New Economics Foundation

NHS = National Health Service

OECD = Organisation for Economic Co-operation and Development

ONS = Office for National Statistics

PIS = Participant Information Sheet

pO = *proximal* Outcome

PT = Programme Theory or Programme Theories

RCT = Randomised Control Trial

rPT = *refined* Programme Theory or *refined* Programme Theories

SARS-CoV-2 = severe acute respiratory syndrome coronavirus 2

SExT = social exchange theory

SEfT = self-efficacy theory

SDT = self-determination theory

tPT = *tested* Programme Theory or *tested* Programme Theories

UK = United Kingdom

UREC = University Research Ethics Committee

USA = United States of America

WHO = World Health Organization

1) Introducing the thesis chapters, aims, objectives and “men’s sheds”

Chapter 1...

...explains why I have chosen to study men’s sheds. It demonstrates the sequence of the thesis chapters; featuring empirical research that exhibits original contributions to knowledge. This chapter concludes with the aims and objectives of the research and how and why I became interested in the social intervention men’s sheds (see below).

Chapter 2...

...provides the background context of men’s health and what influences social and health inequalities that many men experience. A brief discussion of social inequalities and their impacts on health leads to men’s health and sex differences relating to health outcomes. The chapter uses a social determinants of health model and the influence of social and community networks. This leads to an argument for social interventions to enhance men’s health and introduces a programme intervention: men’s sheds.

Chapter 3...

...is a short chapter introducing three *initial* programme theories (*iPTs*) gleaned from literature and knowledge of practice. These include: *iPT1* about the organisational arrangements of men’s sheds; *iPT2* about men’s sheds resources, and; *iPT3* about the people who participate in men’s sheds and the resources they might bring and enhance. This chapter foregrounds both the literature review (Chapter 4) and the methodology chapter (Chapter 5) and choices made in the research design.

Chapter 4...

... updates scoping reviews on men's sheds and includes a systematic review of men's sheds impact on health and wellbeing since the last replicable review of men's sheds was undertaken. This aims to understand the evidence base relating to possible health and wellbeing impacts of men's sheds and to explore what is known about the initial programme theories generated in the preceding mini-chapter (Chapter 3).

Chapter 5...

...explains the cycle of realist inquiry and data generation methods used within the Realist methodology. The methodology begins with the research purpose, question and objectives. The research design, developed to produce the question-led research, covers the types of claims that can be made with a realist philosophy of science and explicates how these claims link to middle range theory. The pragmatics of the sampling strategy, research methods used within the realist case studies, and the chosen approach to analyses are also covered.

In addition to explaining what methodological choices were made, the chapter includes justifications for *not using* other research philosophies and methods, such as 'social RCTs'. The chapter ends by explaining how ethical practice, research governance and data management were achieved.

Chapter 6...

...concisely introduces three cases studies and relevant points about them. The case studies align to three different organisational arrangements of men's sheds which relates to the first *initial* programme theory (iPT1).

Chapter 7...

...takes the first *initial* programme theory (*iPT1*) about leadership and organisational arrangements, and develops *iPT1* into a fully developed *refined* programme theory (*rPT1*) represented as a context, mechanism, outcome configuration (CMOc). This is then tested using secondary data from a realist review to form a *tested* programme theory (*tPT*).

Chapter 8...

...uses *iPT2* about men's sheds as spaces for men and the resources they might provide. The chapter progresses this naïve explanation into *rPT2* and a CMOc. Literature is used to test and further develop the CMOc into *tPT2*.

Chapter 9...

...develops the final *initial* programme theory (*iPT3*) about the people who participate in men's sheds and the resources they might bring and enhance. This theory is refined into a fully developed CMOc in *rPT3*. This *rPT*, as with the previous refined programme theories, is tested against literature to produce *tPT3*.

Chapter 10...

...identifies overarching middle-range theories (MRT) to support each of the *tPT* in the three preceding chapters. These MRT identify some theoretical links between the three *tPT*.

Chapter 11...

...synthesises the findings from chapters 7, 8 and 9, along with MRT in chapter 10, and explains how the processes undertaken have addressed the research question and what the findings mean. The chapter goes on to discuss the quality of the research and analytical methods used.

Chapter 12...

...is the concluding chapter explicating original contributions to knowledge and the limitations of the research. Plans for future research – based upon the grounding of this work – are outlined along with recommendations for other disciplines and research methodologies to address gaps in related literature.

Aims and objectives of this thesis

This PhD set out to understand:

- What characteristics of men's sheds enhance health and wellbeing, for whom, in what circumstances, how and why?

The research aim was developed to contribute evidence to address gaps identified in the body of men's sheds literature reviewed before the investigation took place. Literature claims men's sheds across the world enhance health and wellbeing. However, there is little understanding of how men's sheds might improve health or why men's sheds might achieve health and wellbeing maintenance or improvements.

Furthermore, there is a lack of clarity regarding the *organisational arrangements* of men's sheds. Additional information is needed to understand how *organisational arrangements* of grassroots (community-led) men's sheds and authoritarian (Public Health) led men's sheds impact beneficiary's health and wellbeing. Linked to this, there is a lack of information on how men's sheds are *funded* and the implications of funding streams. Information is required to assess how grassroots, 'community-led' men's sheds with limited funding compare to similar grassroots men's sheds that have received external funding; (perhaps) on conditions of monitoring and evaluating specific outputs or outcomes. Further to this, more knowledge is

needed regarding Public Health-led men's sheds and the implications of men's sheds being '*delivered*' by health and social care providers.

Men's sheds, irrespective of their strategic purpose, can be described as 'social interventions'. The social world is complex and so the methodological approach of realist inquiry was chosen to unpick the complexity of the social intervention: men's sheds. Underpinned by a realist philosophy of science, the overarching approach was to develop explanatory programme theories about the impacts of men's shed on beneficiary's health and wellbeing. Realist methodology facilitates an unpacking of social interventions by developing context, mechanism, outcome configurations; theorising how and why interventions interact with specific circumstances to produce outcomes.

Realist research aims to resolve the underlying query: "What works, for whom, in what circumstances, how and why?" (Wong et al., 2013, p.2). In this investigation, the '*working*' element/s of men's sheds refers to the characteristics that enhance or diminish health and wellbeing. The '*who*' are the participants or beneficiaries of men's sheds. '*Circumstances*' refers to the specific contexts of the participants or beneficiaries. '*How*' ascertains the means or mechanisms by which the programme works. Finally, '*why*' gives a reason, or reasons, for programme outcomes.

Research objectives

To succeed in fulfilling the aim, and develop explanatory programme theories, the following objectives were set:

- 1) to examine the setup and implementation of men's sheds to determine whether there are health and wellbeing enhancing characteristics relating to: i) Public Health-led men's sheds; ii) Community-led men's shed, and; iii) Hybrid – community-led, yet financially supported – men's sheds;

- 2) to understand how the circumstances of those who attend led to men's shed participation;
- 3) to establish the characteristics of men's sheds that are associated with improved or diminished health and wellbeing

The research objectives were set to consider the interaction between the complex social interventions (men's sheds) and how these alter the contextual circumstances of beneficiaries, which may trigger mechanisms that impact upon health and wellbeing outcomes.

Why research a social intervention for men?

Men's sheds are community spaces established by local government, charities or community groups for men to engage communally in activities such as woodwork and crafts (Ormsby et al., 2010). They can take the form of a free-standing building, a room in a community centre, or even industrial units, to accommodate joint activities. The spaces are similar to workshops that men often inhabited in traditional forms of employment, such as, joinery, fabrication and engineering.

When grouped by biological sex it is men, though rarely assumed to be the most disadvantaged social fraction in matters of inequality or social justice, that persistently suffer worse morbidity and live fewer years than women (White and Holmes, 2006; Wang et al., 2012; ONS, 2015b). Although there are biological influences that may contribute to this situation, the greatest risks to men's health are modifiable determinants that can be addressed through policy and practice (Courtenay, 2003).

This study seeks to understand whether communities of men might contribute to a reduction in health inequalities and work toward greater health equity. Communities might be able to support people to resist the effects of socially determined health inequalities, over which individuals, alone, often have negligible influence.

Men's sheds came to my attention in 2007, when I worked in a Public Health department as a Health Promotion Specialist. Setting up a community group for men was judged too progressive for the region I worked in and was not financially supported by the local National Health Service (NHS) based department. However, the idea of men working shoulder-to-shoulder, on utilitarian activities, for themselves or their local communities intrigued me. I was puzzled as to how such projects could be 'health promoting' interventions.

For my Masters in Social Research dissertation project, a colleague put me in touch with a men's shed in the Republic of Ireland, which fitted my interests in health promotion and men's health, along with mental, emotional and social health. My research found that the small community project enhanced previously diminished wellbeing by facilitating peer support between participants and supporting the meeting of emotional and social needs. This award-winning work impacted the men's shed movement with presentations at two men's sheds conferences, and helped convince the Rayne Foundation to finally support the work of an Age UK charity and a UK Men's Sheds Association project. Further to this, findings were presented at three academic conferences.

Literature suggests that men's sheds can have benefits for participant wellbeing. Men's sheds are worthy of study in order to assess if they are the health promotion exemplar they are claimed to be (Wilson and Cordier, 2013), and if so, how and why. In this doctoral research, I wanted to explore how men's sheds might alter the circumstances of participants. Who are these organisations benefitting, why are they producing positive acclaim and what beneficial aspects of these communities might be replicable in other contexts and for other communities? As a researcher, my overarching aim is to contribute to research required to support professionals in policy and practice wanting to impact upon the social determinants of health (CSDH, 2008) through empowerment and social change approaches (Ewles and Simnett, 2003). The research

in this thesis is sought by men's sheds associations and will contribute to the wider discipline of public health.

In 2017, when this investigation was initially proposed, it seemed a particularly pertinent time for researching community approaches to reducing health inequalities. In the following year it was predicted that the UK was at 'peak inequality' in health, wealth, housing, voting and education, and that the tide was due to turn towards a more equitable future (Dorling, 2018). Few could have predicted the 'syndemic pandemic' where the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) swept across the world interacting with, and exacerbating, existing social and economic inequalities (Bambra et al., 2020, p.964; Horton, 2020).

Despite the interruptions and challenges brought about by SARS-CoV-2 to the research sites and the research design, this study has produced evidence of the changing circumstances and social processes in and around the men's shed movement that impact upon the health and wellbeing of participants. Furthermore, whilst focusing on the health of men, this research more broadly aimed to understand community-based social processes that can support general health and wellbeing, including direct and indirect application to people who identify as women and/or non-binary.

Chapter summary

This brief introductory chapter summarises what can be expected in the following chapters of this thesis. It also states the aims and objectives of the research and gives initial reasons for why I am interested in the social intervention: men's sheds. The context in which the following research enters is presented in the next chapter (Chapter 2).

2) The context of men's health and determinants of men's health inequalities

Introduction

A plethora of factors determine human health and various inequalities impact the health of different populations. Drawing upon a social determinants of health model, this chapter will consider the impact of health determinants and discuss men's health and sex differences relating to health outcomes. An argument will be made for social interventions to enhance men's health. Finally, "men's sheds", a community-based intervention, primarily supporting men and their wellbeing will be introduced.

What is 'health' and 'wellbeing'?

The nature of human beings has been of debate for longer than is ever likely to have been recorded. Human beings attempting to understand themselves, and other human beings, is one of the main scientific endeavours. For a human to be 'being' they must have their 'health'.

Health

'Health' is a ubiquitous and yet contested term (Tod & Hirst, 2014). The meanings given to the word are influenced by paradigms (Kuhn, 1970). It has been conceptualised that there are three *health paradigms* reflecting differing approaches to an *illness – health – wellbeing* continuum. The *biomedical paradigm* focuses on physiological and psychological disease; the *behavioural paradigm* centres on changes to individual's behaviours through education and skills training, and; the *social paradigm* concerns itself with the social constructs and determinants of health (Taylor et al., 2014).

The World Health Organization's [sic] (WHO) definition of health as '...a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity' (1946, p.1) has been criticised for not considering other holistic dimensions of health. These can include emotional, sexual, spiritual, societal or environmental considerations (Warwick-Booth et al., 2012). Health can be viewed as an idealistic state that some believe is near impossible to attain (Ewles & Simnett, 2003). However, even the view of health as a 'state' has been criticised, as it has been conceptualised as a fluid capacity or part of a dynamic relationship (Warwick-Booth et al., 2012). This thesis will mainly use the social model of health where determinants of health are based on social factors which, it is acknowledged, can influence individual's choices and behaviours (Abel & Frohlich, 2012; Ewles & Simnett, 2003; Green et al., 2015; Naidoo & Wills, 2016). Indeed, *Public Health* has embraced a discourse that goes beyond 'health' and 'social care' or 'lifestyle factors' to encompass feelings of 'wellbeing' (Warwick-Booth et al., 2012).

Wellbeing

The concept of 'wellbeing' is subtly and yet fundamentally different to health and the way the term 'health' is often used. Wellbeing refers to a more holistic understanding of the dimensions of a human being characterised by health, happiness, and prosperity (Laverack, 2014). The holistic nature of wellbeing makes it challenging to describe and differentiate its components. Some authors believe it is futile to attempt to define health or wellbeing (Jadad & O'Grady, 2008). Green and colleagues (2015) refer to wellbeing as being a way to describe the positive dimensions of health. They also suggest that ill-health and wellbeing are not a part of a linear continuum but rather they 'co-exist'. When wellbeing has been discussed it tends to be associated with both interpersonal relationships and with wider social issues (Laverack, 2014). It features concepts such as self-efficacy and social inclusion and the ability people have to adapt to environmental circumstances (Walker and John, 2011). Relationships with family and

friends and the status people have in contexts like work, and their communities, are important to our wellbeing as they increase our sense of inclusion, connectedness and self-esteem (Laverack, 2015).

A conceptual definition of wellbeing is that it:

'...is a complex and dynamic process consisting of good functional and affective experience linked through various mechanisms, and situated within multiple layers of context [...with support of wellbeing likely needing] ...tailoring to individuals and the specific contexts with which they find themselves' (Rosselli et al., 2019, n.p.).

Over the last two decades there has been increasing interest in wellbeing. Linking wellbeing to the *social model* of health-related determinants, there are think-tanks and research organisations focusing on social and economic factors and influences on health and wellbeing (Aked et al., 2010; NEF, 2009; OECD, 2012). Although there is a persistent political narrative that Gross Domestic Product (GDP) is an indicator of population health and wellbeing, Dixey et al. note that academics and countries have keyed:

'...into the zeitgeist where hypercapitalism is being scrutinized [sic], and the claims that economic growth necessarily lead to 'development' and 'progress' are questioned' (2013, p.170).

This is effectively stating that wellbeing, and health, will not be maintained or improved by a country classified in the top ten largest global economies in the world. What is important is the equality and equity of the social and economic fortunes of populations within countries (Marmot & Wilkinson, 2006; Wilkinson & Pickett, 2010, 2018; Wilkinson, 2018). This leads to the need to discuss social inequalities and how they affect health.

Social inequalities and health

Succinctly, social injustice is killing people. Between the countries of India and the USA, average life expectancy at birth (LEB) can differ by up to 20 years (Marmot, 2015). However, differences in LEB are not only found by comparing countries. LEB differs by 20 years just

within the city of Baltimore, America (Marmot, 2015). In the UK – which since 1948 has had free at the point of access healthcare with the NHS – one London borough has an 18-year difference in LEB for males (ONS, 2015a). Furthermore, inequalities mean that males born in Richmond-upon-Thames have a healthy life expectancy of 72 years; 19 years longer than males born in Blackpool, where healthy life expectancy is only 53 years (ONS, 2019). In Glasgow, LEB has differed by as many as 28 years for men born less than ten miles apart (CSDH, 2008). If some people are expected to live for 82 years in one region of a city, how can others only be expected to live 54 years in another region of that same city? These are not isolated examples. There are LEB differences occurring across the world (Marmot, 2017; Marmot et al., 2020; Smith et al., 2018; White & Holmes, 2006). People living in the most deprived areas spend twice as many years in suboptimal health, and twice the proportion of their lives in poor health, compared to those living in least deprivation (Bajekal, 2005). Furthermore, declines in mortality have not been accompanied by declines in morbidity and so economically poorer people are living with diseases longer (Newton et al., 2015).

Such health inequalities provide aetiological clues; social and economic inequalities have considerable impact upon health and wellbeing (Marmot et al., 2008; Wilkinson, 2018). The World Health Organization's (WHO) 'Commission on Social Determinants of Health' (CSDH) state that dramatic improvements in health equity are achievable by addressing social determinants (CSDH, 2008). Social injustice is disempowering. Poverty and social disadvantage deprives people of control over their lives (Marmot, 2015b). This means that changes to social justice and capital resources could support a reduction of health inequalities.

Men's health and sex differences

Health data shows that there are specific differences between the morbidity and mortality of males and females (CDC, n.d.; ONS, 2021). The easiest way to conceptualise 'men's health'

is to make appropriate comparisons with ‘women’s health’; not by fuelling a ‘competing victim’ narrative (Oliffe, 2014), but by acknowledging that males are more likely to die across nearly all causes of death that should affect males and females equally (Etienne, 2019, cited in White & Tod, 2022; Heidelbaugh, 2016). Until the age of 75 years, men die before women in every age bracket (White, 2006); and men are expected to die younger (Galdas et al., 2005). Men suffer more chronic conditions topping the death rates for fifteen of the leading causes of death (White & Holmes, 2006), and die an average of four to seven years earlier than women (Bajekal, 2005; ONS, 2015b; Salomon et al., 2012).

Further to mortality and physical health, there has been an increase in mental health issues, particularly affecting men (Artazcoz et al., 2004; Mossakowski, 2009), and men are more likely to take their own lives (Antonakakis & Collins, 2014). As with the intersectional nature of health (Bowleg, 2012), the gendered health gap widens with increasing levels of deprivation (Bajekal, 2005; White & Banks, 2009).

Differences in premature mortality and sex, suggest that there could be biological reasons at play (Grumbach, 2004), but the differences relating to socioeconomic status demonstrate that determinants must also be psychological, social, and environmental. The human right of health, and men’s health, are not merely medical issues but societal issues (Marmot, 2017; White, 2006; Wilkinson & Marmot, 2003; World Health Organization, 1946). Importantly, the greatest risks to men’s health are modifiable determinants which can be addressed through policy and practice (Courtenay, 2003; Luy & Gast, 2014). It is, therefore, helpful to have a model of what determines health and wellbeing and to understand what determinants are modifiable.

A determinants of health model

One model used for conceptualising ‘determinants of health’ is proffered by Dahlgren and Whitehead (1991) in Figure 1 (below).

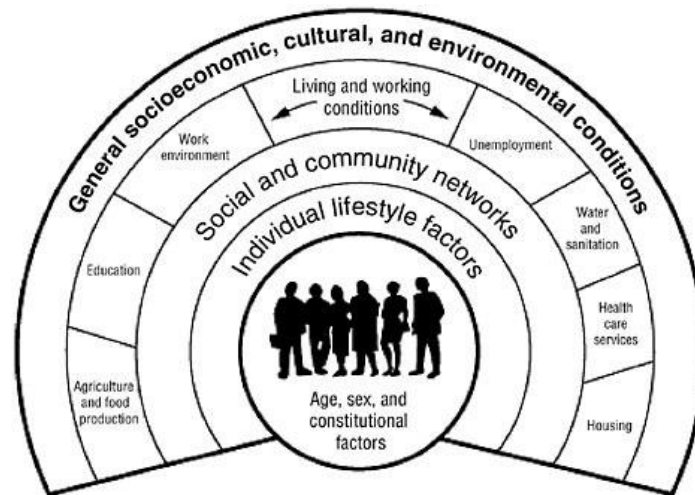


Figure 1: Determinants of health (Dahlgren and Whitehead, 1991, p.11)

The remainder of this chapter discusses facets of this determinants of health model to illustrate issues that men encounter in relation to health and wellbeing. However, this discussion will not go through the model sequentially. Rather, it will take a seemingly convoluted route that best suits the narrative of this thesis. First, the inner circle of *Age, sex and constitutional factors* will be addressed, followed by the most outer layer of *General socioeconomic, cultural and environmental conditions*. Then, the adjoining layer of *Living and working conditions* will be broached before jumping inwards a layer to discuss *Individual lifestyle factors*. Finally, *Social and community networks* will be covered, linking to a social intervention that is considered to be able to enhance men’s health: men’s sheds.

Age, sex and constitutional factors

The centre circle of Dahlgren and Whitehead's (1991) model considers biological factors. Being male, female or non-binary is a variable affecting health and illness throughout the life-course. Beyond diseases associated with reproduction, such as prostate and gynaecological cancers, men, for example, are less likely to develop autoimmune diseases (Kronzer et al., 2021; Ørstavik, 2017). However, women are protected against a range of killer diseases, such as, coronary heart disease (CHD) (Naftolin et al., 2019), cardiovascular disease (CVD) (Desai & Brinton, 2019) and cerebrovascular diseases (McCarthy & Raval, 2020), until post-menopause. Female health is also less affected by conditions such as obesity; men gain adipose tissue around the stomach which is more damaging to vital organs (Chang et al., 2018; Taubes, 2007).

Despite sex differences, biological reasoning cannot account for why in the year 2020, 17.5% of all male deaths occurred between 15 and 65 years in England and Wales, compared to 11.4% of female deaths (ONS, 2021). This is no isolated incidence. In America (2018), 30.4% of all male deaths occurred between 15 and 64 years, compared to 19% of female deaths (CDC, n.d.). These statistics are part of an epidemiological trend regarding men's mortality most prominently from noncommunicable diseases (NCDs) (Heidelbaugh, 2016). Men have a mortality rate four times greater than women due to external causes and it is estimated 36% of deaths in men are preventable, compared with 19% in women (Etienne, 2019, cited in White & Tod, 2022).

Furthermore, it is important to consider that the lives of both men and women can be severely affected by the health challenges faced by individual men. People rarely experience life in gendered isolation and are never the beneficiary of only one sex's input.

Identity, intersectionality and identity politics

Health is also affected by an individual's inherent characteristics beyond biological sex. Age, medical conditions, gender identity, race, sexual orientation and disability amongst other variables, all intersect to influence health and wellbeing (Scriven, 2017). More socially constructed factors include: relationships with family and friends, schooling, cultural upbringing, religion, beliefs, employment status and type, along with leisure activities. These all influence who we are, our psychology, and how we are perceived by others and our reactions to these perceptions (Davey, 2018; Giddens & Sutton, 2021).

Individual's composite identities and combinations of social categories intersect at micro, meso and macro levels and influence health and wellbeing (Bowleg, 2012). If a culture favours or discriminates based upon, for example, biological sex, an individual's identity will be favoured, or discriminated against, as a part of the cultural phenomenon. However, a focus on 'identity', categorising and stereotyping people based upon individual characteristics (Béland, 2017; Fukuyama, 2018; Moghadam, 2019), can create a narrative which virtually ignores socio-economic position, social class, and social and cultural capitals. Socially constructed factors all impact upon the control that people have, and perceive they have, over their own lives and, hence, their health.

Stereotypes of men suggest all men profit to consistent degrees from 'patriarchy'; social structures that are male-controlled. It is, however, recognised by some feminist writers that within what can be described as 'patriarchal societies', few men are the main benefices of this system (Kaufman, 1994; Oakley, 2015; Scott-Samuel et al., 2015). Indeed, more accurately many men, along with many women, are systematically dominated by other men and women (Coston & Kimmel, 2012; Walby, 1990). Yet, within identity politics discourse males are grouped together as one homogeneous group (Hearn & Collinson, 1994); with all males

perceived as the winners of societal structures and policies. Difference in outcomes in relation to social class, economic prosperity, and cultural and social capital are less acknowledged, as discussed by Hearn and Collinson (1994); Donaldson and Poynting (2004); Coston and Kimmel (2012); Walker and Roberts (2018).

Socioeconomic, cultural and environmental factors

Moving to the most outer layer of the determinants of health model, the facets cover general socioeconomic, cultural, and environmental circumstances. Social, economic and cultural processes can create, replicate and/or aggravate biological differences and those associated with the previous subsection covering 'identity'.

Economic culture

The economic system underpinning mechanisms of trade in the Western world is capitalism. In capitalist economies, the means of production are in private ownership and are exploited for profit (Marx, 1976). Characteristics central to capitalism include wages for labour, driven by competitive markets (Piketty, 2014).

Neoliberalism is a model of free market capitalism; dominant in the 'globalised' world from the 1970's. It favours *laissez-faire* economics, the deregulation of markets and the reduction of Governmental involvement in social and economic matters. Neoliberalism privileges increases in wealth (regardless of *for whom*), above human values such as equity and social justice (Robertson et al., 2018). These imperatives support and encourage socio-economic inequalities, blaming the poor and socially immobile for having failed to work hard enough to achieve economic and social goals; to live well and maintain age-related good health and wellbeing (Walker & Roberts, 2018). The gap between superrich elites and the poor has risen exponentially over the last 20 to 30 years (Cornia, 2004; Fuentes-Nieva & Galasso, 2014).

Health inequalities have risen with this widening financial inequity (Dorling, 2015; Wilkinson & Pickett, 2010). The necessities of this economic model impinge upon the determinants of health, as identified by Dahlgren and Whitehead (1991), and negatively affect distinct proportions of society (CSDH, 2008; Wilkinson, 2018). These inequalities affect men, their families and wider communities (Coston & Kimmel, 2012; Marmot & Wilkinson, 2006); along with everyone's health (Wilkinson & Pickett, 2010). Whilst acknowledging the peril of gender inequalities, and other inherent characteristics such as race, and how these intersect (Bowleg, 2012), Walker and Roberts observe that:

“...it is undeniable that working-class men have been *among* the losers of neoliberalism...because of the ways they have been exploited” (2018, pp.2-3, my italicisation).

Under the auspices of neo-liberalism is the tenet of ‘individualism’ (Foucault, 1991); the cultural trend favouring action for individuals over collective benefits and celebrating individual's economic, social and cultural capitals. It has been suggested that the internal focus to ‘the individual’, from the external focus of ‘the collective’, has led to more mental illness (Forget, 2011; Griffin & Tyrrell, 2013), along with less economic and social security (Daniels & McIlroy, 2009).

Social class

Within the neoliberalist regime, the economic position of the working-classes and particularly men has been transformed; with diminished social capital (Walker & Roberts, 2018). Traditionally skilled, semi-skilled and unskilled jobs, often undertaken by men, have changed remarkably. This particularly affects men, directly in terms of employment role and in how

they may or may not be able to earn a living. It also affects their families economically and in terms of how and when¹ families can interact.

As inequalities have widened (Dorling, 2019b; Hiam et al., 2020; Marmot et al., 2020; Piketty, 2014; Reich, 2020), and the spectrum on which people can be situated has exponentially expanded (Dorling, 2019a), the foci on ‘identity’ (Fukuyama, 2018) and ‘*the individual*’ has risen (Walker & Roberts, 2018). As such, it has been more challenging to defend older definitions of social class. This has made it more challenging to discuss social class and affects of being higher or lower on class spectrum rankings (Oesch, 2006). In the UK, the National Statistics Socio-Economic Classification (NS-SEC) model of class, based on Erikson-Goldthorpe-Portocarero (EGP)’s stratifications between employees and employers (Rose & Pevalin, 2002), is deemed outdated, lacking utility and not effectively capturing the role of social and cultural class divisions (Savage, 2015). There has, however, been new criteria outlined by Savage et al. (2013).

Drawing on Pierre Bourdieu’s theory of capital (Ainsley, 2018), academics used measures of economic, social and cultural capitals to theorise that there are seven categories of social class (Savage et al., 2013). In this research, ‘economic’ capital refers to household income, savings and value of owner-occupied housing; ‘social’ capital denotes knowing others in anyone of 37 different occupations to assess people’s range of social ties (Lin, 2001); ‘cultural’ capital signifies leisure interests, musical tastes, media use, and food preferences (based on the Cultural Capital and Social Exclusion survey by Bennett et al., 2009).

¹ Consider the Sunday Trading Act, (1994). , the normalisation of Sunday becoming *just another working day*. Also, the consequential reductions of pay for work conducted in formerly ‘unsociable’ hours (Kirby,1992; Richter, 1994).

The seven classifications of social class are conceptualised as: Elite; Established middle class; Technical middle class; New affluent workers; Traditional working-class; Emergent service workers; Precariat (Savage et al., 2013). The classification of these categories is described in the following table (Table 1).

	Economic Capital	Social Capital	Cultural Capital
Elite	Very high economic capital (especially savings)	High social capital	Very high highbrow cultural capital
Established middle class	High economic capital	High status of mean contacts	High highbrow and emerging cultural capital
Technical middle class	High economic capital	Very high mean social contacts, but relatively few contacts reported	Moderate cultural capital
New affluent workers	Moderately good economic capital	Moderately poor mean score of social contacts, though high range	Moderate highbrow, but good emerging cultural capital
Traditional working-class	Moderately good economic capital	Moderately poor mean score of social contacts, though high range	Moderate highbrow, but good emerging cultural capital
Emergent service workers	Moderately poor economic capital, though with reasonable household income	Moderate social contacts	High emerging (but low highbrow) cultural capital
Precariat	Poor economic capital	The lowest scores on every other criterion	

Table 1: Adapted from Savage et al. (2013, p.230), Table 5. Summary of social classes

In addition to economic inequalities (covered earlier in this section), inequalities in social and cultural capitals may disproportionately affect people (including men) within the lowest three social classes; what can be termed the ‘*new working class*’ (Ainsley, 2018).

Politics

Although not explicitly stated in Dahlgren and Whitehead's (1991) model, health is very much influenced by 'politics' and political choices (Ewles & Simnett, 2003; Green et al., 2015; Warwick-Booth et al., 2012). The causes of health inequities cannot be separated from the responsibility of the state to equitably distribute resources amongst the population. The UK political vogue of financial austerity (circa 2010 - to date) is a contributing factor to stalling and declining life expectancy (Hiam et al., 2018).

Culture

The discourse on the study of men seems to have all but forgotten that many men, whilst subjugated by, and subordinate to, external forces are continually positioned and judged by standards of elite men (Walker & Roberts, 2018); ignoring the conditions which contribute to power and its exercising. Cornwall, referring to Connell's (2005) work on men, globalization and imperialism, remarks that:

'for all that men... derive benefits from the patriarchal dividend, those embodying subordinate masculinities may suffer disproportionately the costs of existing gender regimes' (2016, p.9).

Men are not one homogeneous group and might be 'privileged' as men in one sphere and marginalised in other spheres: by class, race, sexuality or other arena (Coston & Kimmel, 2012). Coston and Kimmel (2012) argue that this is particularly problematic for men, as societal expectations have traditionally held men as the sex responsible for certain things, such as providing financially. To not be able to live up to expectations, regardless of external forces (such as globalisation and neoliberal imperatives) can be internalised as being 'less than good enough' or not 'living up to their responsibilities'. Considering the irrefutable inequalities created and sustained within, what can be considered a 'patriarchal society', it has been suggested that rather than grouping all males together as 'responsible for' inequalities or 'to

blame for' the subjugation of arbitrary groups, there should be a focus on methods to end patriarchy that move beyond blaming men (Connell, 1990).

Socioeconomic, cultural and environmental factors are inextricably linked to the adjoining layer of Dahlgren and Whitehead's (1991) model; individual's living and working conditions.

Living and working conditions

The next facet of the determinants of health model, under socioeconomic, cultural, and environmental circumstances, is a population's living and working conditions. It has already been observed that living conditions are associated with vastly different LEB (CSDH, 2008; Marmot et al., 2008). A report on the health of men in a UK, northern city recently found that there is great variance in the health challenges of men living in areas of high deprivation, compared with other challenges experienced by men living in more affluent suburbs (White et al., 2016). Agriculture and food production, water and sanitation and specificities of housing all affect health. In the following subsections, the topics of health care services and education, along with work environment and (un)employment, will be applied to men and their health.

Health care services

Health care services have been criticised for their inequitable focus and appeal (Smith, 2007). It can be argued that a population health-approach, rather than being gender-neutral, provides health services which favour women and children (Macdonald et al., 2000). Evidence indicates that gender-sensitive services are required and that there needs to be more consideration regarding different groups, such as, children, women, older people and men (Barker et al., 2007; Macdonald et al., 2000).

Education

Education and literacy are key determinants of health (Kickbusch, 2001; Marmot, 2005). Educational engagement and attainment differs between social groups; with examples of working-class boys demonstrating pride in their rejection of educational establishments and practices (Willis, 1977). The educational underachievement of working-class children, and particularly males, is of public concern (House of Commons Education Committee, 2014). Although it is impossible to segregate educational attainment from other health determinants, it is clear that the worst health is predominantly experienced by underachievers in the domain of education (Reay, 2009; Strand, 2014), such as working-class boys (Evans & Tilley, 2017; Kuppens et al., 2018; Roebuck, 2019).

Work environment, unemployment and retirement

As discussed, socio-economic status and the gap between the richest and poorest communities are key factors of inequality and poorer health (Stafford & Marmot, 2003; Wilkinson & Pickett, 2010). Types, and qualities, of employment, past and present, influence health (Marmot et al., 1991; Savage, 2015). The economy in the UK has changed over the last 50 years, from having strong industrial and manufacturing industries to a greater focus on financial, service and retail industries. This has changed the types of employment undertaken and skills required to earn a living in capitalist Britain (Nixon, 2018). It has also led to precarious employment, unemployment and underemployment, with more globalised economies vulnerable to economic and political events beyond the control of employees and employers; for example, the ‘credit crunch’ circa 2008 (Karanikolos et al., 2013; Perotti, 2012) and SARS-Cov-2 (Bambra et al., 2020; Horton, 2020). These issues affect the individual, their family and potentially the wider community (Brady & Wallace, 2001; Robertson et al., 2018). The effects of these changes and vulnerabilities affect health (Black, 2008) and, to no lesser degree, working class men (Andersson & Beckman, 2018; Walker & Roberts, 2018).

In societies that expect people to spend most of their adult lives working, being without a job can be distressing beyond any economic consequences. People not in education, employment or training ‘NEETs’ (Social Exclusion Unit, 1999), and individuals who are underemployed or retired, may experience a lack of meaning and purpose (Black, 2008; Griffin & Tyrrell, 2013; Hari, 2018). For example, a person’s identity can suffer when preparing for retirement and when retired (Katz & Laliberte-Rudman, 2004; Osborne et al., 2017; Price, 2000). Not having a retirement plan, which supports continued development and purpose, can increase depression and mortality (Gilleard & Higgs, 2008; Mutran & Reitzes, 1981).

Individual lifestyle and ‘choices’

Next to the *Age, sex and constitutional factors*, denoted in the circle of the determinants of health model, is a layer referring to lifestyle aspects (Dahlgren & Whitehead, 1991). Health-impacting lifestyle factors can include physical activity, food consumption and drug and alcohol intake, amongst many other dynamics. The model states that these are all ‘individual’ lifestyle factors. The label insinuates that all individuals have the same level of volition over the choices they make in relation to their lives and health. This links to a public health focus on health education and individualised behaviour change approaches, such as Public Health England’s (n.d.) ‘Change 4 Life’ campaign. The approach fits well with the neoliberalist agenda of encouraging social inequalities (Walker & Roberts, 2018) and blaming individuals for failing to achieve good health (Williams & Gibson, 2018). Contextual factors and a plethora of other health determinants all contribute to health and wellbeing and hence there is now a palpable ‘lifestyle drift’ in public health promotion (Powell et al., 2017; Williams & Fullagar, 2018). Consider, for example, the difficulties of changing smoking behaviours (Graham, 1993) and the options available to people regarding physical activity and healthier eating behaviours (Harcombe, 2010; Powell et al., 2015; Williams, 2017b; Williams, 2015).

However, considering lifestyle factors and the domain of ‘choices’ men are observed to make: risk-taking; help-seeking behaviours, and; emotional and mental health, are discussed below.

Risk-taking

Globally, one of the leading causes of death for males aged 15-49 years is road traffic injuries. Other major causes include interpersonal violence and contraction of HIV (which might develop into AIDS). These causes of death are associated with risk-taking. Sex differences are further evident for ages 15–34 years with injury, HIV/AIDS and non-communicable diseases even more associated with male death. This is despite there being a decrease in age-sex-specific death rates between 1990 and 2010 (Lozano et al., 2012).

Research on gender differences in risk-taking is long established (Byrnes et al., 1999; Charness & Gneezy, 2012; Glass, 1965). Investigations shows that sons’ risky misbehaviours are more often attributed to non-modifiable characteristics, whilst daughters’ risk-taking behaviour are more likely accredited to factors that a parent could expect to influence. Further to this, mothers expect more risky behaviour of sons, in comparison to daughters, and show greater concern about injuries to daughters than sons (Morrongiello & Hogg, 2004). As with many social science areas, attributing behaviour to nature and/or nurture is contested. Ultimately, the propensity for risk-taking by males is affecting lifestyle choices and the health and wellbeing of boys and men.

Men’s health-related help-seeking behaviour

There are differing views on possibilities of gender differences in seeking health and wellbeing-related support. Some studies report that men are more stoic leading to delays in health seeking behaviours (Macdonald, 2011; O’Brien et al., 2005; White, 2001). However, a developing body of work reports negligible difference between men and women’s health seeking (Hunt et al., 1999; Macintyre et al., 1996; MacLean et al., 2017; Wang et al., 2014; Wang et al., 2013; Wyke

et al., 1998), with some commentary suggesting reported differences are merely ‘gender stereotypes’ (Emslie et al., 2007; Galdas et al., 2005). There are, of course, subjective variances in perception regarding when ‘sickness’ has occurred (Zola, 1973). However, to shorten episodes of many illnesses and prevent progression, early diagnosis and effective treatment are key (Macleod et al., 2009; Ota et al., 2002).

Linking to this point, there are historical differences in what has been offered to men in terms of health services. For example, it is only recently that any screening programme has *included* men (the National Chlamydia Screening Programme in England from 2007; the NHS Health Check offered every five years to people aged 40-74 since 2009; the National Bowel Cancer Screening Programme automatically sends a bowel cancer screening kit every two years to people aged 60-74 years commenced 2013). Furthermore, there is only one UK screening programme *specifically focused* on men (the National Abdominal Aortic Aneurysm screening programme targets men between 1 April to 31 March when they turn 65 years old) (Robertson & Baker, 2017).

In terms of men’s behaviours, some academics suggest men tend to have poorer health practices (Mahalik et al., 2007) and value health less than women. However, women have been found to be no less ready to consult a GP regarding most common conditions except for mental health problems (Hunt et al., 1999). It is theorised that presenting potential emotional or mental health problems may be perceived as been ‘less than’ masculine (O’Brien et al., 2005) by men who adhere to stereotypical masculine ‘ideals’ and that such men are more predisposed to behave in unhealthy ways, with risk-taking behaviour (de Visser et al., 2009; Gough & Conner, 2006).

Masculinities

The field of masculinities, as with the topic of men’s health-related help-seeking behaviour, has developed over many years and includes varied and contentious views. ‘Masculinities’,

literature suggests, are ‘descriptions of popular ideologies about the actual or ideal characteristics of men’ (McMahon, 1993, p.691). It has been suggested that there has been a ‘psychologicalization of sexual politics’ [sic] and that ‘to study men, it would seem, [means] ...to study masculinity’ (McMahon, 1993, p.675).

The study of ‘masculinity’ has attempted to give examples of the activity of men in the social world; often ignoring contextual factors (Hearn, 1996). Where context has been referenced, masculinity is loosely conceptualised. There was early critique on the use of the term masculinity due to: a) the wide variety of use; b) the lack of precise conceptualisation; c) use of the terms ‘masculinity’ and ‘masculinities’ in sweeping statements about social phenomena and men as individuals; d) masculinity being conceptualised as the major, underlying cause of social problems due to being the ‘essence of men’ rather than a ‘cultural expression of gender’ (Hearn, 1996, p.204). The label of masculinity can be viewed as a ‘catch-all’ phrase to explain societal problems experienced, with blame attributed to men (Lomas, 2013; Mac an Ghail & Haywood, 2012).

As is the nature of a catch-all term, masculinity means different things to different people. Within the conceptualisations of masculinity there seems to be little reflection that not all ‘men’ are equal within the structure of society; neither are all ‘people’. At a personal level, as Lomas (2013, p.177) observes, ‘...generalisations about men’s emotional capabilities whitewash the nuances...’ which does little to advance understanding of relations. The differences in definition beg questions regarding the usefulness and utility of the concept of masculinity (Hearn, 1996; Lomas, 2013; Mac an Ghail & Haywood, 2012; McMahon, 1993).

The incarnation of ‘hybrid masculinities’ (Bridges & Pascoe) can be viewed as doing little to address ‘internal hegemony’ claiming, as its proponents have, that there is a ‘gender order (young, [w]hite [and] heterosexual, etc)’ (2014, p.256). Yet, there is clear evidence that ‘young’

and ‘white’ (and working class) males are significantly under performing at ages of schooling (Reay, 2009), and as men have been the victims of neoliberalism regarding employment and all its impacting factors (see further in the nuanced work presented in the edited book by Walker & Roberts, 2018).

At the time of writing, I have yet to identify an accurate theory of innate qualities of men or of performing gender behaviours associated with men. It is for these reasons that I rather to male subjects by the term ‘*men*’ as recommended by Hearn (1996) and describe the behaviours of men rather than using the terms ‘masculinity’ or ‘masculinities’.

Gender sensitive policy and services

Returning to studies of men and help-seeking, there has been institutional reluctance to engage men who can be considered ‘hard to reach’ (Mahalik et al., 2007; Seymour-Smith et al., 2002). Indeed, the introduction of the UK Equality Act 2006 (Gov UK, 2006, superseded by the Equality Act, 2010) and the Department of Health’s guidance on implementation of the Gender Equality Duty (DoH, 2007) promoting gender sensitive policy and services, has not produced the desired impact in terms of men health related policies, men-friendly services or better health outcomes for men (Robertson & Baker, 2017).

Rather than focusing on masculinity as a priority determinant of men’s health, it has been suggested that socio-economic status might be more influential and explanatory regarding differences in health outcomes for men (Galdas et al., 2005). In a recent report on the state of men’s health, in a major UK city, authors conclude with the importance of targeting men whilst addressing social determinants of health:

“...action is required both at the structural level of service provision, in reaching out and targeting men more effectively, and also at the societal level addressing the social determinants of health” (White et al., 2016).

This supports the use of a determinants of health model and indicates that a multifaceted approach will have increased efficacy.

Emotional and mental health

Literature indicates that the socialisation of males might account for why there is reluctance to seek help (Galdas et al., 2005). Men in Western society are often socialised to act in ways that are deleterious to their health and wellbeing (Sabo & Gordon, 1995). In particular, men who experience mental or emotional health issues can be unwilling to describe their symptoms; with concealment potentially exacerbating problems (O'Brien et al., 2005). Some men are less able to recognise and/or articulate symptoms; as with the condition 'alexithymia' (Krystal, 2015; Lane et al., 1997; Taylor & Bagby, 2000).

Health professionals, reportedly believe that men are indifferent to psychosocial support for problems (Seymour-Smith et al., 2002). This is important because men are less likely to have support networks and family with whom to discuss emotional needs and concerns (Bird & Rieker, 1999). For example, in terms of mental health and risk to life, the male rate of suicide in the UK city of Leeds is nearly five times that of females, with the rate for years of life lost due to suicide for men aged 15-74 years being 28% higher compared to the rate observed across England and Wales. Female rates, however, are similar to the female rate observed nationally (White et al., 2016). A lack of social support, combined with men's reluctance to seek help, could concur with the suggestion of White and Holmes (2006) that social upheaval and uncertainty, associated with neoliberalist economies, contribute more to the morbidity and mortality of men, than that of women.

Clearly, this section on men's lifestyles and the choices some men have been observed to take, have been shown to intersect with structural, wider social determinants of health and further

negatively affect the morbidity and mortality of men and their families (Scott-Samuel et al., 2015; Wilkinson & Pickett, 2010).

Social and community networks

The final layer of Dahlgren and Whitehead's (1991) model, discussed here in relation to the health of men, covers 'social and community networks'. In the pictorial depiction of the model, '*social and community networks*' is sandwiched between 'individual lifestyle factors' and the 'living and working conditions' of society. Human beings are social creatures (Griffin & Tyrrell, 2013; Kagan, 2009), and this facet of the model goes beyond the domain of the individual to include the influence of other people, other families and local resources.

As stated in the last section, men tend to have fewer social networks within which they feel comfortable to seek support (Bird & Rieker, 1999). Women tend to have larger social networks and also get support from a greater number of sources (Walen & Lachman, 2000). In general, heterosexual men tend to rely on female partners for support and their non-work interaction (Antonucci & Akiyama, 1987). Hence, if heterosexual men live alone, or are separated from female partners through relationship breakdown or death, men's social networks diminish, as does their access to social support (Gerstel et al., 1985). As well as the implications for health-related support, loneliness and fewer social relationships can have as much influence on mortality risk as other well-established risk factors, such as smoking (Holt-Lunstad et al., 2010).

Social support networks protect against loneliness, help with informational needs, and can provide practical help (Gilchrist, 2009; Ryan et al., 2008; Schaefer et al., 1981). Through the life-course men reportedly make most of their friends through school and work; along with developing friendships with their partner's friends (Arbes et al., 2014). However, if

unemployment or retirement occur, men's social networks can diminish (Wilkinson & Marmot, 2003). As already covered, men, and particularly working-class men, are some of the most vulnerable to being out of work and are the most vulnerable to lacking social support networks.

Social interventions to enhance men's health

Local communities, as smaller entities, are more easily influenced than societies; super-structural, physical, social and economic factors involve large scale economic and political changes (Dahlgren & Whitehead, 1991). Some academics believe it is possible to intervene in social environments even where socialisation practices have occurred (Green et al., 2015; White & Holmes, 2006). It is recommended that research be conducted on departures by men from unhealthy behaviours where men seek help and behave in ways more akin to their health needs (O'Brien et al., 2005).

To influence groups of men, structured programmes can be developed within non-traditional, non-female-dominated, health-related settings. It is suggested that men should be a part of intervention planning, to ensure they meets their needs and establish positive, motivational group dynamics (Carroll et al., 2014). An example of such programme interventions are men's sheds; environments created where predominantly working-class men reportedly feel comfortable and where health and wellbeing can be integrated in pragmatic and men-friendly ways (Robertson et al., 2015).

What are men's sheds?

Men's sheds are an example of '*social and community networks*' which have the potential to influence the health and wellbeing of attendees, their families and the wider community (Golding, 2015b). Men's sheds are communal environments where predominantly men spend social time, often engaging in purposeful, utilitarian activities alongside their peer group. In

Australia, men's sheds have been hailed as a health promotion exemplar (Wilson & Cordier, 2013). This social and men's health promotion movement (Golding, 2015b; Wilson et al., 2015a) has spread across the world; particularly across European countries and in communities where men experience health inequalities most prevalently (Cordier & Wilson, 2014a).

Men's sheds are seen as suitable environments to enable social connections for men which, it is suggested, are fundamental to human wellbeing (Robison et al., 2009; Umberson & Karas Montez, 2010). This would be contrary to the tide of individualism driven by neoliberalism. Further to this, men's sheds are perceived as a way to overcome "shedlessness" (Ballinger et al., 2009), with men's sheds being a replacement of the formally frequented environments which men have embodied socially and in traditional occupations (Wilson & Cordier, 2013) as well as in isolation (Earle et al., 1996). The physical attributes and provision offered by men's sheds varies. However, the distinctive qualities include a defined space and time for men to gather, foster social interaction and relationships, and engage in a form of activity (Ormsby et al., 2010). As Gradman (1994) identifies, these types of qualities were (and still can be) enabled through traditional forms of work.

This is akin to a time when working-class men often spent time with other men crafting materials with their labour for their own pleasure regardless of neoliberal imperatives. Within men's sheds there appears to be an absence of urgency, requirements to reduce labour costs or to speed up production; as there are no 'targets' to meet. Working can enable people to meet the social norms associated with human beings as social creatures (Griffin & Tyrrell, 2013). Workplaces can be facilitative environments for the meeting of these needs (Black, 2008). However, as covered above, when men are no longer working, they often lose contact with colleagues and therefore social interaction and social support. This can compound the issues of loss of income, volition and independence, which can all negatively impact on wellbeing (Gall

et al., 1997). As Wilson and Cordier (2013, p.492) observe, there has been ‘a gradual loss of male-only social spaces for men’ which men’s sheds may help to redress. Men’s sheds offer the opportunity for men to gather for legitimate, positive and socially acceptable reasons, that go against the negative discourse of men or the proposed ‘toxicity of masculinities’ (Connell & Messerschmidt, 2005). Men’s sheds might also give men the opportunity to share their own voices with their peers, away from discourses of identity politics and being grouped together with elite men who are beneficiaries of wealthy ‘male’ privilege (Coston & Kimmel, 2012).

Chapter summary

This chapter has applied Dahlgren and Whitehead’s (1991) *determinants of health* model to guide a review of factors which determine the health of men. Interrelated dynamics of biology, lifestyle and psychosocial aspects have been considered with social and societal factors. These issues enable or constrain men’s experience of illness, health and wellbeing.

It is proposed here that men’s sheds are worthy of investigation to ascertain if this social intervention supports men to protect and enhance their health and wellbeing against some of the health inequalities and their socioeconomic determinants described above. The next mini-chapter (Chapter 3) will introduce some initial theories about men’s sheds gleaned (Manzano, 2016) from men’s shed advocates, health promotion practitioners and tacit knowledge of health promotion. This will be followed by a systematic review of men’s shed literature (Chapter 4) to understand what is already known regarding impacts on the health and wellbeing of men participating in these social interventions.

3) *Generating initial programme theories for how and why*

men's shed programmes impact men's health and wellbeing

The previous chapter considers contextual factors of what determines men's health. Furthermore, it foregrounds men's sheds as '*social and community intervention[s]*' worthy of further study. This short chapter introduces factors that might influence health and wellbeing impacts of men's shed participation. This generation of ideas support the lines of enquiry used in the subsequent chapter (4) reviewing men's shed literature.

This thesis uses Gough and colleagues 'Generate, Explore and Test' (GET) framework (2012). The first part of this framework refers to the *generation* of research activities. 'Explore' and 'test' will be discussed later. Initially avoiding discussions of the ontological and epistemological stance that underpins the subsequent empirical research design (discussed in the Methodology section - Chapter 5), this chapter interprets Gough and colleague's '*generate*' phase as: spawning ideas on what about men's sheds might influence participant health and wellbeing (2012). These generated ideas will be referred to as '*initial programme theories*' (*iPT*): tentative ideas on how and why men's sheds as social *programmes* impact health and wellbeing. By various means I generated three *iPT*: *iPT1* on 'organisational arrangements'; *iPT2* on 'shed-based resources', and; *iPT3* on 'human-based resources'. These processes of *generation*, related to health and wellbeing impacts of men's sheds participation, are discussed sequentially below.

iPT1: Organisational arrangements

Early on in the process of generating ideas about men's sheds and health and wellbeing impacts, I contacted men's shed associations to ask their leaders if they had questions about men's shed

organisations. I did this to increase the likelihood that my research enquires would have impact beyond the academic requirement for a PhD thesis to make ‘an original contribution to knowledge’. The (then) leader of the United Kingdom Men’s Shed Association (UKMSA) said they wanted to know if there were observable differences between men’s sheds organically setup by groups of local men, ‘bottom-up’, in comparison to men’s sheds created by established organisations, ‘top-down’, providing a facility to enhance *male service user* health and wellbeing.

This line of investigation interested me. As a former employee of a Public Health department that created programmes to enhance health and wellbeing, I wondered how a men’s shed intervention arranged – ‘top-down’ – by a Public Health agency might differ from a grass-roots men’s shed initiated – ‘bottom-up’. The aims, objectives, funding, size, equipment, roles and responsibilities might all be different as a result of why the men’s shed was setup, how it is led, and by whom. I refer to these factors as ‘organisational arrangements’. Reasons for creating a men’s shed – and decisions on what a men’s shed will, and will not, accommodate – will likely influence what happens therein.

The more I thought about bottom-up and top-down organisations, I began to consider a third possible scenario. I was aware that some community-led (bottom-up) men’s sheds in Australia had accessed funding provided by Government (DHA, 2010); keen to capitalise on shed’s presumed potential to promote men’s health (Wilson & Cordier, 2013). I have experience of UK funders requiring organisations to meet set requirements and achieve specific outcomes in order to receive funding. I wondered if personnel at grass-roots initiated, ‘bottom-up’ men’s sheds might be tempted to apply for funding and had needed to change their organisation’s aims and objectives to meet funder’s requirements.

The following figure (Figure 2) features *iPT1*: initial ideas on how and why different types of men's shed organisational setup might impact participant health and wellbeing. Each of the *iPT* ideas are written to account for three things: a) what the *circumstances* are in which men's sheds might be created; b) what about men's sheds might *cause* health and wellbeing impacts, and; c) what *result* or *results* might occur based upon interactions between a) and b). To help articulate these three factors, I have written *iPTs* as 'If... Then... Leading to...' statements; where parts of the sentence or sentences include prompts about circumstances (if...), responses (then...) and results (leading to...).

iPT1: Organisational arrangements as 'if... then... leading to...' statements

The first part of the initial programme theory about *organisational arrangements* is:

If a men's shed is led by its community members,
then participants have control over how their men's shed operates,
leading to a comfortable physical and social environment for supporting the health of members

A sub-theory is:

If community-led men's sheds are financed by external funders,
then they are prone to the influence of funder aims and objectives and pressure to acquiesce to funder demands,
leading to activities that take shed leaders and members away from their original aims and objectives

A rival theory is:

If a men's shed is led by a public health organisation,
then participants have little control over their men's shed,
leading to less participant investment and less added value in terms of personal and community health benefits

Figure 2: *iPT1* 'Organisational arrangements'

Organisational arrangements are – using the ‘GET’ framework (Gough et al., 2012) – *explored* in the systematic review of men’s literature review (Chapter 4) and are further *explored* and then *tested* in the chapter on organisational arrangements (Chapter 7).

***i*PT2: Shed-based resources**

The antecedent of the second *initial* programme theory (*i*PT2) was an attempt to understand *why some men attend men’s sheds*. The question led me to consider that men must first become aware of the existence of men’s sheds. If a shed exists in a man’s commutable locality, future participants must recognise this and then consciously choose to make their first attendance. To become a regular participant in men’s shed activities, and achieve any sustained subsidiary health and wellbeing benefits, men need to experience first impressions of a men’s shed and meeting other participants. The shed and/or its participants must be welcoming and appealing enough to encourage them to choose to return. This methodical reasoning led me to think about what men’s sheds might overtly appear to offer, and covertly offer, men who choose to become regular participants.

Any potential participant of a men’s shed must identify something overt and sufficiently appealing to provoke an enquiry and first attendance. During this first attendance the potential participant must identify a thing, or things, about the shed that motivates them to become a member and make further visits. Men’s sheds might also offer covert benefits, which encourage regular participation.

As such, men’s sheds could be conceptualised as offering one or more types of ‘resource’ that some men find appealing; leading to a selection of men continuing to participate. However, not all men that initially attend a men’s shed will continue indefinitely. So, there must be resources that provoke an initial attendance and resources that appeal enough to *some men* to attend

regularly. Nevertheless *some men*, having made an initial attendance, will not be attracted enough to regularly attend henceforth. Therefore, any theory about why some men attend men's sheds should also account for this circumstance.

The following *initial* programme theory (*iPT2*) in Figure 3, accommodates the various scenarios of '*initial attendance*', '*continued attendance*' and '*non-continued attendance or irregular attendance*'. It is based on the theory that 'a resource' or 'resources' are valued enough by some men, but not others, to provoke attendance and become men's shed members.

iPT2 Shed-based resources, as 'if... then... leading to...' statements

The initial programme theory about *shed-based resources* suggests that:

If men value the men's shed resources,
then men will make an initial attendance.

Continuation of attendance at a men's shed is initially theorised to be contingent on the value men place on the resources they identify. So,

If men continue to value men's shed resources,
then men will continue to attend,
leading to improved health and wellbeing.

However, a rival theory is needed to account for men who do not continue to attend or who only attend sporadically:

If men do not (continue to) value the men's shed resources,
then they will not attend regularly or at all,
leading to negligible changes to their health and wellbeing.

Figure 3: *iPT2* 'Shed-based resources' and *initial, continued, or no or limited continuation* of men's shed attendance

iPT2 is *explored* in the following chapter (Chapter 4) and is further *explored* and then *tested* (Gough et al., 2012) in Chapter 8 on shed-based resources.

iPT3: Human-based resources

The third and final *iPT* leads on from the preceding *iPT2*. Men's sheds contain resources. However, use of men's shed resources depends upon – one or more participants having existing knowledge, skills, experience or capacities to learn – how to do so. Indeed, it is likely that all participants will have some form of knowledge or skill that can be useful to themselves and other participants in men's sheds. I refer to this theory as *iPT3* on 'human-based resources'.

The initial theory is that, as men's sheds offer resources to their participants this facilitates participants to draw upon and use participant's practical knowledge and skills. A brief foray into men's sheds literature identified that informal 'adult learning' is a considerable theme of study (see, for example, Golding, 2015b). Men engaging in shed-based activities and learning pragmatic skills might be positive for individual men (heightening their competence), their local community (products built for community use) and for the informal 'teachers' sharing skills (making a valued contribution to others).

iPT3 is presented in the following figure (Figure 4), and refers to possible benefits of men's shed participants sharing, learning and enhancing human-based resources.

iPT3: Human-based resources, as an 'if... then... leading to...' statement

The generated initial programme theory on *human-based resources* suggests that,

If men bring, share and learn from experiences, knowledge and skills through social interaction,

then men can enhance their own and others' abilities,

leading to improved health and wellbeing and resilience to negative effects on wellbeing

Figure 4: *iPT3* 'Human-based resources'

Human-based resources are *explored* in the systematic review of men's literature (Chapter 4) and are further *explored* and then *tested* (Gough et al., 2012) in Chapter 9 on 'Human-based Resources'.

A summary

This short chapter set out to generate ideas about what might influence health and wellbeing impacts of men's shed participation. Three initial programme theories (*iPT*) suggest that *iPT1* on 'organisational arrangements', *iPT2* on 'shed-based resources', and *iPT3* on 'human-based resources' are possibly related to health and wellbeing impacts of men's sheds participation. These initial ideas derive from conversations with men's shed associations, my own experience of community-led and Public Health-led organisations and from a brief exploration of men's sheds literature.

The following systematic review of men's shed literature (Chapter 4) beings a process of *exploring* the three *iPT*. This will seek to learn what is known about men's sheds and possible links to these *iPT* on how men's shed programmes impact health and wellbeing.

4) *Exploring men's sheds* - A systematic review of men's shed's health and wellbeing impacts

Reviewing Literature: types of literature and what will be explored

A preliminary activity for researchers interested in a phenomena, is to understand what evidence already exists (Aveyard, 2014). The purpose of this review is to examine what is known about the benefits and detriments of men's sheds to the holistic health and wellbeing of participants. This is with a view to making theory from this evidence synthesis useful for Public Health bodies (Wong, 2018b).

In health and related research there is an expectation that literature should be reviewed methodically (Booth et al., 2016). This review takes a systematic approach to understanding what is known about men's sheds. Whilst adhering to an explicit, replicable method, this review is also "narrative"; including interpretation and critique to deepen understanding (Greenhalgh et al., 2018, p.1).

Men's Sheds have received academic and lay publication attention since 2001 (Graves, 2001, cited by Milligan et al., 2016) with approximately 450 items mentioning 'men' and 'sheds' and circa 120 articles pertaining to community 'men's sheds'. This attention is signalled by published reviews of primary studies. Knowledge of these reviews shaped my decision to conduct a 'review of reviews' and to then update these reviews with recent primary studies. The purpose of this is to 'explore' (Gough et al., 2012) *what* about men's sheds '*works*' to improve the health and wellbeing of participating men.

The question guiding both the review of reviews (Part 1) and the review of contemporary primary studies (Part 2) was: *What is known about men's shed impacts on participant health and wellbeing?*

Chapter structure

Part 1 of this chapter examines the pre-existing reviews on men's shed-related impact on participant health and wellbeing. This is reported chronologically to build the picture of how the evidence base has grown and developed.

As this thesis is structured around the Generate, Explore and Test (GET) activities framework (Gough et al., 2012), Part 2 of this review reports the 'explored' findings using the themes of the 'generated' initial programme theories (*iPTs*) introduced in the previous chapter. These themes, based on the *iPT* topics, are:

- 1) Organisational arrangements;
- 2) Shed-based resources, and;
- 3) Human-based resources

By structuring Part 2's review of health and wellbeing findings around these predefined themes, I will explore what is known about the three generated *iPTs* within this literature.

Literature Review Part 1: A review of reviews on men’s sheds and health and wellbeing impact

‘Search strategy’

I identified reviews of men’s shed research using search results retrieved according to the protocol developed by Markham and Booth (2019). A total of 19 reviews were found. A list of these reviews with reasons for their inclusion or exclusion can be found in Appendix A. Three reviews covering 43 items are included. A review by Wilson and Cordier (2013) covered 22 items. Milligan and colleague’s (2016) scoping review of men’s sheds (and other social activity interventions for older men) included 14 men’s shed related items² (adding eight additional items, after removing duplicates). A scoping review of men’s sheds to conceptually explore causal pathways for health and wellbeing from Kelly and colleagues (2019) covered 16 items (adding a further 13 studies, after removing duplicates).

The quality of these three reviews was assessed using the ‘CASP Checklist: 10 questions to help you make sense of a Systematic Review’ (Critical Appraisal Skills Programme, 2018).

The results of these assessments can be seen in Appendix B. A summary table featuring each

² The Milligan et al. (2016) review states 31 items about men’s sheds and other gendered activity interventions were identified up to 2013. In the review, Figure 1. ‘Stage 3’ states ‘14’ studies are included about men’s sheds. The review’s Figure 2 states 11 studies were included about other gendered activity interventions. This equals 25 items included, rather than the 31 items claimed.

Uniquely, in the first paragraph of the results section, one of the author’s studies (dated ‘2014’, and so beyond 2013) is included in the results section. This does not feature in the review’s Table 3, summarising the ‘included’ studies. I have chosen to review this study separately in my review of primary studies (Part 2). It is referenced using its later publication date of ‘2015’: Milligan, C., Payne, S., Bingley, A. and Cockshott, Z. (2015) ‘Place and wellbeing: Shedding light on activity interventions for older men’, *Ageing & Society*, 35(1), pp. 124-149.

Interestingly, Milligan et al.’s (2015) primary study was not picked up by Kelly et al.’s (2019) search strategy.

of the 43 unique items in Wilson and Cordier (2013), Milligan et al. (2016) and Kelly et al. (2019) can be found in Appendix C. A precis of the three reviews follows.

1) Wilson and Cordier (2013)

The review by Wilson and Cordier (2013) was the first published review of men's shed literature. Although labelled as '[a] narrative review...', this is a scoping review, which aimed to determine the state of the science (quality and quantity) of what empirical evidence existed to support the claim that men's sheds improve men's health and wellbeing (up until February 2012).

Twenty-two items were identified which predominantly focused on older men, all in the context of Australian men's sheds. These were found using undefined search terms, but the review did include the databases searched. Literature consisted of opinion pieces, descriptive surveys and qualitative studies. The authors used the Critical Appraisal Skills Programme (CASP) checklist to assess the validity of all the qualitative items. One study (Bulman & Hayes, 2011) failed to pass the CASP screening questions because the research aims and methods were not adequately described. Yet, this was still included in the review.

None of the authors considered the gender of the researcher or how their relationship with participants or their role's might influence findings. All data were self-reported and no standardised baseline measures were used to enable follow-up of maintenance of intervention effects. The reviewers categorised the findings into five themes: Adult learning (12 publications by Golding and colleagues); Health and wellbeing; Meaningful participation; Mentoring, and; Conceptual frameworks.

The limited body of research studies in publication as of 2012 suggested men's sheds were socially inclusive environments reducing social isolation and supportive for participant mental

health and wellbeing. Participants benefited from adult learning, ‘meaning’ derived from participating in shed-type activities and some mentoring offered within men’s sheds. The reviewers detected no evidence of physical health improvements and there were limited conjectures on how or why men’s shed environments support participant mental health and wellbeing.

2) *Milligan et al. (2016)*

The review by Milligan and colleagues (2016) assessed evidence of effects of men’s sheds, and other gendered social activities, on the physical and mental health and social wellbeing of older men. This is a systematically conducted scoping review, assessing literature for quantity and quality (Booth et al., 2016). It includes the search terms used and databases searched. Of all the items found, 14 featured men’s sheds (up to 2013). Eleven of these items referred to Australian Sheds, two items originating from the UK and a further study from Canada. Six items were already covered in Wilson and Cordier’s (2013) review and so Milligan and colleague’s review (2016) added eight additional items. Milligan et al. (2016) appraised the quality of items using a tool developed by Hawker and colleagues (2002). However, as with the previous review, no item was excluded based upon this quality appraisal.

Some of the additional identified items used mixed methods: interviews, focus groups, observations and questionnaires (Graves, 2001), and also included more than one research site (Milligan et al., 2012; Milligan et al., 2015; Reynolds, 2011). Data collected from participants of these primary studies were also supported from other sources, for example, shed coordinators, family members and professionals. Two of the studies used longitudinal methods to research sheds for a duration of 12 months or longer (Cass et al., 2008; Graves, 2001). The other four items offered little in terms of health and wellbeing impact (Golding et al., 2007;

Golding & Foley, 2008; Healthbox CIC, 2012) or relevance specific to men's sheds (Golding et al., 2009).

Participants suggested men's sheds could promote moderate physical activity but no measures were used to corroborate this claim. Evidence and incidence of reported mental health improvement was more substantive. This was attributed to a greater sense of belonging and active participation in men's shed activities enhancing participant's sense of purpose. Positive effects on mental health were also found to be greater for men's shed participants than for people taking part in other gendered activities (which Milligan et al., 2016, also examined).

The review reported evidence that social wellbeing was improved due to the inclusivity of the gendered spaces for men, with activities supporting opportunities to gain a sense of personal and social accomplishment. The shed environments provide social opportunities and social support; enabling the development of friendships and building a sense of camaraderie with other men.

Importantly, the review attempts to identify effective components of men's shed interventions. The reviewers suggest men's sheds must be in a location deemed suitable by potential participants and be supported by a co-ordinator and the local community to provide diverse activities, over extended opening hours. The unstructured and informal nature gives participating men choices of what to do. Through activities sheds become a friendship community to belong to, where members volunteer their time giving them a sense of purpose. Shed members do not consider themselves to be recipients of a health and social care intervention, but rather they are proactive members who contribute to peers and the community through their work. The review calls for longitudinal and controlled studies using validated measures of health status to improve the quality of research on men's sheds (Milligan et al., 2016).

3) *Kelly et al. (2019)*

The final scoping review features 16 peer-reviewed studies published between January 2009 and May, 2018. Search terms were not made explicit and searches were mostly conducted within 'publisher platforms' (Emerald Insight, Cambridge University Press, Oxford University Press and Wiley Online) along with three bibliographic databases (Science Direct, ProQuest and PubMed). The review adds 13 further items to the 30 unique items (22 + 8) previously covered by the other reviews (Milligan et al., 2016; Wilson & Cordier, 2013). Of these new items, Australian men's sheds feature in eight of the studies. Three studies include UK participants and one study was conducted in Republic of Ireland. The final study surveyed sheds internationally. No assessment tool was used by Kelly and colleagues (2019) to assess the quality of included studies. The review attempts to assess 'what' men's sheds activities do for participant health and wellbeing and to suggest 'how' health and wellbeing outcomes might occur.

The reviewers organised health-related outcomes into the World Health Organization (sic) terms 'physical health', 'mental health' and 'social wellbeing' (WHO, 1946). As with previous reviews, evidence of physical health improvements, of the mostly older participants, was scarce, but five items were cited to support this claim (Ayres et al., 2018; Crabtree et al., 2018; Henwood et al., 2017; Moylan et al., 2015; Munoz et al., 2015). Positive mental health outcomes reportedly feature in all 16 items. All but two of the 16 items are cited regarding improved social wellbeing (absent only in Cordier & Wilson, 2014a; Ford et al., 2015).

Outcomes were attributed to three themes of intervention inputs: education and skills; socialisation and interaction, and; inclusivity. These intervention inputs are hypothesised to lead to intermediate and long-term outcomes via eight processes referred to as 'mediating variables'. These are listed in Table 2 (below).

- | |
|---|
| <ol style="list-style-type: none"> 1) Improvement of skills and knowledge - shared amongst shed members 2) Increased physical movement and activity - decreased sedentary behaviour 3) Participation in meaningful activities - address loss of workplace identity 4) Improved interaction skills and expansion of social networks 5) Improved health literacy and understanding of social, physical and mental health 6) Replacement of drugs and alcohol with shed activities 7) Engendering of an accepting, safe and supportive environment 8) Improved communication with family members |
|---|

Table 2: Processes in men's sheds leading to improved physical health, mental health and social wellbeing (adapted from Kelly et al., 2019, p.4).

This review adds to Wilson and Cordier's (2013) and Milligan et al.'s (2016) reviews by updating the published evidence about men's shed participation and self-reported improvements in health and wellbeing. It also introduces two studies featuring validated survey-based health measures. Culph et al. (2015) used the Beck Depression Inventory-II instrument identifying minimal depression in 11 participants who had previously reported symptoms of depression. Furthermore, Ford et al. (2015) used a World Health Organization (sic) measure of Quality of Life (WHO, 1998) with 332 respondents from an undisclosed number of Australian sheds. Unfortunately, although this study reports 322 participants completed the validated quality of life questionnaire, the authors did not publish the results. There is also no comparison 'pre-shed membership' data or comparison to 'a similar group of men'. As such, the study does not use the validated quality of life questionnaire to evidence any effects of *participation in men's sheds* benefiting participant's health.

Kelly and colleague's (2019) work adds a logic model and three pathways to demonstrate how intervention inputs are hypothesised to lead to improved physical health, mental health and social wellbeing. However, the lack of transparency of search terms and searches predominantly conducted within 'publisher platforms' rather than bibliographic databases means that this review is not systematic to enable replication. Moreover, the review does not

provide any theoretical underpinning to explain *why* the identified intervention inputs might lead to improved health and wellbeing outcomes.

Summary

The three reviews highlight a developing evidence base (2001-2018) that participation in men's shed activities enhance self-reported health and wellbeing. The strongest evidence base is for mental health improvements. As a body of work the three reviews, covering 43 published items, cumulatively suggest that men's sheds support the health and wellbeing of participants.

Unfortunately, the review did not allow for replication of its search results in bibliographic databases. Added to this, the search strategy used by Kelly and colleagues (2019) did not identify Milligan and colleagues (2015) primary study, which made a cameo appearance in Milligan et al's review (2016). Date coverage and methodological limitations of these three reviews signals an ongoing need to identify the latest literature published that contributes to collective understanding of men's shed related health and wellbeing impacts. Furthermore, the predominantly self-reported accounts of health and wellbeing related maintenance and improvement is unlikely to convince hard-nosed commissioners that men's sheds work to improve health and wellbeing.

To better understand the current evidence base on what men's sheds offer participants to support their health and wellbeing, a new review is required to search for the latest studies in recognised academic databases. In terms of this thesis, this also presents the opportunity to categorise the latest findings within the themes of the 'generated' *initial* programme theories (*iPTs*): Organisational arrangements; Shed-based resources, and; Human-based resources. In doing so, a new review might identify if the *iPTs* in the previous chapter (Chapter 3) are worthy of 'exploration' (Gough et al., 2012) using empirical investigation.

Literature Review Part 2: A review of primary men’s shed studies

This review augments and updates the three reviews conducted by Wilson and Cordier (2013), Milligan et al. (2016) and Kelly et al. (2019). As I was unable to replicate the searches conducted by Kelly et al. (2019), I systematically searched for literature pertaining to men’s sheds and health and wellbeing related impacts published from 01-01-2013 (the most recent search year used by Milligan and colleagues) up to and including 31-01-2020. This list of items can be found in Appendix D.

‘Search strategy’

Four databases were searched to identify publications relating to men’s sheds. Aiming for diversity these covered health, social science and multidisciplinary subjects. The databases and coverage can be viewed in Table 3 below.

Subject	Database	Coverage
Health	MEDLINE via Web of Science	Database of general medical, biomedical and life sciences and allied health literature
	APA PsycINFO® via Ovid	Database of abstracts of literature in the field of psychology and related disciplines
Social Science	Applied Social Sciences Index and Abstracts (ASSIA) via ProQuest	Database of health services, social work, sociology, psychology, economics, politics, race relations and education
Multidisciplinary	Scopus	Database of life sciences, social sciences, physical sciences and health sciences

Table 3: Subjects and coverage of the databases chosen to search for men’s sheds literature

Five search terms were used including all known synonyms and derivatives of “men’s sheds”. The search for literature was carried out in February, 2021, searching for literature between 01-01-2013 and 31-12-2020.

- 1) mens shed
- 2) men's shed
- 3) men in sheds³
- 4) menz shed⁴
- 5) community shed

Screening, appraisal and analysis

The search terms applied to the databases identified 167 items. After removing duplicates (totalling 48), 119 unique items remain. A 'Preferred Reporting Items for Systematic Reviews and Meta-Analyses' (PRISMA) flow diagram (below) gives an overview of the number of items identified (Moher et al., 2009). Of the systematically identified items, studies were purposively chosen according to their ability to contribute to knowledge about men's sheds and health and wellbeing impacts. A list of the 119 unique items along with reasons for inclusion or exclusion can be found in Appendix D.

Eligibility Criteria

Items identified through the databases are included if they are primarily about the community-based intervention "men's sheds" and have generated primary data about 'health' and/or 'wellbeing' impacts published between 2013 and 2020.

All of the qualitative studies, and mixed methods studies including qualitative components, were subjected to a quality assessments using the 'CASP Checklist: 10 questions to help you make sense of qualitative research' (Critical Appraisal Skills Programme, 2017). This can help assess study's results, validity and the helpfulness of results in a local context. Although quantitative study assessment tools exist, no tool was used in this review due to the author's

³ 'Men in Sheds' is a term observed in a UK context; associated with men's sheds founded by the charity AgeUK.

⁴ 'Menz...' is colloquial; used in some men's sheds located in New Zealand.

discomfort with quantitative analysis. Notwithstanding this, no quality of evidence appraisal tool was used to limit the types of study (qualitative, quantitative or mixed mixed) that could contribute to this review. Different methodological approaches and evidence types are valued to produce the richest picture of the topic (Pawson et al., 2005).

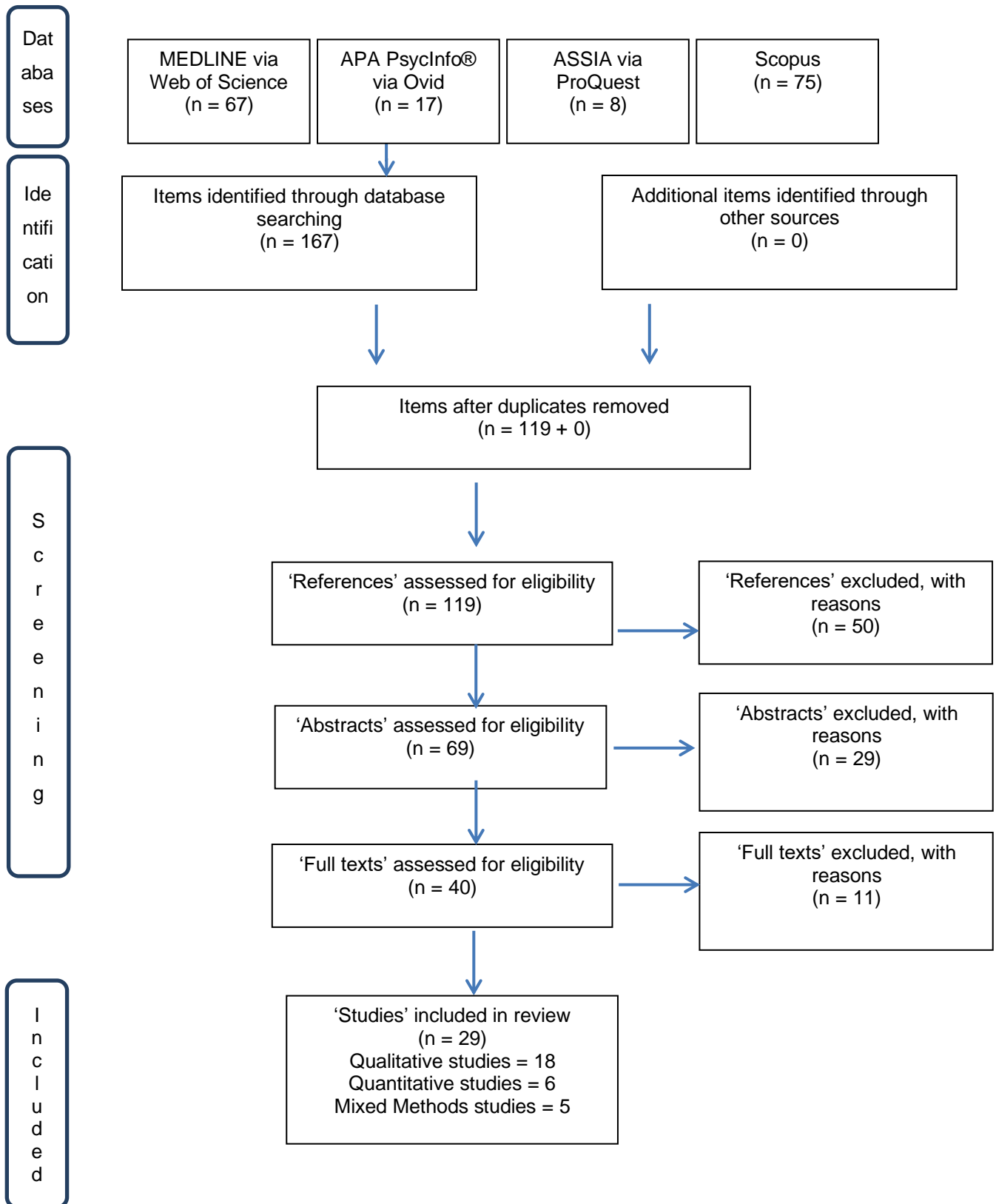
Items were excluded if they did not include primary data about a “men’s shed” or if the predominant focus was another topic (such as ‘mentoring’ or ‘adult learning’ or ‘effects on partners of men’s shed members’) without inclusion of health and wellbeing benefits to men’s shed members attributable to men’s shed participation. For example, one study focuses primarily on the experience of men’s sheds to (female) partners of male attendees (Hedegaard & Ahl, 2019). Although this study did yield ‘nuggets’ of information (Pawson, 2006a) about men’s lack of proactive help-seeking/health-seeking, the health and wellbeing focus of the research was about men’s shed member’s *partners*, not the shed’s participants. Items were also excluded when full-texts lacked information about the methods used to generate new empirical data and basic information about participants, such as the gender and numbers of participants involved in the research (for example, Kimberley et al., 2016).

Presentation

The data was organised within the themes of my initial programme theories (*iPTs*) generated in the previous chapter. These *iPT* themes relate to:

- 1) ‘Organisational arrangements’
- 2) ‘Shed-based resources’
- 3) ‘Human-based resources’

PRISMA diagram for Men's Sheds Literature



Findings

Of 29 items meeting the inclusion criteria, five studies used quantitative methods (Ang et al., 2017; Cordier & Wilson, 2014a; Ford et al., 2015). A further six studies used mixed methods involving a quantitative component (Carragher, 2017; Carragher & Golding, 2015b; Culph et al., 2015; Foster et al., 2018; Taylor et al., 2018; Wilson et al., 2019; Waling & Fildes, 2017). Exclusively qualitative research accounted for the remaining 18 studies. Results of the CASP quality assessment (Critical Appraisal Skills Programme, 2017) can be found in Appendix E.

As with the 43 items identified in the previous three reviews, a table in Appendix F summarises the 29 studies. Due to partial overlap with the years covered by the Kelly et al. (2019) review, 12 of those 43 items also feature in my review. For clarity these 12 items are noted in the summary table as being from Kelly and colleagues (2019) review along with the 17 items unique to this review. As mentioned in Footnote 2 (earlier in this chapter), I have chosen to include Milligan and colleagues (2015) primary study despite this (inexplicability) also featuring in Milligan and colleagues (2016) review. The summary table includes details of the qualitative, quantitative or mixed methods designs of studies. The table also notes which one, or more, of the three *initial* programme theories (*iPTs*) the study supports: *iPT1* was supported by 16 studies; *iPT2* was supported by 15 studies, and; *iPT3* was supported by 16 studies.

Findings linked to *i*PT1: Organisational arrangements

Men's sheds have long been assumed to benefit participant health and engage men whom Public Health-led interventions are less likely to reach (Golding, 2011b; Wilson & Cordier, 2013). For these two reasons men's sheds have featured as part of national Public Health policy in Australia (DHA, 2010; DoH, 2019) and in the Republic of Ireland (Richardson & Carroll, 2008; Richardson & Carroll, 2017); countries with the highest numbers of men's sheds (Cordier & Wilson, 2014a; IMSA, n.d.). The following two sub-themes, 'Organisational setup' and 'Leadership and coordination', explore literature that relate to the 'Organisational arrangements' theme if *i*PT1.

Organisational setup

Men's sheds are often referred to as 'grass roots' organisations; meaning that they are started and led by people (usually men) in a local setting, without ties to commercial organisations or the public sector (Anstiss et al., 2018). For example, in a study of the personal and community impact of a Scottish men's shed, Foster and colleagues refer to their investigated case as a shed '...set-up in 2014 by a core group of members who remain attendees' (2018, p.2). This community-led organisation grew to a membership of approximately a hundred members, some of whom 'enjoy raising funds' to keep the shed operational (Foster et al., 2018, p.7). Fundraising is required to cover costs associated with venues and the purchase and maintenance of equipment, among other expenditures.

Alternatively, some 'community-led' organisations have received financial support from external funders (Ford et al., 2015; Wilson & Cordier, 2013). For example, the Australian Government allocated \$3 million (Australian dollars) over four years to support men's sheds (DHA, 2010). Some health and social care policy makers see men's sheds as:

‘...important existing community structure[s] whose community development philosophy can potentially be tapped into as a vehicle for the delivery of preventative health services... [With men’s sheds being] ...part of a wider suite of men’s health initiatives... aligned with the international focus on solving the gendered health inequities that become apparent when the social determinants of health are exposed’ (World Health Organization Commission on Social Determinants of Health (CSDH) 2008, in Cordier & Wilson, 2014a, p.484).

These ‘hybrid’, community-led yet financially supported, men’s shed organisations are expected to deliver health and social care outcomes on behalf of their funders. Indeed, Wilson and Cordier’s quest to assess ‘the state of the science about the potential for [m]en’s [s]heds to promote male health and...’ wellbeing (2013, p.451), was in part to determine the outcomes of the ‘health by stealth’ theory. The theory is that sheds support participant health without that intention being the intervention’s foregrounded purpose (Golding, 2011b, cited by Wilson & Cordier, 2013, p.461). For the continuation of this hybrid model (public funding financially supporting community-led men’s sheds) clear health and social care outcomes need to be evident.

Literature also refers to a third model of men’s shed origin and leadership. Public Health organisations, social enterprises and charities set up and run men’s shed initiatives with the specific intent of engaging and supporting men and their health behaviours (Healthbox CIC, 2012; Milligan et al., 2015; Munoz et al., 2015). A core objective of Public Health-led men’s sheds is to attract what organisations refer to as a specific ‘hard-to-reach’ demographic of their local population. As Milligan and colleagues state, many ‘provider organisations find it difficult to engage older men’ (2015, p.143) and men’s sheds attract members of this demographic, alongside socially engaged men; who, incidentally, ‘perhaps makes it easier for the disengaged to integrate with others within the shed’ (2015, p.140). These Public Health-led interventions often recruit paid coordinators to manage venues and activities therein. This, naturally, requires funding to pay this staffing.

One study makes comparisons between the community-led model (associated with ‘Australian men’s sheds’) and Public Health-led men’s sheds (socially engineered in Denmark). Ahl and colleagues (2017) present preliminary data which suggests similar positive outcomes of Public Health-led men’s sheds to that of grass-roots men’s sheds conceived and run without external support. These include: participation in social activities, practical tasks and adult learning, and; enhancing wellbeing.

In the Danish model, a national coordinator for a men’s health forum, sponsored by the Danish Ministry of Health, identifies a local municipal care officer (often female) to recruit men and start a men’s shed project in a locality. In one of two chosen cases, Ahl and colleagues discovered that the man who became a shed’s chairperson was ‘sent’ by his wife to join the shed (2017, p.324). This was interpreted to be a common circumstance by which many men get involved in their local shed.

The processes of finding a venue, becoming a constituted group and participants readying their venue for use, were similar across both models. However, the study did not highlight if participants were aided in the choice of venue or if this place was chosen and provided for them. A proactive chairperson at the other study’s shed, brought in considerable sponsorship suggesting that the organisations were not as well financed as they needed to be by the Danish Forum for Men’s Health. In both community-led and Public Health-led models, participants did get the opportunity to engage in meaningful tasks. During tasks, participants worked ‘shoulder to shoulder’ and, in time, started talking about personal matters including their health (Ahl et al., 2017). As in the community-led model, this was identified as unusual in other contexts, yet occurring naturally in men’s sheds. The models shared similarities both identifying respite for female partners along with male participant resistance to female involvement; based on men feeling they would be *disempowered* in decision-making and in

how they were allowed to act if females were involved (Ahl et al., 2017). Other similarities existed in the ethos of a safe and men-friendly environment where participants are equal and decisions are democratic. The study allotted three benchmarks of ‘the Australian model’ to test against the socially engineered activities in Denmark (Golding, 2015b, cited in Ahl et al., 2017).

The two models share similar organisational principles in that they both enable a men-only environment for their male community’s interests (their main interest, for example, woodwork). Secondly, both models allow for autonomy away from service providers; kept at arm’s length. The difference between the two models is the top-down nature of the Danish model; described as ‘anathema’ to the bottom-up nature of Australian men’s sheds. However by engineering conditions, the Danish Forum for Men’s Health have facilitated local men to develop their shed according to their interests. This freedom is observed in differences between the two Danish sheds, identified by Ahl and colleagues (2017) in their brief investigation. ‘Shed 1’ is thriving and well equipped whereas ‘Shed 2’ included a frail, older member who wanted to ‘just sit and chat’ (Ahl et al., 2017, p.325). ‘Shed 2’ leaders wanted to attract more members. Naturally the men involved, whether volunteers or paid staff, come with or without skills that might benefit the shed and its members. Men influence what sheds can, and cannot, be.

As stated above, Ahl and colleagues (2017) study represents a preliminary investigation. No identified studies for this review outline differences in outcomes of: community-led ‘grass roots’ organisations, ‘hybrid’ – community-led , yet financially supported – organisations, and; Public Health-led initiated and managed organisations such as those founded by AgeUK. There is clearly a gap in the literature regarding how the organisational setup of a men’s shed might influence the health and wellbeing of members. However, each of these different organisational arrangements seems to share an expectation that they will produce favourable health and social

care outcomes. These scenarios require investigation to understand how each of these three models impact health and wellbeing.

Leadership and coordination

As noted, Milligan and colleagues study on AgeUK ‘Men in Sheds’ programme used paid coordinators to oversee the effective running of the shed, its activities, and to give one-to-one support to frailer members at the three sites (2015). The need for a coordinator perhaps stems from the organisation’s emphasis on supporting elderly men, including those who require care due to ‘early stage dementia or physical limitations’ (Milligan et al., 2015, p.132). With the help of staff, men who experience ‘memory loss, and dementia or Alzheimer’s’ disease are still able to engage in meaningful activities; contributing by upcycling furniture to retail, which supports AgeUK’s charitable aims (Milligan et al., 2015, p.139).

In one case identified by Cavanagh and colleagues, the co-ordinator’s role resembled that of a Human Resources Manager; distributing suitable tasks to willing volunteers; covering pastoral care duties and ensuring health and safety was adhered to (2013). Members stated:

“...the co-ordinators are essential” [and] “if it wasn’t for the coordinators, the Shed wouldn’t operate” (Cavanagh et al., 2013, p.299).

In another case from the same study, a shed was ‘managed’ by a local Government funded Officer at a community health centre. Amongst other tasks, this role involves monitoring the wellbeing of the members (Cavanagh et al., 2013). However, members referred to a lack of systems and planning with so many day-to-day tasks to *manage*, there was little time for *leadership*. The study suggests that employed coordinators provide needed support at these men’s sheds and receive the required authority to implement “... rules and order, otherwise things might get out of control” (Cavanagh et al., 2013, p.300). The researchers identified a tension regarding the balance between bureaucracy and maintaining a ‘grass roots’ culture at the sheds (Cavanagh et al., 2013). The human resource management-esque role of leading and

managing men's sheds was deemed to be important for the safety of the participants with implications for their health and wellbeing.

Cavanagh and colleagues (2014) added to the aforementioned research by highlighting how vocational education and training in health and safety is important in maintaining the health and wellbeing of participants. They assert that men's shed must have training and development policies and practices that use collaborative learning so that participants work together towards shared training goals. Without such leadership in training, participants health and wellbeing might be harmed. These assertions to increase compliance seem at odds with participant desires to avoid bureaucratic involvement and maintain a 'grass roots' ethos to focus on learning what the men want to learn. How such contentious issues are addressed will be influenced by organisational arrangements of sheds and leaders responsible for shed's day-to-day running.

In terms of what participants want to learn, 154 men across 11 rural South Australian sheds were surveyed about their health interests (Misan et al., 2017). The survey did not cover health and safety, but participants – found to be 'lesser educated men from lower socioeconomic strata' – sought physical, mental and sexual health information (Misan et al., 2017, p.207). Help-seeking for medical advice was most often sought from General Practitioners (GP), with a preference for learning by kinaesthetic (hands-on) approaches. These findings suggest that men's shed leaders should consider *what* health information, *how* health information, and from *whom* health information, is delivered; if they aim to efficaciously improve health and wellbeing.

One study suggests that shed leaders need to be charismatic to enhance the belief in participants that organisation values, and shedder's individual values, are congruent so that participants will 'follow' leaders (Southcombe et al., 2015b). This study, involving more than 300 focus group participants across 60 Australian sheds, found congruence of values can be enhanced through

empowerment, envisioning and empathy; contributing to social connection and the wellbeing of participants. However, participants demonstrated reservations towards autocratic leadership or any resemblance to negative employment experiences (Southcombe et al., 2015b).

In collaboration with additional academics, these same authors found that good human resource management practices enhance social connections, participant health and wellbeing and retention of members (Ang et al., 2017). Findings were based on responses from more than 160 leaders and 400 members.

Some of the same authors suggest shed leaders who build relationships with outside agencies can better support the health and education outcomes of Aborigine and Torres Strait Islander participants. They recommend more research about capacity building at a community level (Southcombe et al., 2015a).

Furthermore, researchers of five sheds across Ireland concur, suggesting a need for further work to examine meaningful men's shed collaboration with other community-based services to enhance support for participants (Lefkowich & Richardson, 2018). The authors note that although shed leaders and participants felt solidarity with neighbouring men's shed groups, they were also competing for funding and other resources. This competition threatens the development of wider social connections to other community organisations and the ways shed might be led and participants supported.

Mackenzie et al. (2017) suggest, from data generated with 22 Canadian shed participants, that men's sheds use and support traditional views of what men value: work; woodwork; tools to work with. The presupposition of the authors is that this approach is detrimental to men and their company. However, Waling and Fildes (2017) argue that leaders and funders should refrain from attempting to alter men's sheds as their research, surveying and interviewing around 20 participants, confirms the cumulatively established benefits of shed participation;

that they improve health and social wellbeing. It is clear that the leadership and coordination of men's sheds influence how men's sheds are delivered and run. This has implications on to what extent and how sheds impact participant health and wellbeing.

Summary of sub-themes linking to iPT1: organisational arrangements

The studies included within the theme of organisational arrangements show that there is interest from public health commissioners in men's sheds as vehicles to support men's health and wellbeing. Preliminary research has considered similarities and differences between the community-led model of men's shed creation and men's sheds socially engineered by the Danish Ministry for Public Health. However, no identified studies outline the differences between the three models – of Public Health organisations setting up and running their own men's shed initiatives, 'grass roots' community-led organisations, and 'hybrid' community-led, yet financially supported, men's shed organisations – and their respective outcomes. Ahl and colleague's (2017) study suggests that the community-led approach, with or without external support and funding, is key to the success of men's sheds meeting the needs of their participants. Other studies have shown that within these organisational arrangements, leaders of men's sheds influence engagement, practices and outcomes of participation with impacts for health and wellbeing. More research is required to understand how organisational arrangements influence the health and wellbeing impact of men's shed participation.

Findings linked to iPT2: Shed-based resources

Men's shed organisations provide resources for their members to use. Access to materials, tools and equipment (Taylor et al., 2018) are attractive to some populations of men. Participants discussed in the men's sheds literature valued their men's shed because of the resources they contain. The four sub-themes: 'Adult Teaching and an avenue for sharing knowledge'; 'A

community-based resource for men'; 'Respite from family is good for both parties'; 'Men Only Spaces for health-seeking'; explore literature as part of the theme of 'Shed-based resources'.

Adult 'Teaching' and an avenue for 'sharing' knowledge

'Resources' are not necessarily material in nature. Shedders (men's shed participants) teach their skills and share their experiences (Carragher, 2017). Men's shed environments encourage sharing skills (Culph et al., 2015) with participants driven by altruistic motives to share (Cavanagh et al., 2013) or satisfaction from teaching. Informal provision of vocational training is suggested as a way to bridge the transition from work to retirement (Anstiss et al., 2018; Cavanagh et al., 2014b). Open, individual interviews with 12 participants of a Canadian shed found that participants valued knowledge exchange. A participant stated:

"It's fabulous the amount of knowledge and experience that a group of men have and are quite willing to share... and to be able to share those things, it's fabulous" (Reynolds et al., 2015, p.539).

Indeed, men experience health and wellbeing benefits from sharing their skills (Taylor et al., 2018). One study suggests that the type of activities – traditional activities in which men have historically taken part – might 'counteract potential vulnerability' of sharing feelings such as depression; which, in-turn, benefits participant health (Culph et al., 2015, p.311). These studies suggest that men's sheds facilitate opportunities to share knowledge which might benefit the health and wellbeing of those imparting the knowledge as well as any listeners.

A community-based resource for men

Participants describe their community shed as being a "home away from home" (Taylor et al., 2018, p.239). Drawing on Oldenburg's (1999) 1980s research, Golding describes men's sheds as 'inclusive "third places" for older men'; hangouts at the heart of a community providing a setting 'for informal and social public life, aside from work and home' (Golding, 2011a, p.41). Further to this, Anstiss and colleagues refer to retirees 're-placing' themselves in a shared space

which supports opportunities to engage in ‘healthy lives beyond paid employment’ (2018, p.217). AgeUK’s ‘Men in Sheds’ projects have demonstrated that local community spaces can become therapeutic landscapes to engage older men and provided cognitive stimulation, enhancing wellbeing and reducing social isolation and loneliness (Milligan et al., 2015).

Beyond physical resource benefits, men’s sheds are found to offer equalising places for men living with long-term disabilities enabling good integration with able bodied participants (Hansji et al., 2015). Sheds were also found to support Indigenous and Torres Strait Islander men to develop social relations and overcome social and health wellbeing concerns. However, caution is advised when galvanising social connections between men if these ‘reinforce[d] negative health behaviours’ form part of a group’s ‘social norm’ (McGeechan et al., 2017, p.5). But, Cox and colleagues (2020) report that the shed environment supports, not merely the maintenance but, the improvement of older Aboriginal men’s wellbeing despite aging and declining health. Many men’s sheds offer the local male population a place to be, beyond their residence and workplaces; a community resource that can support social health and reduce loneliness and social isolation.

Respite from family is good for both parties

Further to participant benefits, men’s sheds as spaces for men were found to benefit partners of attendees suffering ‘retired husband syndrome’; when retired men are home more often and are *under their partner’s feet* (Golding, 2011a, p.40). Attendance at men’s sheds gives participants a sociable break from their partners, whilst giving their partners a break from their man; aiding their relationships.

Further to respite, participants and their families benefit through provision of discussion points on shed-related stories, for example:

“My family look forward to each Thursday and ask what I did” (Moyle et al., 2015, p.227).

These accounts further suggest men’s sheds are community resources supporting the health and wellbeing of their participants, with positive implications for participant’s families.

Men only spaces for health-seeking

In a study with predominantly white, retired, Canadian men, Mackenzie and colleagues identified a need for male-only spaces that allow a pragmatic focus on work-related tasks and maintaining independence (2017). Such opportunities can accommodate ‘an array of masculinities’ (Mackenzie et al., 2017). A further study in Canada also recognised the need for community programmes for men and more awareness of such programmes to reduce isolation, support friendship formation and engage men in continued learning (Nurmi et al., 2018).

In the UK, men’s sheds have been described as gendered spaces able to attract men and where men are performing and reaffirming what it means to be male (Milligan et al., 2015). Importantly for health, sheds are enabling environments where men can access resources in a supportive and safe male environment (Hansji et al., 2015). The presence of other men and ‘no (or very few) women’ (Ahl et al., 2017, p.321) facilitates men to talk about health and mental health (Mackenzie et al., 2017). McGeechan and colleagues (2017) found group leaders and participants expressed that the presence of women would change the way male participants communicate and socially connect. They also noted a precedent for gendered interventions with more tailoring towards, or targeting specifically at, women:

‘There are more facilities... in terms of groups and such for the female than there is for the male’ (McGeechan et al., 2017, p.3).

With no case control studies within the men’s sheds literature, it is interesting that no studies on health benefits of men’s sheds negate the assertion that men often find it easier to broach health matters with their male peers.

A UK focus group participant reiterated a view expressed by many shed members, that men:

“...sometimes keep quiet [about illness, and] just muddle through. Whereas in the workshop environment you start to see these guys struggling with a bad shoulder, [or] something else and you can say, ‘Have you had a test lately?’ and it seems to click in their minds that ‘Mmm, I ought to do that’. And that’s what it’s all about” (Milligan et al., 2015, p.137).

The men-only essence of men’s sheds adds a therapeutic resource to put participants at ease to open up about their health and become more health literate and health-seeking. These gendered interventions have been found to support male social and mental health needs internationally in the face of gendered health disparity. For example, with 42.6% of 324 Australian sheds proactively attempting to enhance men’s health literacy through health worker visits (Cordier & Wilson, 2014a). These studies suggest that men’s sheds are spaces where male participants feel able to talk about physical health and mental health, and that sheds can encourage health-seeking behaviours.

Summary of sub-themes linking to iPT2: Shed-based resources

This theme presents descriptions of men’s sheds offering resources which could impact participants health and wellbeing. There is no conclusive evidence that men’s sheds improve health and wellbeing through opportunities: to share knowledge; have respite from home, work or family, or; to be in a men only environment. However, this theme brings together a cumulative body of work suggesting men’s sheds offer participants resources that could impact their health and wellbeing.

Findings linked to iPT3: Human-based resources

The previous section relates to resources available within the men’s sheds. Shed participants can benefit from these resources as direct outcomes (for example, health information which leads to early diagnosis and treatment or men listening to problems and offering support) or as

subsidiary outcomes (for example, men learn household maintenance skills that are used at a later date and provoke feelings of fulfilment). This final theme relates to ‘human-based resources’ and considers more ways and methods by which shed participation benefits men, categorised within the following subthemes: ‘Adult Learning’; ‘Combating loneliness & isolation’; ‘Belonging’.

Adult Learning

A consistent theme across men’s shed literature is training and skill development. Mental health and wellbeing benefits of community adult learning are well established (Merriam & Baumgartner, 2020; Merriam & Kee, 2014; Robotham et al., 2011; Waller et al., 2018).

Linked to the previous theme’s altruistic motives to share by *teaching*, is to gain⁵ by *learning* (Cavanagh et al., 2013). Lower socioeconomic groups (Yamashita et al., 2019) and particularly older men (Golding B et al., 2007a, in Carragher and Golding, 2015) often hold negative attitudes regarding education and training. As Wilson and Cordier (2013) point out, men’s sheds often attract men with fewer attained qualifications and provide education in a way that is informal and enjoyable to a lower socioeconomic demographic. Education, to these demographics of men, is well supported in subsequently released men’s shed literature (Carragher & Golding, 2015b; Cavanagh et al., 2013; Culph et al., 2015). For example, further to Misan and colleagues’ (2017) discovery that lesser educated men prefer informal hands-on learning, community-based informal education was identified as important to members of 52 sheds across the island of Ireland (Carragher & Golding, 2015b). Carragher and Golding (2015b) found that 97% of participants agreed that they were keen to learn more and concluded that the process and outcome of learning added value to participant’s lives.

⁵ There are, of course, feel-good factors and wellbeing benefits of being able to share with (teach) others and hold their attention (Griffin and Tyrrell, 2013).

Men's sheds provide environments that facilitate an increased outward focus (Cordier & Wilson, 2014a) and 'use of cognitive skills' (Culph et al., 2015, p.306). For example, 12 men, previously self-reporting symptoms of depression, and/or with 'a diagnosis of depression', were found to be experiencing minimal depressive symptoms when participating in one of three Australian men's sheds (Culph et al., 2015, p.307). Enjoyment of learning new skills and a sense of pride derived from purposeful shed activities is experienced by all the study's participants.

It cannot be assumed that people innately know how to maintain their health and wellbeing as they age in an ever-changing society. Men's sheds participation is a method of supporting some men to engage in adult learning which has recognised mental health and wellbeing benefits (Golding, 2011b, in Wilson and Cordier, 2013).

Combating loneliness & isolation

The community-based nature of men's sheds means that individual men can integrate into a shared space and add their labour to the social practice of work-based activity and experience the company of other men (Anstiss et al., 2018; Reynolds et al., 2015). Researchers studying 61 Aborigine and Torres Strait Islander participants deemed the five sheds in their study to be communities where men learn as they interact as a group; overcoming wellbeing concerns (Henwood et al., 2017). Focus groups with Indigenous and non-Indigenous men led to findings that being together and learning together enhanced social inclusion, social connectedness and men's resources for mental health and wellbeing (Cavanagh et al., 2018). Through being and working together men experience meaningful relationships with peers; with personal, social and health benefits; as Foster and colleagues found in their study of a Scottish men's shed (2018). The work-focus gives men an appealing and active reason to be in a room together. Enhanced social interaction, positively impacts social engagement and health welfare (Foster

et al., 2018). A survey of all men's sheds registered with the Australian Men's Sheds Association (AMSA), identified from 300 responses that sheds can reduce barriers of access to increase social connectedness, reducing social isolation and loneliness (Wilson et al., 2019). These social connections benefit individual's mental and social health, increasing their self-confidence and the Australian cultural idiom of 'mateship' (Ayres et al., 2018, p.1); meaning the embodiment of equality, loyalty and friendship (Pease, 2001; Ward, 1978).

This sub-theme brings together literature describing how men's sheds offer community-based activities specifically for men that can help to reduce loneliness and isolation.

Belonging

Reduced feelings of social isolation, link to the last aspect of human-based resources featured in the literature; the experience of *belonging* to a social group and entity bigger than oneself (Golding et al., 2008, both cited in Wilson and Cordier, 2013; Golding et al., 2006).

Community-based participatory research methods with Aborigines revealed that:

'[s]hed activities were premised on these men co-creating an informal, culturally safe and male-friendly community...' leading to positive experiences including 'belonging' (Cox et al., 2020, p.1).

Similar findings were identified in a study of 27 men in rural areas of the Republic of Ireland.

Research of participation across five men's sheds identified a 'sense of belonging' that supported wellbeing:

' "People get up in the morning and if they have somewhere to go and something to do, it's good for their health as well as, you know, it's good for their sense of belonging." – Dylan' (Lefkowich & Richardson, 2018).

It is interesting that in the rurality of these areas men's shed participants were able to feel a sense of belonging to their groups. Two sheds within urban areas lacking community engagement have also been described as providing:

'...a space that connects men in the community, who would otherwise never have got to know one another...' (Crabtree et al., 2018, p.211).

These UK city men's sheds were found to improve participant social contact and interaction (Crabtree et al., 2018).

In a medium-sized urban area of North Scotland, Foster and colleagues found that more than 90% of 31 respondents agreed or strongly agreed to an increased sense of "belonging" (2018, p.8). Indeed, evidence from multi-shed focus groups suggest sheds represent acceptance and somewhere to belong even for men who come 'along for nothing more than a chat and a cup of tea' (McGeechan et al., 2017, p.251).

Summary of sub-themes linking to IPT3: Human-based resources

This human-based resources theme discreetly accompanies the previous shed-based resources theme. It brings together what studies present about participant's abilities to learn, and connect and engage with others as well as their experience of belonging to their men's shed groups. These sub-themes are associated with improved health and wellbeing outcomes. Men's sheds are community spaces which facilitate these human-based resources.

Discussion

This review has assessed three reviews of men's sheds literature, re-examined 12 studies featured in Kelly et al.'s (2019) review and updated what is known about men's sheds and health and wellbeing in 17 unreviewed primary research studies. The purpose of this was to *explore* (Gough et al., 2012) reported health and wellbeing impacts of men's shed participation. The predominant nature of published studies is evaluation of men's shed benefits. Less emphasis has been placed on any disadvantages or harms caused by the existence of men's sheds or participation in them. Evidence shows that men's shed organisations bring predominantly older populations of men together through the premise of engagement in work-based activities. Although the Kelly et al. (2019) review lacks some reporting detail, it does

bring together evidence of ‘what’ activities support participants in the domains of physical health, mental health and social wellbeing. Furthermore, it synthesises evidence to suggest ‘how’ these outcomes might occur.

This present review aimed to use the latest literature to further understand what about men’s sheds works to improve participant health and wellbeing. No men’s shed is the same and the theme of ‘organisational arrangements’ demonstrate how origins and leadership add to their heterogeneity. This work has identified gaps in what is known about how organisational setup might influence the health and wellbeing of men’s shed members. Despite public health commissioners interest in men’s sheds to support men’s health and wellbeing, no identified studies outline the differences between 1) Public Health organisations setting up and running men’s shed initiatives; 2) ‘grass roots’ community-led men’s sheds, and; 3) ‘hybrid’ community-led yet financially supported men’s sheds. Preliminary research suggests that the community-led approach, with or without external support and funding, is key to the success of men's sheds meeting the needs of their participants (Ahl et al., 2017). More research is required to understand how organisational arrangements and shed leaders influence the health and wellbeing impact of men’s shed participation. The review reveals an absence of theory to understand if different approaches to organisational arrangements might achieve (similar or disparate) outcomes and if so, how and why.

Themes of ‘shed-based resources’ and ‘human-based resources’ demonstrate similarities and the homogeneous elements of men’s sheds, which are: adult learning spaces for groups of men to belong. Grouping men in a welcoming community space and focusing on purposeful activities facilitates social and adult teacher-learner interactions. This interaction reduce social isolation and loneliness and create a sense of belonging to a community of peers whilst producing products of participant’s labour. Men’s sheds offer opportunities, and indeed

reasons, to come together and feel useful whilst men contribute and benefit from their shed's resources and from interaction with peers. Participants report feeling better for attending and being part of their men's shed. Members enjoy the experience and self-reported accounts and surveys show mental and social health and wellbeing benefits.

The body of research includes few accounts of increased physical activity beyond participants being 'on their feet' more often. Research has also relied on participants to report their experience of benefits. To strengthen the evidence base regarding if men's sheds work to improve health and wellbeing, ideally a social Randomised Control Trial (RCT) with pre-, during- and post- measures would be implemented to independently test differences across health domains correlating to men's shed participation. Unfortunately, this would not be feasible for a PhD Candidate to complete within a discrete three-year period. Also the financial costs and resources involved to conduct such a trial would be considerable and well beyond the reach of this PhD.

Notwithstanding the limitations to the predominantly qualitative and self-reported accounts of health and wellbeing related maintenance and improvement, cumulatively there is a body of supportive evidence – from variations of men's shed, in different contexts and geographic locations – that builds to suggest men's sheds offer participants resources that positively impact their health and wellbeing. A more achievable aim for further research is to theorise how and why men's sheds achieve the health and wellbeing outcomes established in the literature.

Conclusion

Having *generated* three *iPTs*, this review began by clarifying what is already known about men's sheds and impacts to participant health and wellbeing. An *exploration* of three previous scoping reviews drawing on 43 items and the systematic review of 29 studies published since 2013 has

provided a cumulative body of evidence suggesting men's shed participation supports participant health and wellbeing. As such this chapter has established what knowledge exists about men's shed impacts on participant health and wellbeing.

The in-depth exploration of primary studies mapped against the themes from the generated *i*PTs supports further exploration of the generated *i*PTs in chapter 3. An exploration of organisational arrangements and men's shed and participant resources will further our understanding of what characteristics of men's sheds might impact health and wellbeing, for whom, how and why.

Chapter summary

Health and wellbeing benefits attributable to participation in men's sheds have been identified in reviews and primary studies explored throughout this chapter. The explorational review found support for the *i*PTs themes: 1: Organisational arrangements; 2: Shed-based resources, and; 3: Human-based resources. Whilst these findings contribute to the 'explore' component of Gough and colleague's (2012) GET framework, the generated *i*PTs will require further exploration through primary research designed for this specific purpose. Chapter 6 discusses cases providing opportunities to explore the three *i*PTs. I will look at *i*PT1 in Chapter 7: 'Organisational arrangements of men's sheds - Explored and Tested'; *i*PT2 in Chapter 8 'Shed-based Resources - Explored and Tested, and; *i*PT3 in Chapter 9 'Human-based Resources' - Explored and Tested.

For now, this review has identified that the themes, relating to the *i*PTs in the previous mini-chapter (Chapter 3), are worthy of 'exploration' (Gough et al., 2012) using an empirical research design. This methodology and research design is covered in the next chapter (Chapter 5).

5) Realist methodology: the cycle of realist inquiry and methods of data generation

Methodology

This chapter discusses the philosophical paradigm used to conduct the empirical research presented in the remainder of this thesis. The methods used and the methodological choices made will be clearly presented and justified. This includes a discussion of the methods which were planned and had to be changed.

At the start of 2020 ‘severe acute respiratory syndrome coronavirus 2’ (SARS-CoV-2), spread across the world. This ‘coronavirus disease’ identified in 2019 as ‘COVID-19’ – an acronym pronounced as a word commonly expressed as ‘Covid-19’ – resulted in national lockdowns and restrictions on people physically meeting in several countries, including the UK where this research was taking place. As a result of these circumstances – and vulnerability of the often older populations attending men’s sheds to corona viruses – the research sites were all shut from February 2020 to a time long after the scheduled data generation period.

This chapter will culminate with explanations of the process of data analyses and the consideration given to ethical implications.

Research purpose

The purpose of the research was to generate, explore and test explanatory theories regarding health and wellbeing impacts of men’s sheds for participants. I wanted the research to contribute original knowledge to academic literature about men’s sheds, men’s health and the sociology of health. Ultimately, the research was designed to inform policy and support practice in how health and wellbeing might be enhanced within communities.

Research question

- What characteristics of men's sheds enhance health and wellbeing, for whom, in what circumstances, how and why?

Research objectives

To fulfil the research purpose and answer the research question, the objectives are:

- 1) to examine the setup and implementation of men's sheds to determine whether there are health and wellbeing enhancing characteristics relating to: i) Public Health-led men's sheds; ii) Community-led men's shed, and; iii) Hybrid – community-led, yet financially supported – men's sheds;
- 2) to understand how the circumstances of those who attend led to men's shed participation;
- 3) to establish the characteristics of men's sheds that are associated with improved or diminished health and wellbeing

Philosophical paradigm

There is '...no neutral position from which to produce knowledge' (Fryer, 2020, p.12). Philosophical positions are dependant on a researcher's ontological and epistemological beliefs (Blaikie, 2007, 2009). When a researcher is explicit about their ontological and epistemological positions they are able to justify the decisions about their methodological choices and what methods of data generation are used. As Fleetwood succinctly states:

'[t]he way we think the world is (ontology), influences: what we think can be known about it (epistemology); how we think it can be investigated (methodology and research techniques); the kinds of theories we think can be constructed about it...' (2005, p.197)

Ontologically, I am a 'realist'; believing that there is a 'reality' of the social world. Epistemologically, I am a subjectivist with a sceptical awareness that knowledge is fallible and 'theory-laden'; being dependent on theory to understand how the social world works (Maxwell, 2012, p.vii). This philosophical position has been broadly describes as 'critical realism' (Fryer,

2020, p.13; Maxwell, 2012, p.5) and ‘social realism’ (Blaikie, 2009, p.101). However, I prefer the term ‘scientific realism’ (Haig & Evers, 2015; Pawson, 2006b, 2013) to describe

‘the [social] world... [as being] ..the way it is... [whilst also acknowledging] ...that there can be more than one scientifically correct way of understanding reality...’ (Lakoff, 1987, p.265 in Maxwell, 2012, p.5).

A realist methodological design

The research question is informed by a realist philosophy of science (Wong et al., 2013). The social world is complex, variable and messy (Stones, 1996), and the study of social phenomena is also complex. As such, decisions need to be made on how to manage unpredictability and disorder (Blaikie, 2009; Patton, 2002). Realist inquiry considers interactions between complex social conditions and interventions, which may trigger mechanisms and even alter contexts to produce outcomes (Wong et al., 2013). A mass of different contextual factors constrain and facilitate social interventions and these contexts need to be understood along with any social programme under investigation (Pawson, 2006b). Realist methodology facilitates unpacking of social interventions by developing context, mechanism, outcome configurations; theorising how and why interventions interact with specific circumstances to produce outcomes. Such inquiries can also explain why interventions might not achieve their intended outcomes.

Ontologically, realism assumes the existence of a ‘real world’, whilst acknowledging that epistemologically, knowledge of any external ‘reality’ is always limited by human senses, interpretations and cultures (Greenhalgh et al., 2011). As such, ‘knowledge’ cannot be considered objective truth (Emmel, 2013) . On a positivist / constructivist continuum, realism lies between positivism, where the real world is directly observable, and constructivism, where all knowledge is purely a human construction and so cannot represent a ‘real’ world. Realist philosophy considers social systems and structures to be real, because they influence people’s lives; however, realist also encourages an appreciation of human agency and that human beings respond differently to interventions (Wong et al., 2017). This research approach assumes that

it is possible to undertake research that can produce subjective knowledge about objective social reality and social processes (Mason, 2017).

An alternative research design – to the realist one chosen for this thesis – could be to employ a randomised control trial (RCT). RCTs have been considered the flagship of experimental design (Rossi et al., 2004) and the gold standard of original research (Goldacre, 2010). The specific advantage of randomised experiments, over other experimental designs, is that the effects of the intervention are potentially isolated so that any difference between the experiment group and the control group can be attributed to the tested intervention: the independent variable (Rossi et al., 2004), which in this case would be health and wellbeing outcomes for men. The problem with this is that no intervention, including men's sheds, can impact the health and/or wellbeing of all men, because 'men' are not one homogenous group. Human beings that identify as male react differently due to contextual and cultural factors and due to differences in interpretations and responses to the concept of men's sheds. In addition, no men's shed is the same, and so the idea that men's sheds '*work*' to improve health and wellbeing is epistemologically naïve. Men's sheds, as a social intervention, in different cultures and contexts are complex and heterogeneous. As such, the creation of any randomised trial to assess if attendees of men's sheds are healthier and experience better wellbeing than a similar cohort of men not participating in men's sheds would do nothing to explain what it is about the chosen men's sheds that impacts on any observed outcome. No new knowledge would be produced regarding why and how men's sheds have positive, negligible or negative impacts upon the specific attendees. Moreover, no understanding could be gained of what the key components of the intervention were, and which might be replicable in other social interventions. Realist investigations, however, do have these properties (Marchal et al., 2013).

Realist research aims to resolve the underlying query: “What works, for whom, in what circumstances, how and why?” (Wong et al., 2013, p.2). In this investigation, the ‘*working*’ element/s of men’s sheds refers to the characteristics that enhance or diminish health and wellbeing. The ‘*whom*’ are the participants of the men’s sheds. ‘*Circumstances*’ refers to the specific contexts of the participants, the men’s sheds as organisations, and the wider neighbourhood conditions where men’s sheds are situated. ‘*How*’ ascertains the means or mechanisms by which the programme works. Finally, ‘*why*’ gives a reason, or reasons, for programme outcomes.

Context, Mechanism, Outcome configurations

I have used the heuristic of Context(s), Mechanism(s), Outcome(s) configurations to represent ‘*refined* programme theories’ (*rPT*) and ‘*tested* programme theories’ (*tPT*). I have chosen to represent these configurations with the letters and symbols denoted in Figure 5.

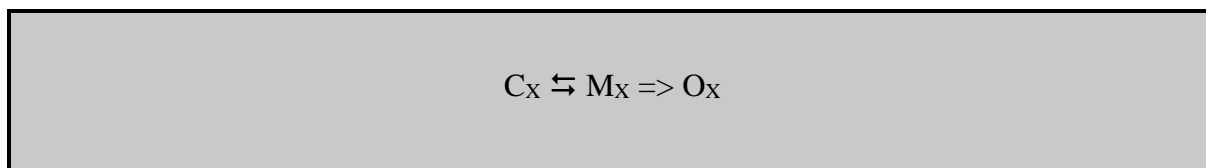


Figure 5: Context(s), Mechanism(s), Outcome(s) configurations

‘C’ stands for Context(s) which interact with ‘M’, denoting Mechanism(s). Interaction between context(s) and mechanism(s) is represented by the twin, left and right, arrows symbol ‘ \leftrightarrow ’. The conjoined ‘equals’ and ‘greater than’ symbols, ‘ \Rightarrow ’, ‘indicate the directional path of causation...’ (Byrne, 2018, p.105), leading to Outcome(s) represented by ‘O’.

In the succeeding chapters, outcomes will be split into two classifications: ‘*proximal* outcome(s)’, represents as ‘ pO_x ’ and ‘*distal* outcomes’ represented by ‘ dO_x ’. The subscript ‘x’ (in Figure 5) represents *a letter* for contexts, *a roman numeral* for mechanisms and *a number* for outcome(s). These letters, roman numerals and numbers help distinguish the different

contexts, mechanisms and outcomes. Context(s), Mechanism(s), Outcome(s) configurations will sometimes be referred to as ‘CMO’ or ‘CMOc’ – with the lower case ‘c’ denoting the word ‘configuration(s)’.

For clarity, I have not used Context(s), Mechanism(s), Outcome(s) ($C \leftrightarrow M \Rightarrow O$) configurations for the initial programme theories (*iPT*). However, I have used statements preceding with the terms ‘if...’, ‘then...’ and ‘leading to...’. As previously mentioned the term ‘if...’ is used to describe circumstances; ‘then...’ is used to denote responses; ‘leading to...’ is used to present results. The presentation of *iPT*, *rPT* and *tPT* will be found in each of the findings chapters (Chapters 7, 8, and 9) and in the discussion chapter (Chapter 11).

Research design – the cycle of realist inquiry

The process, outlined below, explains the stages involved in developing, testing and refining a programme theory (Pawson & Tilley, 1997) to explain the characteristics of men’s sheds that impact the health and wellbeing of men and their communities, in particular circumstances, how and why. This approach was developed from the ‘wheel of science’ (Wallace, 2017) to produce the ‘realist evaluation cycle’ (Pawson & Tilley, 1997). The wheel or cycle (see Figure 6) depicts stages of developing theory and a hypothesis. This is followed by primary data generation, secondary data collection, and concurrent analysis to test and refine a hypothesis and establish what works, for whom, under what circumstances, how and why (Rycroft-Malone et al., 2015). However, these stages are not fixed, and theories are iteratively developed, refined, tested and further refined throughout the research processes. These involve realist investigation in research sites, realist reviews of literature and the realist synthesis of these data.

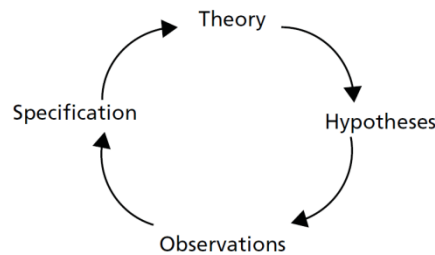


Figure 6: Cycle of realist inquiry adapted from Pawson and Tilley (1997, p.85)

Stage 1: Developing ‘theory’

Developing theory starts with the *generation* component of Gough and colleagues ‘Generate, Explore and Test’ (GET) framework (2012). As discussed in Chapter 3 (*‘Generating initial theories for how and why men’s shed programmes impact health and wellbeing’*) *initial* programme theories were generated on how and why men’s sheds as social *programmes* might impact health and wellbeing. I *generated* three *iPT*: *iPT1* on ‘organisational arrangements’; *iPT2* on ‘shed-based resources’, and; *iPT3* on ‘human-based resources’.

As *explored* (Gough et al., 2012) in the literature review (Chapter 4), there are gaps in what is known about how organisational setup might influence the health and wellbeing of men’s shed members. A tentative hypothesis about organisational arrangements – requiring more *exploration* using primary data – will be discussed below (Stage 2: Developing a ‘hypothesis’).

Furthermore, the theory *generation* of there being ‘shed-based resources’ and ‘human-based resources’ is also *explored* in Chapter 4. It was also thought that these initial ideas about what ‘resources’ might influence health and wellbeing required more exploration to understand how and why this might be so. Again, tentative hypotheses about ‘shed-based resources’ and ‘human-based resources’ are discussed next in Stage 2.

Stage 2: Developing ‘hypotheses’

Hypotheses about the three themes of ‘organisational arrangements’, ‘shed-based resources’ and ‘human-based resources’ were *generated* (Gough et al., 2012) in Chapter 3.

The hypotheses in iPT1

The first part of *iPT1* on ‘organisational arrangements’ stated that *community-led men’s sheds* were likely to produce the most conducive environments for men’s shed members, as denoted in Figure 7.

If a men’s shed is led by its community members,
then participants have control over how their men’s shed operates,
leading to a comfortable physical and social environment for supporting the health of members

Figure 7: Hypothesis on ‘community-led men’s sheds’ (*iPT1a*)

The second part of this *iPT* suggests that ‘*hybrid*’ – *community-led, yet financially supported* – *men’s sheds* would be vulnerable to being consumed by external funders’ aims and objectives which might derail the men’s shed’s aims and objectives and culminate in a less conducive environment to support participant’s activities. This is represented in Figure 8.

If community-led men’s sheds are financed by external funders,
then they are prone to the influence of funder aims and objectives and pressure to acquiesce to funder demands,
leading to activities that take shed leaders and members away from their original aims and objectives

Figure 8: Hypothesis on ‘hybrid community-led yet financially supported men’s sheds’ (*iPT1b*)

The final part of *iPT1* suggests that Public Health organisations providing men’s sheds as Public Health ‘services’ are unlikely to give participants any sense of ownership or violation over how these sheds are run. This is presented in Figure 9.

If a men’s shed is led by a public health organisation,
then participants have little control over their men’s shed,
leading to less participant investment and less added value in terms of
 personal and community health benefits

Figure 9: Hypothesis on ‘Public Health-led men’s sheds’ (*iPT1c*)

These three hypotheses form the first initial programme theory that requires more exploration with primary data to refine it, before ‘testing’ discussed in Stage 3 (Testing theory through ‘observations’).

The hypotheses in iPT2

The second programme theory *iPT2* on ‘shed-based resources’ also includes three hypotheses. The first of these is that if men value the idea of what they believe a men’s shed might provide in terms of resources, then they will make the effort to attend to investigate if the men’s shed might live up to their expectations. This is depicted in Figure 10.

If men value the men’s shed resources,
then men will make an initial attendance.

Figure 10: *iPT2a* ‘Shed-based resources’ and
initial men’s shed attendance

Following the initial attendance, there are hypothesised to be two possible outcomes this leads to. The first of these is that if men’s expectations are met or exceeded they will continue to attend the men’s shed (as shown in Figure 11).

If men continue to value the men’s shed resources,
then men will continue to attend,
leading to improved health and wellbeing.

Figure 11: *iPT2b* ‘Shed-based resources’ and *continued* men’s shed
 attendance

However, if men's expectation are not fulfilled during the initial attendance they will not continue to attend or will only attend sporadically. This scenario is shown in Figure 12.

If men do not (continue to) value the men's shed resources,
then they will not attend regularly or at all,
leading to negligible changes to their health and wellbeing.

Figure 12: *iPT2c* 'Shed-based resources' and no continuation or limited continuation of men's shed attendance

These three hypothesised scenarios require further exploration with primary data to refine the overall programme theory on how men interact with shed-based resources. This exploration will be discussed in Stage 3.

The hypotheses in *iPT3*

The final *iPT* includes one overall hypothesis. Namely, that all men will arrive at the men's shed with experiences, knowledge and skills and through interactions facilitated by the shed-based resources men will share and learn from the pooled experiences, knowledge and skills in the men's shed. These processes and enhancement by sharing and learning will support men's health, wellbeing and resilience. This hypothesis is presented in the following figure (Figure 13).

If men bring, share and learn from experiences, knowledge and skills through social interaction,
then men can enhance their own and others' abilities,
leading to improved health and wellbeing and resilience to negative effects on wellbeing

Figure 13: *iPT3* Human-based resources

As with the other two hypotheses, human-based resources have been *explored* in the preceding literature review (Chapter 4). These hypothesis about how the programmes work require further *exploration* and then *testing* (see below).

Stage 3: Testing theory through ‘observations’

The process of further developing the programme theory is what Pawson and Tilley, in the ‘realist evaluation cycle’ (1997), refer to as ‘testing’ theory through ‘observations’.

In terms of Gough and colleagues (2012) ‘Generate, Explore and Test’ (GET) framework *testing theory through ‘observations’* is an iterative process of ‘refining’; involving both ‘exploring’, and then ‘testing’ what has been ‘explored’. As stated at the start of this ‘Research design – the cycle of realist inquiry’ section, the four stages are not ‘fixed’. This means that *after* the generation of the “‘initial’ programme theories” (*iPT*), settled upon after exploration within the literature review, the *iPT* will be refined to form “‘refined’ programme theories” (*rPT*). The *rPT* will then be tested to form “‘tested’ programme theories” (*tPT*). This is an iterative process and is depicted in Figure 14 below.

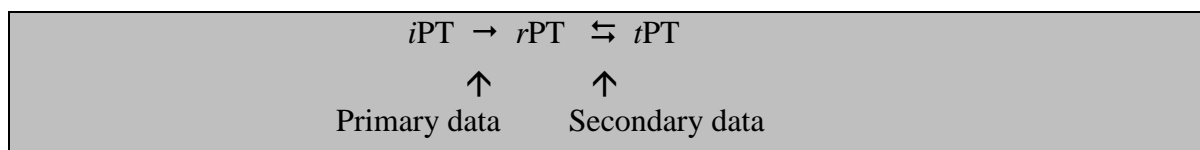


Figure 14: The process of ‘initial’ programme theories (*iPT*), developed with primary data to become *refined* programme theories and then tested with secondary data to become ‘tested’ programme theories (*tPT*)

Each of the *iPT* were *explored* in the literature review and confirmed as valid *iPT*. Further to the use of the men’s shed literature the formulated *iPT* required further *exploration* (Gough et al., 2012) with newly generated primary data. This will lead to *rPT*. Exploratory investigations took place in three types of men’s shed. These sheds will be discussed in the ‘Sampling frame for men’s sheds’ section below and in The Three Case Study Research Sites (Chapter 6).

This *rPT* can be, what Gough and colleagues (2012) refer to as, ‘tested’ against another round of generated data, to produce a *tPT*. The plan for generating data for the final round of ‘testing’ was through focus groups. However, these plans were thwarted by national lockdowns in 2020 and 2021 due Covid-19. This will be discussed below in the Data Generation section.

Stage 4: Refining programme theory ‘specification’

Realism as a methodology is based on the inquiry framework: ‘what works, for whom, in what circumstances, how and why’ (Wong et al., 2013, p.2). The final stage of the cycle of realist inquiry is to apply learnings from the analysed data to credibly state: What components of men’s shed interventions impact which participant’s health and wellbeing, in what contextual circumstances, what are the causal mechanisms of how this happens and what theories give reason for why this occurs?

As already stated, the journey around the realist cycle continues by developing further theory; additional possible interplay of context, mechanism, outcome configurations (Pawson & Tilley, 1997). In this investigation CMOc are iteratively refined throughout the empirical investigation informed by primary data and checking back to relevant literature.

The findings and middle range theory (MRT)

The purpose of the research is to develop explanatory theories about the impacts of men’s shed participation on individual health and wellbeing. This iteration of the realist cycle will pause when there is robust, empirically evidenced, understanding of the mechanisms through which men’s sheds impact participant health and wellbeing and the contextual conditions necessary for the activation of these mechanisms.

The exit point from conducting ‘research’ for this PhD research will be cemented with the identification of ‘middle-range theories’ (Merton, 1967) to add further support for the *tested* programme theories. Middle-range theory is an academic term used to describe a ‘working explanation’: standing between macro all-embracing ‘published theories... delimited in their area of application’ and the micro focus of ‘minor working hypotheses’ which would include triviality of detail (Blaikie, 2009; Davidoff et al., 2015, p.229; Pawson & Tilley, 1997). The resultant middle-range theories (MRT) explains the demi-regularities of context, mechanism

and outcome patterns that impact health and wellbeing through men's sheds. This might support policy-makers and practitioners aiming to improve men's health and wellbeing through a social intervention. MRT are discussed as the *seventh method* of data generation in the Data Generation section (below).

Sampling strategy

Sampling strategies, and the size of an investigated sample, depend upon the unit of analysis (Patton, 2002). In realist research the unit of analysis is not the programme intervention (men's sheds) or the participants (men). The primary unit of focus is the theories that underpin the social programme (Greenhalgh et al., 2017a; Pawson, 2006b, 2013), and so the sampling process is driven by theory (Emmel, 2013). As programme theories develop, they direct "where to look" and "what to look for..." (Pawson, 2013, p.62).

Research sites were chosen based upon their suitability to develop, test and refine the programme theory (Emmel, 2013) in relation to impacts of men's shed participation on men's health and wellbeing. In a more nuanced sense, sampling choices are designed to identify 'mechanisms in action (or inaction)'; the causal powers that occur within specified contexts (Emmel, 2013, p.85, my parentheses). Sampling choices are designed to limit contexts; as social life is an open system, there was a need to ensure the scope of the research was manageable (Emmel, 2013).

Research sites, and people about whom data was collected, were not selected randomly. This sampling framework was chosen purposefully to enable in-depth understanding and programme theory development, rather than generalisation (Patton, 2002). In practice, I looked for potential research sites using the UK Men's Sheds Association website and then contacted sites that appeared to be grass roots, community-led organisations and Public Health-led

organisations. Grass roots organisations appeared to be more common and I was able to identify one with little to no funding and another which was in receipt of funding. I chose from two Public Health funded men's sheds. The most local was a group of vulnerable adults who used an existing businesses premise one afternoon a week. However, the chosen site was further away, but was open more days and had its own premises. This was a better fit for the investigation. Likewise, my decisions about the people I chose to generate data with were also carefully considered. I chose people to speak to and learn from who had a range of experiences from the programme's inception to men who had just joined their men's shed.

The sampling frame for 'men's sheds'

The research took place within England, due to the paucity of published research about men's sheds from this country and opportunistically because of the researcher's location. Research sites were chosen for their representativeness to three shed types it was theorised, could be distinctive. Henceforth these will be referred to as:

- i. "Industrial Town Men's Shed" – a Public Health-led men's shed;
- ii. "City Men's Shed" – a community-led men's shed;
- iii. "Market Town Men's Shed" – a hybrid – community-led, yet financially supported – men's sheds

The mixed, purposeful sampling strategy included elements of theoretical and criterion sampling. The sampling strategy was based upon the 'theory' that differences in men's sheds leadership may influence the efficacy of men's sheds. 'Criterion' sampling is the sampling of cases which fit predetermined criteria, which in this circumstance was the shed leadership types outlined above. These sampling types were appropriate to this research because the investigation was driven by the theory that the leadership and funding of men's sheds affects resource mechanisms and participant's responses, which affect the characteristics of the men's sheds and, hence, participant's health and wellbeing outcomes. It was therefore appropriate

that the sample fit this criteria and that the sample be a good fit with the theoretical constructs under investigation (Patton, 2002).

As mentioned, research sites were initially identified through the UK-based men's sheds association (UKMSA) which predominantly covers England. Once lead personnel at a men's shed were approached, and if the people at the site had a willingness to engage in the research, steps were taken to assess the suitability of the shed's profile with which to coproduce data. There is more information about these case studies in Chapter 6.

The sampling frame for men's shed personnel

Within the established sampling strategy for research sites, people who it was surmised would enable further refinement of the programme theory were invited to participate in the research (Emmel, 2013, p.80). An array of data generation techniques were used. The strategy to involve informants from each type of men's shed included opportunistic and snowball sampling. A primary strength of qualitative fieldwork is the ability to follow where data lead (Patton, 2002) and to purposively choose people based on inclinations that they can enable further refinement of the programme theory (Emmel, 2013).

'Decisions must be made about what activities to observe, which people to observe and interview, and when to collect data... These decisions cannot all be made in advance. Opportunistic, emergent sampling takes advantage of whatever unfolds as it unfolds' (Patton, 2002, p.240).

Whilst adhering to ethical and General Data Protection Regulation (GDPR) guidelines, well-situated people were observed and asked questions. Such people were sometimes able to recommend further individuals to talk to about specific points of interest that support the purposes of the research (Patton, 2002).

Aspects of identity, such as gender, ethnicity and locale were documented; there were, however, no restrictions on informants based on these characteristics. Audio-recorded

interview informants were all men; mainly participants in men's shed activities. However, men's shed leaders, coordinators and supportive staff at host organisations contributed through the ethnographic methods of observation or informal conversations.

Sample sizes

The size of the sample was influenced by the purpose of the study, what was under investigation, the questions being asked, what and who was useful, and what could be done within the limitations of time, circumstances and budget (Patton, 2002). Realists openly state that there is no way of knowing the number of participants needed to produce good interpretation and explanation (Emmel, 2013). This sampling strategy did not adhere to the 'pseudo-quantitative logic' that stating $n \geq 30$ will suggest trustworthiness (Emmel, 2013, p.154); part of a wider concern with 'quantinormativity' in qualitative research (Martin, 2017, in Williams, 2017a). This study included 20 interviews with an appropriate breadth of people, to document variety and diversity of experience, whilst balancing this with depth of each individual's experience (Patton, 2002). The interviews lasted an average of 47-minutes. More than 123-hours of observation were undertaken over the three research sites to inform the refinement of programme theory.

A minimum of five participants from each research site were interviewed to capture informant's understanding of the case and to understand their experiences in relation to each case. Table 4 (below) gives an overview of the dataset. Fewer site visits and hours of observation were possible at the research site of Case 2, due to limitations on opening hours during this period (August to December 2019). More interviewees were chosen at Case 3, partly due to members at this research site offering more diverse contextual variance. Multiple informants were able to give information about the shed's history and setup. Overall, this

sampling strategy supported the purpose of the study whilst offering the required flexibility to manage the realities of data generation to address the research question.

	Site visits	Documents analysed	Demographic data	Observations	Interviews (#, hours)	Focus group/s
Case 1	13	4 - Constitution; Code of Conduct; Data Protection Policy; Induction Form	4	47 hours	5, 4.25 hours	n/a
Case 2	11	2 - Constitution; New starter form	5	28 hours	6, 4 hours	n/a
Case 3	13	11 – Constitution; Business Plan; Data Protection Policy; Safeguarding Policy; Code of Conduct; Membership Form; Volunteer Application Form; Incident Form & checklist; Feedback Policy & checklist	7	48.5 hours	9, 7.75 hours	n/a
Totals	37			123.5 hours	20, 15.75 hours	0

Table 4: An overview of research data collected from, or generated within, each research site

Data generation

Three research sites were the focus of a realist case study design (Rycroft-Malone et al., 2011; Yin, 2003). For realist researchers,

“concepts, meanings and intentions are as real as rocks; they are just not as accessible to direct observation and description as rocks” (Maxwell, 2012, p.18).

For these reasons, primary data was gathered within each type of men’s shed through methods associated with an ethnographic approach: observations, interviews and document analyses. One of the main reasons for using qualitative methods was to investigate cases holistically (Patton, 2002). Once again, it was the development, testing and refining of programme theory that directed considerations of what data was useful to generate (Pawson, 2013).

It is worth reiterating at this point, congruent with realist study designs, that the primary unit of analysis is the theory about how men’s shed programmes improve health and wellbeing, for whom, in what context, how and why. However, each of the sampled research sites was a case; studied. These cases can also be described as ‘units of analysis’. The objects of study were built to produce layered, or nested, units that contribute to the main programme theory (Patton, 2002). The three objectives require varied methods of data generation to provide thorough understanding of the cases. Data needs were fulfilled by examining documents relating to the research sites, observation of ‘surface’ behaviours, and questioning individuals to enhance understanding of ‘hidden’ mechanisms (Pawson & Tilley, 1997). Data were also found in literature through realist reviews (Greenhalgh et al., 2011; Pawson, 2006b; Wong et al., 2013).

The primary research was produced with participants in their men’s shed environment. Fieldwork at each site took place concurrently between August and December 2019. This was sufficient time to generate the data required to meet the research objectives and answer the

research question (Patton, 2002). As mentioned at the start of this chapter – ‘along came Covid’ and – re-entry into social forums was thwarted. The planned and unplanned methods of data generation and collection are:

- 1) Document analysis and demographic data
- 2) Limited-participatory observation
- 3) Participant observation
- 4) Interviews
- 5) Focus groups (plans revised following the start of the Covid-19 pandemic in 2020)
- 6) Realist Review
- 7) Middle-range theories

1) Document analysis and demographic data

Documents relating to the research sites were collected to support the development of programme theory and the contextualisation of data generation in the field. This ‘material culture’ (Patton, 2002, p.293) came from the men’s sheds websites, host organisations and supporting personnel or the men’s sheds themselves. Some of the documents contained pertinent data, stimulating lines of inquiry pursued through observation or questioning (Patton, 2002).

Postcode data was requested from participants of the men’s sheds to help build a picture of the types of area in which the participants reside. The data was used to better understand relative deprivation in small areas called ‘lower-layer super output areas’ (LLSOAs) (Gov UK, 2015a). The index of multiple deprivation (IMD) is the most widely used of these indices and was used for this investigation. Multiple deprivation includes seven domains, weighted in relation to poverty and the indicator’s robustness: Income (22.5%); Employment (22.5%); Education, Skills and Training (13.5%); Health Deprivation and Disability (13.5%); Crime (9.3%); Barriers to Housing and Services (9.3%); Living Environment Deprivation (9.3%) (Gov UK, 2015b). Each of the domains of deprivation potentially influences the health and wellbeing of

each LLSOA's residents. Gauging the level of deprivation experienced by individuals, and inequality between individuals (Wilkinson & Pickett, 2010, 2018), aided understanding of the impact of men's sheds on the health and wellbeing of participants and their local communities.

2) *Limited-participatory observation*

It is suggested that 'if you wish to know what a person is really doing, watch...' them (Stacey, 1969, p.50). Observation is a good way to generate data in natural settings, providing context and direct experience (Pole & Lampard, 2002). The process of observing began with limited participation. Limiting my own participation was an opportunity to learn things that participants do not necessarily perceive, take for granted and/or would not discuss if asked (Patton, 2002).

It was anticipated that the extent of my participation within shed environments would change over time. For this reason, I made the choice to initially be a non-participating observer, an 'etic' perspective (Pike, 2015). Once experienced with a men's shed intervention as an active participant, I could not 'un-know' the experience when observing the same site or one of the other research sites. It is acknowledged that 'non-participation' is virtually impossible (Mason, 2017), however, the initial 'arms-length' observation supported my understanding in a way in which integrated participation might not have allowed. If researchers 'dive in' to research sites as participants, it can be near impossible to appreciate the experience as an outsider. My position on the '*objective onlooker to immersed participant*' continuum, needed to be managed, so as to experience the meanings and patterns as an involved participant and to be detached enough *to know* that *one knows* these meanings and patterns (Wax, 1971, in Patton, 2002). The length of time spent observing, and the duration of the overall time period, were chosen in accordance with the purpose of the study and the pragmatic nature of the distinct timeline of this PhD study (Mason, 2017).

Orientation with the setting reduced the need to rely on other accounts of the men's sheds studied. Field notes were guided by nine dimensions of ethnographic observation. These comprise: space, actors, activities, objects, acts, events, time, goals and feelings (Spradley, 1980). Observation of one shed started in August 2019, and observations across all three cases ran concurrently from September 2019 through to December 2019.

Although participants co-created the data, I did not inform them of my initial theory that: funded sheds initiatives, or sheds developed by public bodies, may not achieve the efficacy of grass roots organisations. Such information could have changed the behaviour of informants to the detriment of the findings. Indeed my sex, cisgender, race, ethnicity, accent, age – younger than the average age of participant – and purpose for being at the men's shed, might have influenced participant's behaviour. These are factors of which I was aware and that I reflected upon.

3) Participant observation

Having spent time initially observing with minimal participation at a site, more immersion and increased involvement occurred. This involvement conducting some of the activities undertaken by other participants: getting involved in conversations, making drinks, doing menial tasks, learning skills. For example, with the help of some shedders, four of my mother's dining chairs got recovered.

The process of first-hand experience, again, reduced reliance on the accounts and descriptions of secondary experiences of shed related activities (Patton, 2002). This further immersion in the field and experience of undertaking participant activities helped generate data along with understanding and analysis of others' experiences.

The degree of participation varied in each shed. I thought my participation would depend upon the levels of acceptance afforded by other participants. This might have been the case and I did consider how far I, as a researcher, could become ‘a participant’ in the relatively short period of time I was in the established settings (Mason, 2017). However, I found that my level of participation varied upon the levels of activity undertaken by the group members. The research process did not afford me the feeling of truly being a ‘Shedder’. Rather than trying to identify a specific place on a ‘participant-observer’ continuum, I conducted the research reflexively to acknowledge the complex negotiations which take place during the fieldwork (Coffey, 1999).

4) Interviews

Data generation through interviews and conversations with support staff and participants uncovered background context to participant attendance, along with impacts on their lives (Finch & Lewis, 2003). Furthermore, interviews and conversations helped to clarify previously observed non-verbal behaviours (Patton, 2002). Interviews were found to fill-in the gaps, not fulfilled by other methods of investigation (Manzano, 2016; Patton, 2002).

Interviews were initially used to understand some of the insider theories about men’s sheds and their health and wellbeing impact (Manzano, 2016). This was part of three planned phases of “realist interviewing”, including “*theory gleaning, theory refining and theory consolidation*” (Manzano, 2016, p.346 and p.343). *Theory gleaning* interviews were conducted with people involved in the development, management and support of men’s sheds. This realist approach to interviewing used a semi-structured style to accommodate theories gleaned from interviewees’ accounts and tacit knowledge. These interviews helped develop the *iPT* (Manzano, 2016). The generated data helped form additional understanding of how generative mechanisms within men’s shed interventions were hypothesised to act on social regularities

that lead to observable health and wellbeing impacts (Pawson & Tilley, 1997). These conversations along with men's shed literature informed the three *iPT*.

Next, *theory refinement* interviews were conducted with men's shed participants (Manzano, 2016). These interviews used a “‘teacher-learner’ function”, where some of the gleaned programme theories were described to an interviewee, with me then becoming the learner, refining knowledge from each interviewee's account of how tentative theories applied, or not, to them and the programme (Pawson, 1996, p.305). Participants are often best placed to report on relevant health and wellbeing outcomes, and although less likely to identify ‘generative mechanisms’, they provide a resource to understand how mechanisms might have influenced outcomes (Manzano, 2016; Pawson & Tilley, 1997).

For each round of interviews, an interview schedule provided pointers of how to explain specific CMOc – or the overarching programme theory – to the intended interviewees. For example, in some interviews I introduced the theory that men's shed do enhance health and wellbeing. I then asked if this was the experience of the interviewee and if so was this due to the resources at the shed, such as the social resource of other men to reduce the interviewee's experience of social isolation.

5) *Focus groups*

The final *theory consolidation* stage planned to use some additional one-to-one interviews but most prominently ‘focus groups’ to *test* the hypotheses of the *rPT* (Manzano, 2016). Focus groups involve a collective research method where a small group of potential informants meet with the researcher. Participants are, with appropriate researcher facilitation, able to present their own views and hear and respond to the views of others (Finch & Lewis, 2003).

As the men's shed participants were comfortable participating together, I anticipated that the collective nature of focus groups would seem more familiar to many of the men and the process might be less intimidating to shyer members than one-to-one interviews. A further advantage of focus groups is being able to draw upon collective memories and experiences (Patton, 2002). For these reasons, I planned to use focus groups to generate data on the views of the collectives at each shed and test how the *r*PT performed with groups of participants.

It is, however, acknowledged that focus groups hold some draw backs. A potential disadvantage to questioning a pre-existing group of men's shed participants is where shared assumptions are not elaborated or meanings are taken for granted (Finch & Lewis, 2003). Also, existing differences in status may compromise individual contributions. The group nature of this method compromises anonymity regarding comments. Indeed, I was mindful that participants might feel constrained about what they could say within the public forum. Furthermore, participants may have chosen not to share opinions that go against their perception of the 'social norm' thereafter, if interviewed.

A further unforeseen draw back of the *face-to-face* focus groups I had planned was that they depended on people being physically present. At the time that I was due to re-enter research sites SARS-CoV-2 caused a global 'syndemic pandemic' (Bambra et al., 2020, p.964) and UK nationwide lockdowns took place in 2020 and 2021. For clarity this 'coronavirus disease' most profoundly affected the elderly, and people with existing medical vulnerabilities, which included some of the population that use men's sheds. As such, even before the first, and after the last, of the national lockdowns, many men's sheds members stopped attending their men's shed.

As the UK research population got used to the new circumstances of social distancing, it became clear that the testing of established programme theories could no longer be conducted

using a data generation method involving physical meetings (focus groups or one-to-one interviews). Few of the men's sheds leaders or participants used video conferencing software and the research had not been granted ethical consent to acquire or keep men's shed participant's telephone numbers and email addresses (see 'Ethical practice, research governance and data management' section below).

6) *Realist reviews (replacing Focus Groups to test programme theories)*

Reacting to constraints on research with participants, the decision was made to use literature as the data source to test and further develop the refined programme theories resulting from the previous processes of generating and exploring programme theories. In keeping with the realist philosophy of this investigation I chose to use the approach of realist review to identify data to test the programme theories. Realist reviews involve searching for programme theories within secondary data sources to explain how and why elements of programmes achieve specific outcomes (Pawson, 2006b; Wong et al., 2013).

Each of the findings and analysis chapters present empirical data, from document analysis and demographic data, observations and interviews, to develop the *initial* programme theories into *refined* programme theories. Further to this, secondary data searches were conducted for specific phrases or in topic areas relating to the *refined* programme theories. As time was limited and the process involved learning a new method of literature reviewing, it was decided to conduct short or '*rapid* realist reviews' (Saul et al., 2013) to ensure data could be found and analysed in a timely fashion. These '*rapid* realist reviews' aimed to find evidence to test each of the *refined* programme theories to develop *tested* programme theories (*tPTs*).

Realist review search strategies

Search terms used to identify records are explained in each of the respective chapters dedicated to a specific programme theory (Chapters 7, 8 and 9). All searches were conducted using

Google Scholar as it is a multidisciplinary database that is excellent for identifying dedicated academic content.

Generic eligibility criteria

All items were first assessed using the standard methodology in Table 5.

Inclusion criteria	Exclusion criteria
Journal article or Report	No full text available
English language	Papers which were difficult to obtain
Relevance Does the paper describe contextual details? OR Does the paper describe mechanisms? OR Does the paper discuss health and wellbeing outcomes	Papers not reporting on 'health' or 'wellbeing' or an influence on health and wellbeing such as 'adult learning' or 'inequality'

Table 5: A list of criteria for including and excluding articles for realist review

Programme theory specific eligibility criteria

Additionally, the inclusion and exclusion of items were mapped against criteria specific to the needs of each of the three findings and analysis chapter programme theories. The following table (Table 6) notes the differences in inclusion criteria, exclusion criteria, review process and style of presentation used to display the findings of each rapid realist review.

Different processes were used in each review, as each of the chapters has different data needs. Furthermore, as a novice to the process of reviewing literature using a realist philosophy, I chose different approaches: for how I search for literature; for how I analyse the data, and; for how I present the realist review findings.

Chapter	Programme Theory	Date	Inclusion criteria	Exclusion criteria	Process / Presentation
7	1	23/06/2020	Searched within men's sheds literature for 'leadership' and 'management'. Supplemented with existing health promotion and evaluation literature.	(No additional exclusion criteria)	Summarised my interpretation of the realist themes within each individual item. Produced 'if... then... leading to...' statements about the underpinning theories of the programme.
8	2	1/12/2020	Searched within men's sheds literature for 'third place' and 'occupation' (meaningful <i>occupation</i> and <i>occupational</i> therapy). Supplemented with wider search (beyond men's shed literature) for 'third place' and 'occupation' to discover more about these theories.	(No additional exclusion criteria)	Collated all evidence within the themes of the two programme theories, then demonstrated links to wellbeing.
9	3	12/08/2020	Searched for items discussing 'capital theory' and mentioning 'men's sheds'.	Item mentions 'men's' and 'shed', but not 'men's shed/s'	Identified a specific part of capital theory and underpinning ideas. Produced themes about the theory that apply to men's sheds.

Table 6: Lists of bespoke inclusion and exclusion criteria, process approach and presentation style used for each of the three realist reviews

The findings of each realist review were used to augment and test my respective programme theories.

Realist investigation, Realist review and Realist synthesis

For clarity, I have used the phrase ‘realist investigation’ regarding the use of primary data generated with participants through the case studies at each men’s shed research site. ‘Realist review’ and ‘realist synthesis’ are phrases often used interchangeably (Wong, 2018a; Wong et al., 2013). However, I have chosen to use the phrase ‘*realist review*’ to refer to the application of realist informed literature searches. I use the term ‘*realist synthesis*’ to mean the synthesis of realist investigation data with realist review data, as Maidment and colleagues have done (2020).

Data analysis

Data generation was multi-method to help build theories from relevance to rigour (Pawson, 2013). This multi-method approach was also a ‘triangulation friendly tactic’ supporting the credibility of data analysis (Manzano, 2016, p.348). Site visits, researcher observations, and interview data, along with documentation and postcode data, and then realist reviews all contributed to the analysis (Patton, 2002).

Analysis of datasets was informed by realist approaches (Maxwell, 2012; Pawson, 1996). Datasets were generated and analysed concurrently to refine the working hypotheses and help iteratively establish credible, realist programme theory (Pope & Mays, 2006). Data was first analysed ‘within’ each case and then ‘across’ the cases (Rycroft-Malone et al., 2016).

From ‘initial PTs’ to ‘refined PTs’

Further to the formulation of initial programme theories (see Chapter 3) and their exploration with a systematic review of literature (see Chapter 4), interview data and ethnographic data were sought to support the refinement (progression, refutation, evidencing) of the three initial programme theories (*iPT*). Interview transcripts and field notes were initially coded as ‘*a context*’, ‘*a mechanism*’, ‘*an outcome*’ or as potentially more than one of these descriptors.

Data was then compiled to inform understanding of: what contexts about the sheds were similar and different; what contexts in relation to the men were similar and different; what health and wellbeing-related outcomes occurred, and; what possible mechanisms might interact with contexts to explain observed outcomes.

For the first programme theory, each research site (case study) contributed to a separate component of men's shed's organisational arrangements. Themes were inductively developed from the data about each case and were expressed and explained narratively. As each case relates to a specific part of the first programme theory, primary data were predominantly analysed and presented on a case by case bases.

For the second and third programme theories, data were analysed 'cross-case' and were used to inductively develop themes: resources types (physical, social and cognitive), and; capital-based resources, respectively. The contextual, mechanistic and outcome based elements helping to refine each programme theory were expressed narratively within these themes.

At the end of this process, the analysed data was synthesised into statements about participating men, the men's sheds and health and wellbeing related factors. The statements began with the phrases 'If...' relating to contexts, followed by 'then...' relating to mechanisms, and ended with 'leading to...' relating to outcomes of interest. The production of 'If..., then..., leading to...' statements acted as an iterative process to help make decisions about which contextual factors and circumstances might provoke the activation of behaviour change (mechanisms) and lead to alterations in health or wellbeing influencing outcomes. These statements represented *refined* programme theories.

From ‘refined PTs’ to ‘tested PTs’

For all three refined programme theories, literature was sought to test and better understand how and why men’s shed attendance and activities impact health and wellbeing.

Literature was organised into themes with explanatory theory and evidencing data building a narrative to help understand what was happening, how it was happening, why it was happening and with what outcomes, for which men, in what circumstances. It was not until after the writing of the narrative process that firm decisions on what is a context or a mechanism or an outcome or a component that changed definition, for example, from being an outcome to a new context, took place. My supervisors made suggestions and pointed out when I had mis-coded a context as being a mechanism, or had wrongly label a mechanism as a context.

Each of the tested programme theories was distilled into groups of mechanisms which occur in contexts and lead to impacts on health and wellbeing. These became tested configurations of contexts, mechanisms and outcomes Again, this was facilitated by the use of ‘If..., then..., leading to...’ statements to iteratively progress understanding of what mechanisms interacting with which contexts to produce outcomes. As this process developed it was decide to separate ‘*proximal* outcomes’; contributing factors that influence health and wellbeing, and ‘*distal* outcomes’; specific health or wellbeing improvements.

Retroduction

A strategy of retroduction is used to identify mechanisms that caused outcome patterns in specific contexts (Greenhalgh et al., 2017b). Retroduction involves a ‘zigzag route of investigation’ (Emmel, 2013, p.160, also see p.6), between deductive social theory and inductive evidence (Rycroft-Malone et al., 2016; Sæther, 1998). Data was analysed, and middle range theories (see below) were developed via a process of abstraction from specific ideas of practitioners to abstract ideas of how families of interventions, sharing the same programme

theory, are theorised to work for the target population (Greenhalgh et al., 2017a; Pawson & Tilley, 1997).

7) *Middle-range theory*

The final strategy for data generation is to find theories of the middle-range. Middle-range theories (MRT) are a concept created by Sociologist Robert King Merton (1968). MRT are able to explain multiple programme types. They are in the middle of a range between *specific* theories about one programme and *grand* theories on *macro* issues. MRT will be sought from literature to support the credibility of the programme theories. These are introduced in Chapter 10 and are discussed further in Chapter 11.

Ethical practice, research governance and data management

The University of Sheffield's founding motto is 'to discover the causes of things' (The University of Sheffield, n.d.). However, the advancement of knowledge is not a reason for the university's researchers to override the rights of others (BSA, 2017). The following section covers the commonly referenced four principles of respect for autonomy, beneficence, non-maleficence and justice (Beauchamp & Childress, 2001), as well as integrity and ethical considerations specific to the ethnographic nature of this research. Social science is a key part of democratic society and this research was conducted with rigour, respect and responsibility throughout (Academy of Social Sciences, 2015). The research was guided by a code of conduct; the British Sociological Association's 'Statement of Ethical Practice' guidelines (BSA, 2017).

Recruitment

Ethical considerations continued from the outset of the research design throughout the entire process up to, and including, the submission of the final thesis (Pole & Lampard, 2002).

Potential participants of the research were fully informed of how and why the research was being planned and why they were being requested to partake in data generation. The information was initially conveyed by the researcher via a telephone call with the shed leader and then during meetings with potential participants which offered opportunities for questions and answers. The processes of making field notes and audio recordings were explained, as well as why the processes were to be used during the research. Participants of men's sheds were initially approached by their men's shed leader to gauge interest in potential participation in the study and to share their thoughts on their men's shed being a potential research site.

All potential participants received a Participant Information Sheet (PIS, in Appendix H). This was based upon the University's Research Ethics Policy Note no.2 'Principles of Transparency and Consent' and instruction from the University Research Ethics Community (UREC), ensuring appropriate information and detail was provided to prospective participants.

Care was taken in relation to potential participants who might identify as having mental health issues or who could be considered vulnerable. Due to the intrusive nature of social research (BSA, 2017), and the study's focus on people's health and wellbeing, knowledge of local support services, in addition to the men's shed, was sought and made available to participants.

My aspiration that findings would benefit the men's sheds associations and possibly the participants was expressed to potential participants. Findings might help to support the continuation of current activities and/or may support changes which are beneficial to health and wellbeing.

Anonymity and confidentiality

The PIS included issues and limitations of anonymity and confidentiality to ensure that neither the participants, nor the researcher, could come to any harm. To this end the internal ethical

review conducted by UREC included details of how the study would adhere to General Data Protection Regulation (GDPR) (2018) and the Human Rights Act (1998).

Participants were informed of the extent to which they would be afforded anonymity and confidentiality and would be able to reject the use of data gathering devices, such as a Dictaphone. Personal information, or identifiable data, would not be disclosed without participant consent. Whenever possible, whilst maintaining integrity to the research, data was anonymised before analysis. In the writing up of the research thesis names of participants and places were removed to protect anonymity.

As some participants disclosed personal data, they all received information on: a) the legal basis for processing the participant's data; b) Who the Data Controller was – the University of Sheffield; c) the participant's right to complain about the handling of personal data – to the University's Data Protection Officer and the Information Commissioner's Office, and; d) what would happen to the participant's data. This adhered to GDPR (2018).

Consent

Data was only generated following successful ethical approval from The University of Sheffield's UREC. Furthermore, data was only generated with consenting participants.

Written consent was sought for all forms of data generation. Participants were asked to complete a Participant Consent Form (see Appendix I), after being given a PIS and having had the research and methods of data generation verbally explained to them. This information included how data might be used and distributed and the degree that participants will be consulted prior to publication of research to which they have contributed.

In field research, it is important that consent is not regarded as 'a once-and-for-all prior event' (BSA, 2017, p.5). It was made clear that individuals could withdraw their consent to data being

collected about their activities at any time, and without needing to give a reason, up until the completion of analysis of the case of which they were a part.

Data integrity

The research was conducted honestly and with integrity. To support this, participants were able to view transcripts of their involvement in interviews and comments identifiable to them as part of the ethnographic observations. They were able to alter or withdraw their statements if they chose.

Data management plan

Observational data was recorded by the researcher using hand written notes in notebooks which were kept in a locked cupboard when not being used for the active data generation and analysis phases. Audio recordings and transcripts were kept on a secure server at the University of Sheffield in accordance with the Research Data Management Policy. Audio recordings were deleted once they had been transcribed as dictated by the UREC.

Transcripts and notebooks may be re-used as part of a secondary analysis. This was discussed with the research participants and their consent was obtained for possible future use of the material. Once it has been decided that the data will not be used, it will be erased or destroyed as appropriate.

Summary of methodology and research methods

The research design is driven by gaps regarding the *creation, development and funding* of men's sheds and proposes to develop an explanatory theory about the impacts of men's shed on participant's health and wellbeing. The research question: *What characteristics of men's sheds enhance health and wellbeing, for whom, in what circumstances, how and why?* is

purposefully open to support the objectives of the investigation. The research objectives are:

- 1) to examine the setup and implementation of men's sheds to determine whether there are health and wellbeing enhancing characteristics relating to: i) Public Health-led men's sheds; ii) Community-led men's shed, and; iii) Hybrid – community-led, yet financially supported – men's sheds; 2) to understand how the circumstances of those who attend led to men's shed participation, and; 3) to establish the characteristics of men's sheds that are associated with improved or diminished health and wellbeing. The methodology, research design and chosen methods provided a pragmatic approach to fulfilling the objectives, answering the research question and fulfilling the purpose of the research.

The following mini-chapter (Chapter 6) will introduce the three case study sites chosen to represent the three theorised shed types (referred to in the research objectives above).

6) Introducing and *exploring* contexts: The three cases study sites

Further to the methodological and research design decisions outlined in the preceding chapter (5), this short chapter introduces the three cases studies and their pertinent differences and similarities.

Each of the chosen cases link to the aforementioned ‘type’ of men’s shed:

- i. the Public Health-led men’s shed is represented by “Industrial Town Men’s Shed”;
- ii. the community-led men’s shed is characterised by “City Men’s Shed”, and;
- iii. the hybrid – community-led, yet financially supported – men’s shed is exemplified by “Market Town Men’s Shed”

Men’s sheds and men as members

It is important to recognise that there are differences between the three research sites. Whilst all research sites are called “men’s sheds”, the research sites were purposefully chosen because they were different in terms of: their origins; the processes involved in their setup; their locations and the impacts of the surrounding locality, and not least because of; the contributions of their membership.

There are, of course, differences between members within each shed. As stated in Chapter 2, men, as a sex and/or, as a part of a small community, are not one homogeneous group. However, there were some themes of communalities (and differences) in ways the groups of men interacted within their men’s shed. For example, the sheds all shared the process of having a warm drink and/or eating communally, which influenced the majority of each group coming together at these times. In terms of differences, when entering each men’s shed I was struck by their different sizes, layout and the men’s abilities to autonomously be and/or do as they pleased.

Public Health-led intervention: *Industrial Town Men's Shed*

Industrial Town Men's Shed lies within the southernmost point of 'the North' of England and is sometimes associated with the 'Midlands' of the country. Its transient positioning in the country pertains to its position on the cusp of larger defined regions of England and its nature as a small town; consistently in threat of losing its largest provider of employment and ties with industrial heritage. I refer to this men's shed by the moniker 'Industrial Town' for this reason.

The men's shed was conceived by the CEO of a regional branch of a leading UK charity campaigning and providing health care and wellbeing service for older people (PH1). It aimed to support the health of men. The shed opened in 2016, run by an enthused volunteer. Host organisation personnel changed when the regional branch (PH1) became unsustainable and a neighbouring region's branch of the same UK charity (PH2) took on responsibility for the men's shed. In 2017, the volunteer leader left due to personal reasons. Another member, the current leader, took on responsibilities as a keyholder, collecting subs, looking after machinery and supplies and maintaining health and safety standards. Member's subs, which incidentally are highest of the three sheds investigated, went to PH2. In return, PH2 paid for overheads of the existing onsite premises, maintenance to machinery and some basic supplies such as wood and peripherals. Products voluntarily made by men's shed members were sold in the charity's shops. When members were exclusively creating products sold in the charity's shops, membership fees were annulled.

In 2019, at the time of my enquiries into the men's shed as a potential research site, the second regional office (PH2) also became financially unsustainable. Another established local organisation (PH3), with differing charitable aims, took over PH2's facilities and premises; this included the men's shed. For context, a contributing factor for the financial jeopardy experienced by PH1 and PH2 could relate to the town in which they were situated. In 2019, the

location (of the organisation and men's shed) was within the 20% most deprived neighbourhoods (Lower layer Super Output Areas - LSOA) in England. This is based on the Index of Multiple Deprivation (IMD) described in Chapter 5. It worth noting that this LSOA is surrounded by areas within the most deprived 10% of lower LSOAs in the country. These contextual factors suggest that the socio-economic fortunes of the area are some of the worst in the country and are the worst of the three cases within this research.

Industrial Town Men's Shed covers approximately 72m². However, this varied as its host organisation, PH3, took up some of the working area as and when they required. The shed has a range of machinery including a large circular table saw, a thickness reducer (planer), at least three lathes, a dust extraction unit and other smaller items such as drills, drill bits and donated wood supplies. The shed's opening hours varied from barely open for existing members whilst relocation was anticipated to being open three days a week for 6x 3-hour sessions.

Membership, attendance and research participants

Members paid £2.50 a session (for 9:30am – 12:30pm or 1pm – 4pm), or £5 for a full day. There were around 12 members of the shed, 10 of whom I observed, along with some additional visits by exiting PH2 staff and incoming PH3 personnel. At the beginning of my investigation, all operational shed management was done by the main contact person for the group; with two other volunteers supporting day-to-day running on other days. The shed was opening up again, and I chose to attend the Thursday sessions; observing activities of between six to 10 men, 11 times between August and December 2019. I conducted 28 hours of observation and interviewed six of the participants.

Members were previously employed in the building and construction industries, as factory process workers, in industrial settings, as taxi drivers and/or as former armed forces personnel – some of whom had worked for long periods abroad. Around half of the small group were

informally referred by community mental health services. Reasons for referral were due to stress-related anxiety and/or mild to moderate clinical depression. Other psychological issues included very low confidence and struggles socialising; despite formerly being gregarious. All observed members were White, British or Irish men.

Table 7 denotes how participants helped to generate data along with their age range. Additional information was requested from interviewees including the distance they travelled to attend the men's shed, the days of the week they attend the shed, for how many hours a week they usually attend, and the number of years they have been a member.

Research Participants at Industrial Town Men's Shed

Participation	Code name	Age range	Distance of residence from men's shed (miles)	Average men's shed attendance		Length of service	
				Days per week	Hours per week	Year	Month
Interviewed and observed	S1	70-74	2	2	14	3	6
	S2	55-59	5	2	7	0	2
	S3	40-44	2	2	10.5	3	9
	S4	45-49	2	1	3.5	2	2
	S5	70-74	1	2	7	1	2
	S6	65-69	4	2	10.5	2	0
Observed only	SO7	40-44					
	SO8	60-64					
	SO9	65-69					
	SO10	70-74					
		Avg - 60 years	Avg - 2.7 miles travelled				

Table 7: Research participants at *Industrial Town Men's Shed*, including demographic details, how often they attend their shed and for how long they have been a member

The community-led intervention: *City Men's Shed*

The second case was chosen to explore a community-led initiative and explain how this worked and differed from the Public Health case. The community group, based in a northern City in England, had gone through various iterations before its current incarnation. Circa 2014, a community member and a tradesman attempted to start a group which met in the tradesman's home workshop. This dissipated with a disagreement between the two founders.

Social meetings in a café followed and this is when the current Chair started attending the group. A constituted group was formed with (the current) Chair, treasurer and secretary, holding open meetings at least three times a year. The group aimed to provide a workshop and socialising space for men based on to UK Men's Sheds Association model. In 2016, temporary premises were found (by the Chair) at a former school. This lasted approximately 12 months. Remaining group members then met in a café basement room for coffee and a chat for an hour, once a week over a further 6-8 months.

Following this, the local council were persuaded by the Chair to provide a small, former park warden's hut covering approximately 30m². The hut has a small kitchen space on the back wall from the left corner, butting up against a closed-off toilet area that protrudes out from the centre of the wall. The remaining 'L' shaped area is used to house two work benches and two wood lathes. The building is located within a green space in a neighbourhood ranked amongst the 30% least deprived neighbourhoods in England, based on the IMD in 2019. It is surrounded by similar ranked LSOA. Interestingly, the area was deemed as 'deprived' by some of the members, most of whom resided a few miles away from this neighbourhood.

In 2017, the group received a grant of £920 to purchase first aid provisions, training and a year's insurance for the shed-based activities. This small grant did not alter to organisation's

aims and objectives, but it did create some free advertising and interest in the project. Most of the members had seen the project advertised or had heard about it through word of mouth.

Some of the attendees were socially isolated and got involved in the shed through their own proactive endeavours or by family or friends prompting them to give the shed a try. Only one of the members had a known mental health condition of bipolar. The shed has a 'social club' like atmosphere rather than being a service, maintained by an ever-present supervisor. As such, the shed is not suitable for people unable to look after themselves and use the industrial equipment safely. The shed features a large portable circular saw that could be erected (when not raining) outside for cutting large stretches of timber to make, for example, picnic benches. The shed had one large workbench available for use and another covered with items for which there was no other space. There were also two wood lathes which saw the most use by participants.

Membership, attendance and research participants

The shed opens just once a week with the group split, predominantly by age: with older members attending at the 9:30am to 12:30pm session, and; with younger members attending, 1pm to 4pm. To generate data I had to attend on this day, observing the socialising that took place and workshop activities of up to 14 men throughout any one day. This process was repeated 13 times from August to December 2019, conducting 47 hours of observation and interviewing five key informants.

Members paid around £50 a year for this. More keyholders and responsible volunteers were needed to increase the hours of operation and no such volunteers were forthcoming. The reluctance of current members could be age related, as the average age of the attendees was higher than other sheds. Some members stated to me that they did not want to take on responsibilities at their time of life. The members were predominantly White, British with two

members from Italy and North America. The majority of men had previously being employed by the military, with some supporting infrastructure projects in the Middle East. Other former professions including engineers, joiners and carpenters, taxi drivers, property developers, and professions relating to computing.

The following table (Table 8) denotes how participants contributed to the generation of data. Age range and additional information was requested from interviewees including distances travelled to attend their shed, for how many hours a week they usually attend, and for how long they had been a member.

Research Participants at City Men's Shed

Participation	Code name	Age range	Distance of residence from men's shed (miles)	Average men's shed attendance		Length of service	
				Days per week	Hours per week	Year	Month
Interviewed and observed	Y1	85-89	4	1	3.5	2	6
	Y2	70-74	1	1	3.5	2	0
	Y3	80-84	3	1	3.5	4	0
	Y4	80-84	5	1	3.5	2	0
	Y5	65-69	7	1	7	4	0
Observed only	YO6	80-84		1	3.5		
	YO7	50-54		1	1		
	YO8	70-74		1	1		
	YO9	70-74		1	3		
	YO10	70-74		1	3	5	0

	YO11	55-59		1	1		
	YO12	55-59		1	3.5		
	YO13	60-64		1	3		
	YO14	65-69		1	3		
	YO15	70-74		1	3		
	YO16	55-59		1	1		
	YO17	60-64		1	1		
		Avg - 68 years	Avg - 4 miles travelled				

Table 8: Research participants at *City Men's Shed*, including demographic details, how often they attend their shed and for how long they have been a member

The hybrid – community-led, yet financially supported – intervention:

Market Town Men's Shed

The third case study was in a small market town in the East Midlands of England, UK. The third case was chosen as a community initiative with organisational support and financing from external funding organisations. Market Town Men's Shed was initiated by a Community Development Worker (CDW) employed by a Team Church Parish located in the town. In the first few months of his employment the CDW noticed that the town had numerous gendered-interventions for women but a lack of interventions that catered for men. He also observed a lack of skills-based activities beyond sports (such as football and golf). The CDW thought that a men's shed might be a good activity for some of the town's men to engage in; certainly for some of the men who were not necessarily interested in sports. In early 2014, posters and local advertising methods were used to invite people interested in developing a men's shed for the local area to attend a meeting at a local public house. Sixteen men attended the meeting. A

constituted group was formed and initial plans to take over a local recreation ground were formulated. However, when construction started to renovate a building and field, the action received negative publicity and the project was abandoned.

After this false start, it was the CDW and the three other constituted group members who drove forward the idea of having a community venue for skilled-based activities for men. The three volunteers, stewarded by the CDW, were vital to getting the project working, after the setbacks of the forestalled recreation ground venture. With new premises identified, the team of four drew upon each other's knowledge and skills to furnish a small 48m² industrial unit into a woodwork shop for use by men. The shed officially opened in the summer of 2015. Two years later, having become a registered charity, the charitable status of the group and skills in attracting funding supported the shed's expansion into an adjoining larger unit to accommodate the increasing number of members that came to join the shed. The footprint expanded to triple the size (156 m²), with woodwork, metalwork and paint shop areas. The original building houses a kitchen / lunchroom, toilet, entrance hall and open area for bicycle maintenance, glasswork, and upholstery. The newer main section of the shed has a large circular saw, two large wood lathes, a thickness reducer (planer), a band saw, a general dust extraction unit and specific dust extraction for other devices. However, the most prominent feature is four large workbenches which were often used by two workers at a time. Other smaller items included drills, drill bits and a traditional garden shed located outside dedicated to wood supplies.

At the time of my investigation, the organisation was no longer associated with the Team Church Parish and the CDW had limited involvement and no responsibilities for the venture. The shed was also an impressive setup offering multiple activities. Attendance was healthy with more than 40 members; 12 attending regularly on the day of my visits. The chair and shed members were happy to have me attend and generate data with them as research participants.

Members had mainly found the shed through word of mouth and press releases, along with church support activities and some informal referrals from other community-based organisations. The group also had a history of service providers bringing clients who were unable to partake safely in the shed -based activities (see further below).

The shed is situated among some other small industrial units. The LSOA where this shed resides is ranked amongst the 30% most deprived neighbourhoods in the England, based on the IMD in 2019. However, it is surrounded by LSOA which rank not only 'lower' in levels of deprivation but much higher in social advantage. The area has previously featured as one of the most desirable towns to live, in the UK.

Membership, attendance and research participants

Market Town Men's Shed is open on Monday, Wednesday and Friday for five hours around the middle of each day (10am – 3pm), approximately 50 weeks of the year. The shed has between 40 and 50 members each paying an annual subscription of £72, due in the month of April. Additionally, the shed hosts a 2-hour workshop, a 'Hen's Shed', for a closed group of six females who pay a fee each session. Four (male) members, volunteer to support the females during their session, helping with advanced craft-skills and DIY projects usually involving woodwork. There were ambitions to open the shed at a weekend, but volunteers to cover any such session are yet to materialise. The shed required at least two volunteers at each of its three current sessions and manages to achieve this. Shed members are all White, British men, with a predominant number in their 60's. A number of the men had previously being involved with the armed forces. However, most of these individuals had also held other roles. Past professions included engineers and workshop foreman, electricians, senior managers, people who ran their own businesses and civil servants.

I attended the research site on 13 Fridays, between August and December 2019. This day was chosen as it fitted in with other research activities and was a day when all in attendance were happy for the research data to be generated. I observed 18 men during 48.5 hours of participant observation and conducted nine interviews with key informants. The following table (Table 9) denotes participant contribution to the research, and their age range. Additional information was requested from interviewees including the distance they travelled to attend the men's shed, the days of the week they attend the shed, for how many hours a week they usually attend, and the number of years they have been a member.

Research Participants at Market Town Men's Shed

Participation	Code name	Age range	Distance of residence from men's shed (miles)	Average men's shed attendance		Length of service	
				Days per week	Hours per week	Year	Month
Interviewed only	L2	60-64	x	x	x	5	
Interviewed and observed	L1	65-69	10	4	17	5	
	L3	60-64	1	3	15	3 ¹ / ₂	
	L4	70-74	4	4	8	1 ¹ / ₂	
	L5	60-64	1	3	15	1	
	L6	55-59	11	3	15	0	1
	L7	70-74	1	3	15	3	
	L8	60-64	5	4	8	2	
	L9	60-64	1	2	4	5	
Observed only	LO10	80-84	4	4	17		
	LO11	65-69	28				
	LO12	75-79	1				
	LO13	60-64					
	LO14	65-69	1			5	
	LO15	65-69					
	LO16	65-69	18				
	LO17	50-54	6				
	LO18	50-54	1				
	LO19	60-64					

		Avg - 65 years	Avg 6 miles travelled			
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Table 9: Research participants at *Market Town Men's Shed*, including demographic details, how often they attend their shed and for how long they have been a member

Summary of the research sites (men's sheds)

This short chapter has introduced the three men's sheds where data is generated. Each of the shed types: the Public Health-led men's shed; the community-led men's shed, and; the hybrid – community-led, yet financially supported – men's shed, are represented by sheds with the following monikers: "Industrial Town Men's Shed"; "City Men's Shed" and "Market Town Men's Shed" respectfully.

The following three chapters reveal findings and analysis, combining data from these three men's sheds and realist reviews. The first of these chapters (Chapter 7) discusses the *organisational arrangements* which each of these men's sheds were chosen to represent.

7) Organisational arrangements of men's sheds: *Explored and tested*

Introduction

This first findings and analysis chapter considers the organisational arrangements of men's sheds. Organisational arrangements (see *iPT1* below) influence, and are influenced by, men's sheds and their resources (see *iPT2* in Chapter 8). Arrangement of men's shed organisations also influence, and are influenced by, the resources of individual members and men's shed groups (see *iPT3* in Chapter 9).

I have chosen to discuss this *iPT* first because initial organisational arrangements need to take place, whether consciously or not, before a men's shed is able to function. It also occupies a natural place as the first findings chapter because it introduces each case in silo and includes discrete 'in-case' analysis. Findings from primary sources are presented 'in case', as each of the research sites align to a specific element of the developing programme theory with the introduction of the realist review in the second part of this chapter, cross case analysis occurs. (The following two findings chapters – 8 and 9 – will present cross-cutting themes, using 'cross-case' analysis from the outset.)

Initial Programme Theory (iPT) 1: Organisational arrangements

The first part of the initial programme theory about organisational arrangements is that:

If a men's shed is led by its community members,
then participants have control over how their men's shed operates,
leading to a comfortable physical and social environment for supporting the health of members

A sub-theory, added to this main initial programme theory, proposes that:

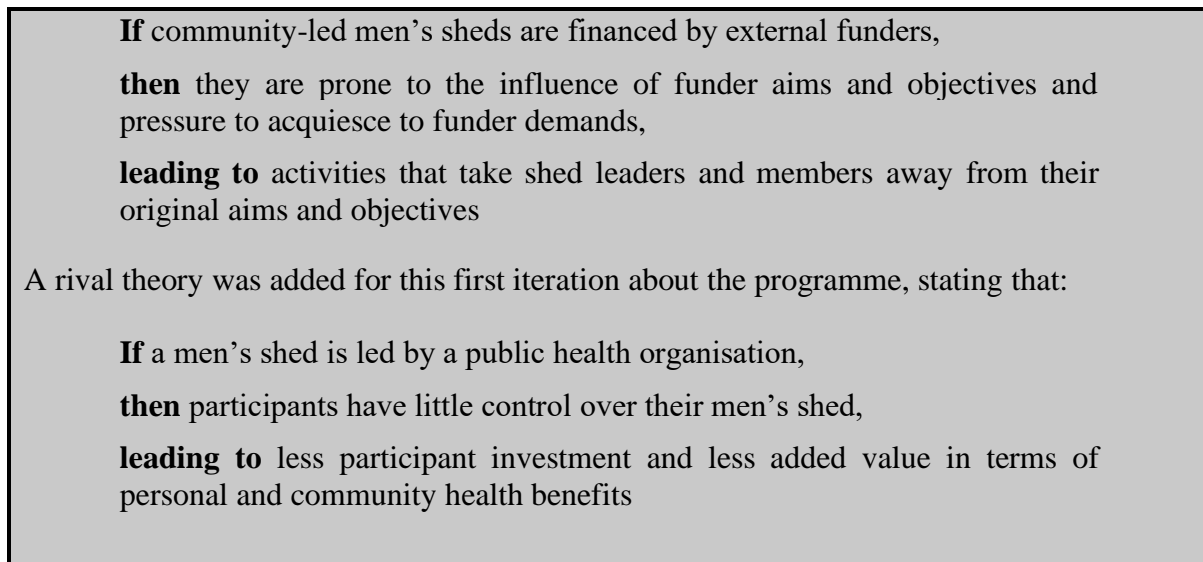


Figure 15: *initial* Programme Theory (iPT) 1 on organisational arrangements

Refining iPT1: Exploring issues with Realist Investigation Data

Although there are innumerable contextual, individual and place-based differences between the three research sites, organisational arrangements of men's shed rarely featured in the literature when this research was designed. However, at the time of writing, more articles in the updated literature review do relate to leadership in men's sheds. This is due to the popularity of men's sheds with commissioners and academics recognising a need for research on how men's sheds are setup and led.

One of the most striking differences between community-led men's sheds and Public Health-led men's sheds has historically been the greater financial support that tends to be given to any Public Health-led initiative, compared with a community-led initiative that is less likely to have access to funding. I wondered if community intervention leaders, trying to convince funders to support community-led men's sheds, might influence changes to the aims of such organisations and how they might go about meeting funder requirements. For example, funders may specify a need for reductions in male mental health disorders or insist on provision for people with learning difficulties. It is for these reasons that I also wanted to examine a community-led

men's shed that had received external financial and leadership support. Market Town Men's Shed fits the criteria of having leadership support and receiving funding from Public Health organisations and funders.

Description of the three different men's shed cases can be found in chapter 6. Findings and analysis of organisational arrangements follow below.

Case 1: Public Health-led intervention (Industrial Town Men's Shed)

As my primary investigation started, Industrial Town Men's Shed were unpacking their equipment and physical resources into their existing premises, which they had previously been *incorrectly* told (by their Public Health host organisation) that they needed to vacate. Re-homing some of the shed's resources in the original space provided an opportunity to re-use the space in new ways.

Poverty of volition

Volition describes the influence and possibilities that are within the control of the men's shed personnel. Financial, educational and health-based inequalities experienced in the locality might have an effect on the men's shed as an organisation and its membership; evidenced in terms of freedoms enabled by economic wellbeing and experiences related to work opportunities and culture. For example, as mentioned in the previous chapter, fees paid by Industrial Town Men's Shed members were the highest of the three cases investigated, despite the economic hardship of some members seemingly being worse than members of other research sites.

When negotiations were taking place between the outgoing Public Health organisation (PH2) and the incoming Public Health organisation (PH3), the men's shed were encouraged by PH2

to become a constituted group so as to potentially take on additional responsibilities of raising money to fund the shed and its activities. However, the men's shed leader, and other members, did not want to assume these additional responsibilities. The leader said that he did not want to take on a role or additional responsibilities associated with constituting the men's shed as a separate community group. Indeed he described this as a '*red line*' for him. The leader stated that he would rather the men's shed close than to have to take on the additional roles and responsibilities of a formal committee.

I reflected that I could understand the leader not wanting to take on extra work. However, I also felt that the men's shed did not appear to have been 'led' by anyone for some time. It had been left to tick-over rather than to initiate any proactive activities. I felt that the shed was not being adequately financially supported to make the most of its potential and that the new organisation might also not be best placed to support the men's shed for the shed's current members or the local community it served. Having a constituted group, able to apply for funding, would help to financially support the group's activities and give the group more security. I kept these opinions to myself as I did not want to criticise or influence the men's shed.

Restricted capacity

The new organisation (PH3) said it would host the men's shed. Initially, it communicated that the shed should be moved to different premises. This was communicated via PH2. With this decision, shed members packed up the shed's equipment and stockpiles of materials. During this time, the men's shed did not observe operational opening hours, but some men did meet socially at the venue on limited occasions for approximately an hour. After a few weeks, however, PH3's plans changed and the Industrial Town Men's Shed members were told that they could remain in their existing location. This decision resulted in members relocating items

back into the premises, while offering the opportunity to redesign the layout of how the space would be used going forwards.

The men's shed had been given a reprieve to stay at their location and to develop a relationship with the new host organisation. It was clear that the community group members were restricted in what they felt able to do. They did not know what their host organisation would allow or approve, restricting the men's ability: to meet at the men's shed site; to volunteer their time; to share skills and make things. It became clearer as time went on that the uncertainty (not knowing) was causing anxiety amongst the men's shed members who greatly valued the community resource and benefitted from regular attendance at one or more of its three previously open days per week. A shed member emphasised potential repercussions for him:

S3 "To be honest I thought it [the shed] was going to be closing down and that upset me. I can't just say 'upset', I was worried because if I ended up stopping in [at home] again all the time with nothing to do, that is what really gets to my depression and anxiety."

Week by week, Industrial Town Men's Shed started to extend its recently reduced operating hours and the site became re-populated with machinery and spaces for activities to take place. In the following weeks, the men's shed re-established its former opening hours on all three days. It began to regain momentum in terms of attendance by members and reconfiguring the layout to enable better use of the space.

After a couple of months, I observed the first meeting which took place between representatives of the new host organisation, PH3, and volunteers at the men's shed. The meeting was called to understand how the organisations could support each other. Discussions covered how the host organisation needed to support the men's shed (such as, running costs and insurance liabilities) and what the men's shed could offer the host organisation (such as, products to sell in their charity shops). The meeting went positively. However, following the meeting, messages came through that the new host organisation wanted to use some of the men's shed

unit for storage. This situation was a further signal that the shed members lacked autonomy and volition regarding how they could use their shed.

Rather than being reassured by the meeting, the actions of the host organisations were again provoking anxiety amongst the members. As one of the volunteers stated, they were worried shed members were...

S6 "...going to be sort of kicked out of the building at some stage, which could be possible because they [PH3] want that building [used by the shed] for their storage."

Taking the reins

In late November, 2019, a rural action group serving part of a wider region in northern England, held a networking event for men's sheds in the region. This was the first time that Industrial Town Men's Shed personnel had been in contact with other men's sheds. The event caught the attention of a church group from the same industrial town. I went to observe the meeting with other regional men's shed groups, national speakers from the UK Men's Sheds Association and funders. Meeting other men's shed champions and making the enthusiastic acquaintance of the church group's representatives had a profound effect on the leader of Industrial Town Men's Shed. The rural action group's networking event was held on a Thursday. At this event, the men's shed and the church representatives decided to meet again to discuss how they could help each other. The meeting took place within 24 hours.

Before the arrival of the church group representatives, that following day, the men's shed volunteers decided to hold a pre-meeting. The outcome was that a constituted group was formed with the leader of Industrial Town Men's Shed taking on the role of Chair. The positions of Secretary, Vice-Chair and Treasurer were taken up by other existing shed volunteers.

S6: "So we sat down, because... all of us who were there on Thursday... was here. [S1] said we ought to have a committee if we are going to go independent,

so that's what we decided to do and got it set up. Putting people's names in places before [the church group] came, so that we showed willing that we want to move forward. I think we were quite on a bit of a high really, thinking that we can move forward a little bit now."

When the church representatives arrived and met with the freshly constituted group, the church personnel agreed to support the men's shed in becoming a registered charity; so as to become even more attractive to funding bodies. Unaware of the previous events, I attended the men's shed the following Thursday and was greeted with the news.

S1: "We've been living in the dark ages" pronounced the Chair of the newly constituted group.

His eyes had been opened to the potential of what was possible by working differently with the support of his fellow men's shed members and the new contacts from their local town. Further attendance at future rural action group networking events was prioritised for as many members who could attend.

In this example the volunteer changed from merely managing the day-to-day running of the men's shed, to – with the support of his colleagues and other agencies – leading the men's shed. The promise, or hope, of additional funding was undoubtedly a big driver in the decision to become a constituted group and to aim towards becoming a registered charity. Industrial Town Men's Shed members went from being an isolated group, attempting to negotiate with a new host organisation, to becoming part of a network; visiting several other men's sheds, meeting their personnel and those of local, regional and national support agencies, including funders. Access to people with knowledge of funding bodies and skills in how to access funding were key in giving the group members confidence to take the men's shed leadership into their own hands. They could leave the uninterested 'host' organisation (PH3) and stop being at its behest. The group could become its own autonomous entity; organised and led for, and by, its members.

Case 2: Community-led intervention (City Men's Shed)

Unlike established organisations with physical, financial and human resources, new community ventures, and group members led by new community leaders, face limited capital resources to counter inertia; going from ground zero to a functioning facility, with required roles covered by volunteers. There is also a big difference between 'providing' a men's shed project – which people attend – and creating a men's shed with community members in a small unit with bare plastered walls. Public Health organisations can provide organisational structures and leadership such that potential men's shed members can look to learn the rules and decide if they want to join and participate or not. A community group creating a men's shed involves several individual community members initially coming together with a similar idea of what a shed might look like and be. They then try to realise their shared (or renegotiate their non-shared) visions. Community groups tend to be more chaotic in the absence of a defined leader who is accepted as such by fellow community members. Those attending can pursue different aims, objectives and interests.

A group of individuals

The following quotation is an example of difference in expectation of the types of people who might show interest in the men's shed project, compared with those who actually started to attend social meetings in the café:

Y5: "When [YO10] and I started out we kind of expected to find likeminded individuals who had the same interests... I like doing woodwork and furniture projects and so we started based around that and expected we would find other individuals who had similar interests. That's not who showed up. I mean some of the guys are still there today, guys like [Y3] who had really no interest in woodwork itself..."

When such differences between aims, objectives and interests occur, tensions may exist regarding what the group is for, who the group is for and how the group can develop. Tensions not only relate to people wanting to lead a group in their preferred direction, but also to people

proactively not wanting to be leaders or to be responsible for tasks. Some members at City Men's Shed pointed to their age as a reason for not wanting to take on regular volunteering responsibilities. One member was quite happy to help out on an *ad hoc* basis but, being 85-90 years old, did not want the responsibilities of regular attendance, between specific times and as the responsible first aider:

Y1: "I don't want to get involved in any responsibility, not at my age! When I was younger it was a different thing... I have helped out, if anyone asks my advice I have helped out. [But] I have sufficient work at home to keep me busy."

Whilst acknowledging that the age of some attendees does explain their not wanting to be a regular volunteer, the Chair of the constituted group refers to the shed membership as 'individuals' who were not used to being 'in union' and working together:

Y5: "...different communities have different, if I can use the word, 'psychologies'... there are some [geographical] areas which have stronger, what I would call, a 'pit mentality', which we don't really have... the feeling of being part of a common activity... Often professional people – even though you work in a larger group – you still have a certain amount of autonomy.

I struggled with it for a while because I couldn't quite figure out... – Was it something I was doing? Was it something we were doing as a group that wasn't right? But – it was just the individuals that showed up, were 'individuals'."

During my observations there was clear reluctance to all work together on practical tasks. With only 30m² to work within, there was insufficient space to work together simultaneously.

In the following extract the Chair explained his thoughts regarding the predominantly professional backgrounds of the men that attended the shed and shared his views on the circumstances which might have attracted an individualised mentality of worker:

Y5: "[The members...] are really ex-professionals and a lot of retirees so you are getting people like [Y3] in civil engineering, [Y1] was some form of engineering... [Y4] had his own business. [YO14 was...] a teacher. You had professionals who although you can say they work in a structured group they don't work [together], they had to have a certain autonomy."

Other member's former professions include 'taxi driver', 'property developer', and an engineer who had moved his family to the Middle East to support infrastructure projects. All these professional backgrounds strongly feature autonomy and working alone.

You get what you give

There seemed to be three main problems with the members' autonomous nature. First, when the latest site for the men's shed was identified, very few of the members helped to paint the new premises or to help setup the building as an operational shed. Moreover, when community based commissions were brought into the men's shed, it was hoped that the group would work together to produce a large picnic table for another community group, and the profits of the work would help to fund the men's shed. However, when the Chair agreed to the commission and bought the materials, few of the group members got involved. The Chair described the challenge in wanting to create opportunities for the group to work together, but also responding to past experience that it was doubtful whether the group members would meet the agreed objectives in fulfilling needed roles:

Y5: "...the struggle... [is] this balance between 'doing for' and 'doing with', if you understand the concept. I will give you an example, the picnic table project when we were asked to do a picnic table for [community group name] and I said to the guys 'would you like to do it' and they said 'yes, we would like to do it'. The realisation is that 'we would like you to do it' kind of. And I have to balance it a little bit because I only get so much [time to] myself..."

A second problem was the lack of interest in volunteering for general roles at the shed. There were only a limited number of keyholders to open up the shed and volunteers must be first aid trained with a willingness to commit to regular and timely attendance at each session. Consequently, the shed was only open one day a week, with a morning session and separate afternoon session; covered by only one or two volunteers. This affects the impact the men's shed could have on members' lives, given benefits of membership are so sparsely experienced.

Health and Safety

A final, and potentially most problematic, issue is difficulties in ensuring that everyone adhere to health and safety measures when using machinery. Some attendees had been accustomed to using industrial equipment all their working lives. However, best health and safety practice responds to new evidence relating to which problematic behaviours cause injury, as shown by the Health and Safety Executive website (HSE, n.d.). Additionally, as people's abilities change and/or people become complacent, the operators of machinery can start to neglect the standards that have previously kept themselves and others safe up until that point. It is understandable that some experienced users would dislike been challenged about their methods of using equipment. Any such challenges are incongruous to the 'no boss' ethos of men's sheds (Golding, 2015b; Misan et al., 2008; Munoz et al., 2015; Ormsby et al., 2010), reported in the literature review (Chapter 4). However, a problem for anyone, or any team, responsible for running a men's shed – along with naturally wanting to avoid individual injury – is adhering to insurer's demands that all due diligence is used by each person using equipment, together with others in the environment, to prevent problems.

Health and safety issues also link with the previous issue of people taking responsibility. The shed leader explained that two shed members had spoken to him about their concerns of how one or more individuals were potentially using machinery unsafely. However, when encouraged by the leader to say something and to 'self-police' the situation, they deferred responsibility to the Chair:

Y5: "...it got to a point where I had a couple of members of the group approach me and said 'I am concerned about this individual' or 'this individual's safety, they are doing some things that I think are not safe in my view'.

"Well, we are all equals, say something!"

"[Their response was: 'No] you are the Chairman, that's up to you'."

During my observations I had overheard some members complaining that they did not like the manner in which they had been challenged about using equipment. Some had used dangerous

equipment all of their working lives. Where they were asked or told to use the shed's equipment in a different way to what they were doing, they felt that no consideration was being given to their extensive prior experience. The Chair told me that a special meeting was held to communicate the health and safety issues after things had come to a head.

Men's sheds are usually equalising places and the literature acknowledges their lack of hierarchy. However, the proclamation that there is 'no boss' is perhaps too simplistic. It is also clear that at City Men's Shed there are issues in how things are communicated and received. Attending men might not be employed, but might still have a role to fulfil and everyone needs to act responsibly when it comes to their own safety and that of others. It begs the question of how can people be led or steered towards desirable behaviours when there is resistance and there are no obvious 'carrots' and 'sticks' – to motivate towards and to dissuade from – respectively.

Although the term 'health and safety' is used in the men's shed literature, *how* health and safety has been enacted is not something that had been identified in the literature review (Cavanagh et al., 2013; Wilson et al., 2015a). Cavanagh and colleagues (2014) suggest that vocational education and training in health and safety is important, but as this case study suggests, assertions to increase compliance seem at odds with participant desires to avoid bureaucracy and focus on what they want to learn.

City Men's Shed leader points to the tension between the shed *being* 'for fun' and having a 'laid back' environment, whilst also enforcing that members abide by health and safety practices. This has proven challenging with the attending individuals:

Y5: "...you have to look at the group and say 'OK, there is still that mentality, that resistance to structure'... and it means that – I can only speak to this shed – it's a fine line between managing expectations and managing a safe environment. Because there is that resistance to structure."

The issue of health and safety also links back to the second problem, described above, about the seeming lack of interest in working together on group projects. One reason mooted for members not engaging with the group projects relates to how they had been spoken to about health and safety issues. Gossip within the group also perpetuated bad feeling among some members.

These three problems clearly demonstrate issues between the leadership of the men's shed and members who were reluctant to volunteer their time and energies for the greater good of the group. The situation also helped me to understand that the leader, who joined to be involved with woodworking projects, was not getting what he had signed up for. Despite this, the leader was still positive about the group and his experience of it, and clearly wanted to stay involved:

Y5: "...like my granny used to say 'you can please all the people some of the time, or some of the people all of the , but you can't please all people all the time'. And that's been the thing you have to keep reminding yourself of in a group like this. Do I wish there were more [men] that would help organise and help step up and do that? Absolutely! It would just be so much easier. But we have what we have and if I sit here and ruminate about that then this is not going to be a happy place for me is it?"

City Men's Shed is a complex case and demonstrates a community-led men shed where participants were not working cohesively towards the same objectives. Some of the men did not feel in control of their men's shed or the activities that take place there. Participants invested comparatively less personally, in terms of volunteering, than in the previous Industrial Town Men's Shed case study. It also seemed that the attendees derived less added value in terms of personal and community health benefits. The leadership and the involvement of the community members had not succeeded in meeting aspirations of creating a men's shed as a well-used facility with enough space to enable woodworking projects and ease of social interaction.

Case 3: Hybrid – community-led, yet financially supported – intervention (Market Town Men’s Shed)

Market Town Men’s Shed is a community-led, yet financially supported intervention, initially steered by a paid employee; a community development worker (CDW). It was clear from interviewing three of the founders, and enquiring about the funding the shed had received, that the CDW had a tenacious inclination and large skillset to draw upon to secure the support the project required. The CDW took the role of Chair to lead the new group in fulfilling required tasks. He liaised with the group members and worked with other men in the group to drive the project forward.

External influences and gaining appropriate premises

During this setup phase, the CDW spoke to various other community groups and organisations about the plans to set up the men’s shed. Noticeably, two women had an impact on the process of getting the shed developed. After addressing a community meeting the CDW was approached by a woman who stated that the idea of a men’s shed would ‘never happen’ because there were no females involved with the organisation. This was one of a few encounters where the idea of a gendered intervention developed by men, and predominately for men, was met locally with hostility.

L2: “Some [women made] derogatory comments about men, that kind of stuff. [At one meeting] this woman came along and... she said to me ‘this will never get off the ground [name of CDW]’ and I said ‘why not?’, [she replied] ‘because there are no women involved’. And I told all the guys in the shed that and they were absolutely fuming. And it kind of inspired them a little bit I think to actually get it going...”

This incident was used by the leader to galvanise the group. The men were disparaged by a woman who stated that they could not achieve their objectives. The men's reaction (behavioural mechanism) was to seek to prove the naysayer wrong, and so the members became more

determined to make a men's shed happen. The comment and talk of the incident became a motivational driver for the men.

Soon after this incident another female was instrumental in helping the group find premises providing the CDW with local knowledge of an industrial unit that was available but unadvertised. This valuable contribution helped secure the venue for the men's shed and helped attract more members.

L2: "... you have got to have a venue, you have got to have somewhere where either you can rent it or somebody will give you a building; a premises. You can get money – money is easy to get hold of – but you need a premises, that's the challenge for most people [men's shed groups] now."

Attracting funding

Beyond the importance of a good venue in a suitable location, a further interesting feature of the above verbatim extract is the ease with which the CDW felt funding could be attracted to the venture. The CDW's confidence in attracting funding was further enhanced by another member of the group with experience of gaining charitable status for organisations. In the role of treasurer, this member helped the men's shed register as a charity which opened up more opportunities for funding. This further supported the group's ability to provide a functioning men's shed. As an established entity, the men's shed became operational and so interested men could decide if they wanted to become members. The charitable status and the funding that this facilitated, supported the shed's expansion into an adjoining larger unit to accommodate the increasing number of members who came to join the shed. At the time of my investigation they had more than 40 members, with 12 attending regularly on the day of my visits.

Severing the shed and its members

After three to four years leading the project, the CDW stood down as Chair. One of the other founding members took on the role as a volunteer. During observations, I noticed that the (new) Chair of the men's shed was not often seen working on his own projects. Although the Chair

would often arrive at the shed approximately half an hour later than the shed's opening time he made himself available to discuss shed-related issues and to serve the functioning of the shed and member activities. His role differed from that of the other volunteers, perhaps purposefully emphasised by his different time of arrival.

With reference to leadership and management, I spoke to one of the members at Market Town Men's Shed who had a personal and professional interest in leadership. He described a lack of hierarchy which, in the circumstances of the men's shed, was a valuable thing:

"L8: "I like to see how leadership works, and I like good leadership and things in whatever form it takes. There are some fantastic leaders within [names former work area] but there are some highly paid idiots as well and that's what used to irritate me. And down here there isn't anything like that, everyone's the same."

Interviewer: "...So there's a lack of hierarchy then?"

L8: "Totally here."

Despite the lack of overt hierarchy or presence of 'a boss' to tell the male participants to conduct tasks, implicit rules did exist. Unlike at City Men's Shed – or occasional comments about how to improve safety at Industrial Town Men's Shed – poor health and safety were rarely mentioned at Market Town Men's Shed. The members seemed to all accept the need to behave with caution on items of machinery that could cause injury. Some men reported to me that the circular saw (the most dangerous piece of machinery in the workshop) was not something they felt comfortable using, with one man openly commenting that "it scares me to death" and so they did not use it.

Different leadership requirements

The implicit leadership was initially successful with the men at this shed in terms of having people willing to undertake specific tasks to get the project up and running. However, a different style of leadership was required when social services started to bring service users with learning disabilities who could not look after themselves, their own safety or that of other

shed users. This circumstance occurred while the CDW was the Chair of the group. Men's shed members did not know how to deal with the service users and expressed concerns about the safety of the individuals with the industrial machinery. This was exacerbated as the carers 'dropped-off' their service users and left them without adequate support. In this situation the Chair of the group had to be in attendance to manage the situation on site and took action to lead the men's shed out of this situation by reaching out to the chief executive of social services.

L2: "We must have had about ten of them [people with learning disabilities]. This group of guys with learning difficulties posed me a massive problem. [...Men's shed members] said 'sort it out [name of CDW]'.

Some guys...changed their days because they didn't want to be around them. Not because I think they didn't like them, I think they just didn't know how to deal with them, they just didn't know... I mean a lot of these mental health services are trained aren't they, but [men's shed members] they are not there for that... ...I saw the chief exec of social services / adult services and had a conversation with him."

Although men's sheds offer health and social care 'benefits', none of the research sites that I visited provide specialist health and social care 'services'; these require professional staff who elect to work with a chosen client group.

Another rule at Market Town Men's Shed, requires the paying of membership fees each April. This was said to be 'self-policing' by the other members, in that when some men had not paid their membership fees, other members would make it clear that this was known and not condoned.

L2: "...there has been a couple of guys who have not paid their membership and then it policed itself. Effectively what they [other members] have said is they kind of badgered them all the time to the point of they [non-payers] left because they said you are not paying your membership. And they did it in such a way as rather than being bluntly 'you ain't paid your membership' there was more sarcasm, you know 'you paid your membership today mate?'.

Co-existing, with this passive-aggressive self-policing tactic, it was noted that if a member was clearly financially struggling to afford the membership fee, some of the other members would

discreetly (so as not to embarrass the economically disadvantaged individual) be prepared to contribute to cover their fee:

L2: "But they [men's shed members] are not averse to helping other people out if they have got a genuine reason they can't [pay]."

The organisational arrangements, built into the constitution and 'bought into' by the attending men, at Market Town Men's Shed, seem to have worked well to ensure that the shed is led with 'a light touch' and served well by its Chair. As the current Chair and one of the founders states:

L1: Overall, the Shed has done very well, four years without any problems I think its testament to the fact that we did most of it right.

However, the current leadership clearly differs from that when the shed was being developed. I asked the CDW what it takes to get a men's shed going beyond funding, getting a suitable premise and attracting a group of men to participate. He identified a need for *driving leadership* from someone who other people are willing to get behind and do things with:

L2: "... You need somebody who will drive it on, whether he [sic] is paid by an organisation, a community development worker or somebody who is passionate about doing something... Because it's a bloody lot of work, I didn't realise just how much work it would be.

...there has to be a kind of a drive from somebody... and that's one of the challenges I think apart from premises that people have. Who is going to take the lead... It's not time, its inclination ...if they have got that. And a lot of guys are happy to go along with the flow but you have got to get somebody who can take it on."

Recruiting volunteers from the membership

In terms of the shed's progression, having people, or persuading people, to take on required roles is a challenge at this men's shed. Some members demonstrate reluctance to volunteer to lead on a task. For example, I asked the current treasurer how he came to take this role. He said that he was 'volunteered' by someone at a meeting where he was not in attendance. To him this was acceptable, seemingly being linked to their military backgrounds and mutual respect:

Interviewer: "...you were saying earlier you were 'volunteered' while you weren't present [at a meeting] which is interesting..."

L8: “[Member of men’s shed] ...knew I wouldn’t volunteer because military people don’t volunteer for things. You never volunteer for something normally because it’s your own fault, whereas if you’re told to do it, it’s alright [laughs]”

However, some shedders have started to recognise areas where the shed could benefit and have decided to work together to address these areas. Midway through my observations at Market Town Men’s Shed, I identified a ‘work-in-progress’ and asked one of the members what it was. They explained that a few of the members were combining their skills to design an ‘oscillating spindle sander’ where a vertical spindle, covered in sandpaper, not only rotates, but also moves up and down (oscillates) to reduce friction and prevent burning of the wood being sanded. The CDW had recently visited the men’s shed and commented that this exemplified how some members of the group no longer relied on the Chair to provide projects or machinery:

L2: “Like that [oscillating spindle] sander, they know who can do that bit, they know who can do that bit, and they know who can do that bit, rather than just saying ‘I will do it all myself’.

“L4 just wanted to make one and they made one. And that would have been something two or three years ago [Chair of Men’s Shed] would have made it, but now they [members] are taking those jobs on themselves because they have got the skills to do it. And if they haven’t they will read a book or whatever...”

In another interview with a volunteer, we spoke of how leadership styles at the shed were different to authoritarian leadership in the armed forces (of which he was once a part). I asked him why he had chosen to volunteer having previously just been a member. It is notable that this individual chose to volunteer, which is contrary to what L8 said was the ‘normal way’ to behave in the military (in the quote above):

Interviewer: “So why is it that you volunteered, were you asked and why did you say ‘yes’?”

L7: “I don’t know, probably conned into it! [laughs] No, I think I want to make the shed a success. ...as regards the role of [role removed] I think it was [at] one of the monthly meetings [name of Chair] was going to be Chairman and he said ‘will anybody take on the role’. And nobody put their hand up, so I said, ‘Oh, yeah, OK I will do it now’. Because I thought somebody has got to, else it will all stumble along sort of.”

This man clearly values the shed, wants it to be a success and is prepared to volunteer his own time to support it and to take some of the workload off the Chair. To some degree he seems to

have felt *obliged* to support his colleague, the Chair, as well as wanting to contribute to see the shed be successful.

Discussion about theory refinement from analysis of the three case studies

The Public Health-led Men's Shed

The Public Health-led intervention, started by PH1, created a men's shed by offering premises and material resources. This community resource attracted some local men to attend. As with most community-based programmes, some participants might leave whilst new members join. The Public Health-led model of men's shed has 'worked' in the respects that it has enabled a basic community facility and has brought a nucleus of men together. PH2 and PH3 have also played a part in continuing to allow the use of their premises and letting the men meet together. This contribution should not be underrated.

Unfortunately, following the men shed's initial setup the shed has been largely left without leadership. In terms of organisational arrangements, the men's shed has received no investment from the Public Health organisations in terms of finance or inclination to promote the men's shed as a community resource. It has been a disregarded commodity.

Until the last few weeks of the investigation of this case, the shed members were resigned to accept the circumstances resulting from the organisational arrangements imposed by the host. However, most recently the men have identified the need to have control and are doing so by taking on leadership roles, previously unfulfilled by the host organisation. In the light of a lack of strategic leadership at this shed, the men are taking matters into their own hands. It is, of course, worth reiterating that without the existence and initial provision of a men's shed hosted by PH1, PH2 and PH3, the men's shed members would not have had the experience of being men's shed members, nor had the inclination or drive to take on new responsibilities. But now

the Chair and supporting committee members realise they want a workshop space that is more suitable to their needs and they have taken proactive action to find one. People have stepped-up to take on new responsibilities as part of a constituted group because they want the shed to continue and better serve their own needs and those of other community members. These needs include the security of knowing that the men's shed will continually be there for them and that they can meet other men and take part in purposeful activities.

This case has helped to develop the initial programme theory (*iPT*) 1. For example, when the men's shed was led by a public health organisation, the participants had little control over their men's shed. Participants cared about their men's shed, but those participants had little interest or inclination in investing in their shed through the uptake of additional roles and responsibilities. This was emphatically the case for the volunteer caretaker of the men's shed who wanted no part of being a constituted group. The shed delivered some social health and mental wellbeing benefits for the participants, and yet attendees were anxious about its future which they originally had no volition over.

Conversely, when the shed began to be led by its community members, participants gained control over their shed's operational direction. The preliminary findings suggest the participants are already more comfortable and less anxious about the destiny of their men's shed and their abilities to access their shed in the future – notwithstanding Covid-19 which put a halt to physical meetings. These findings add support to the first part of the programme theory about how participants feel that they have influence over their men's shed organisation and the benefits this might have. The findings also support the rival theory about the limitations to the control participants have when they do not lead the organisational arrangements of the men's shed they attend.

The Community-led Men's Shed

The community-led intervention (City Men's Shed) lacks sufficient space to allow all attendees to engage in work based activities.

There are tensions between the older and younger generation of men. The older men do not want to take on responsibilities, and some do not want to conform with contemporary health and safety practices. The younger men who lead the shed need people to volunteer to keep the shed operational. This includes a first aider present and someone to keep the shed safe by self-policing the health and safety practices. Some older participants seem to feel restricted by the health and safety practices enforced by the leader. Moreover, some older men did not like being told what is appropriate behaviour regarding the use of machinery. Current participants do not want the responsibility of having to regularly volunteer time to keep the men's shed accessible for other people. One main issue is that the men's shed does not seem to align to what the majority of men really want it to be. Member insistence on not wanting to take on responsibilities, also means that they have little volition to change the situation and make it more suitable to preferred requirements.

As such, the community-led men's shed demonstrates inadequate premises and a lack of engagement. It is possible that the lack of engaged participants means no one is addressing the shortcomings of the premises. Also, the inadequate premises took significant work to acquire and, being currently rent free, does have financial merits. During the time of this case investigation, members had limited engagement in working on tasks and so were not able to work shoulder-to-shoulder; in a way that evidence suggests is beneficial for participant social health and mental wellbeing (Ahl et al., 2017; Anstiss et al., 2018; Milligan et al., 2016; Reynolds et al., 2015). If the premises were more appropriate for men's sheds activities and for

accommodating a larger group, the shed might better support the men and their health and wellbeing outcomes.

This case helps develop *iPT1*, by moving beyond the simplistic idea that a shed being ‘community-led’ is wholly positive. Members within community groups need to feel that they can influence their organisations if they are to feel able to contribute to them in a way that is satisfying. This influences whether or not community members will want to invest their efforts and time. The membership do not feel that it is being led by them and participants feel they have little volition over its destiny. There is some social interaction in the environment, but there is little opportunity for the physical work and this limits benefits to attendees’ health and wellbeing.

The hybrid – community-led, yet financially supported – Men’s Shed

The hybrid – community-led, yet financially supported – intervention (Market Town Men’s Shed) was initiated by a community development worker (CDW) who asked if the town’s men wanted a men’s shed. The community’s men were given volition and autonomy to develop a men’s shed within a structure guided by the CDW. Some of the interested men were former foremen of workshops and helped create and organise a functional, purpose-designed workshop that was Health and Safety Executive compliant. At each of the three weekly sessions at least two volunteers look after the activities and provide first aid cover.

The CDW led and managed the shed and its issues, as part of a constituted group and registered charity, for around three years. As participants become more engaged, capable and confident they have taken on more responsibilities. Other community members were encouraged to step-up and volunteer to look after the men’s shed and make it financially self-sustainable. The newer volunteer Chair dips in and out of sessions to deal with the maintenance of machinery and to deal with visitors and new starters. It has been said that there is no hierarchy at this

men's shed. Everyone respects the rules for health and safety and people who push the boundaries are sensitively approached to address any issues. When the men need help the CDW can provide support such as when the men have not wanted to deal with some situations. He is a buffer; still available if and when the men need support with managing or leading new situations.

This case has helped to develop the initial programme theory (*iPT*) 1. The community members involved in the setup, delivery and continuation of the men's shed were supported by the CDW to get the shed up and running. The shed was led by someone community-minded and those men who wanted to have a men's shed had to volunteer to make it happen with the support of the CDW to lead the process. Volunteering community members felt invested in the project: with participants feeling able to influence the men's shed and feeling motivated to contribute to the men's shed. It seems that when community members do not feel they are respected, or feel unable to influence the men's shed, they are less motivated to contribute to the running of the shed or to engage in group activities. At least one person must be inclined to lead a men's shed. This leader needs to be someone with whom other shed members will join and work with. Some members need to be prepared to take on responsibilities to enable the functionality that make men's sheds attractive. Although men can find meeting with other men enough of a draw to attend (as with City Men's Shed members meeting in a café during two periods of the group's existence) it is only when a men's shed enables the room and equipment for activities that participants can engage in activities which then go on to deliver subsidiary benefits to health and wellbeing.

Furthermore, the initial 'sub-theory', that those community men's sheds that benefit from funding are likely to be vulnerable to their funder's aims and objectives, proved unfounded with reference specifically to Market Town Men's Shed. Market Town Men's Shed maintains

an appropriate level of funding to provide a shed within which participants have a good environment and equipment to work. Other than a signing in/out sheet, the men do not have to routinely provide reported outcome measures or take part in any unwelcome activities as part of their membership. Nor does the leadership have to detract from the running of the men's shed as a place for chosen men's shed activities. With this finding, based on the experience of Market Town Men's Shed, the initial sub-theory has been discontinued, given the absence of evidence from the primary investigation to support this theory.

Refined Programme Theory (rPT) 1: Organisational arrangements

Building on the *initial* programme theory (*iPT*) 1 by integrating the findings from the realist investigation data, the CMOc for the *refined* programme theory (*rPT*) 1 is presented in Figure 16 as an 'if... then... leading to...' statement:

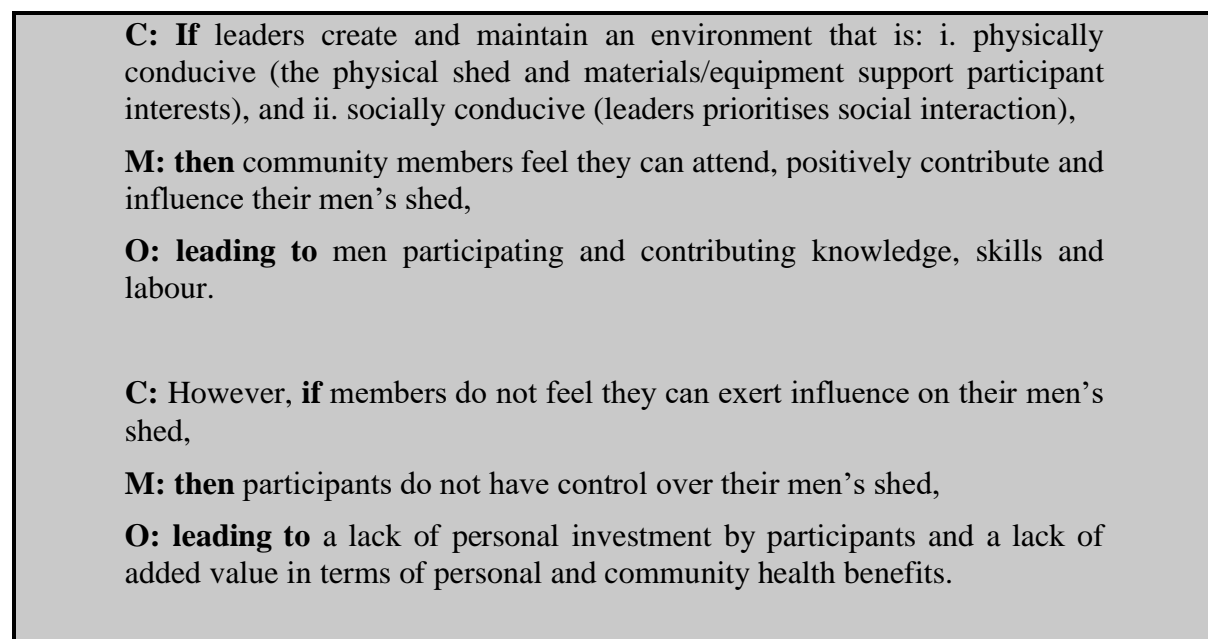


Figure 16: *refined* Programme Theory (*rPT*) 1 on organisational arrangements

Further refining *rPT1: Exploration and Testing of issues with Realist*

Review Data

To further refine the above iteration of the programme theory, I searched for studies in the men's sheds literature referring to "leadership" and "management". Details of the search strategy and eligibility criteria can be found in the Methodology and Research Design chapter (Chapter 5). Five papers were identified for full-text review in Table 10. These papers had already been tested for quality for the systematic literature review (Chapter 4). However, in this chapter the papers are reviewed differently, as part of a realist review.

The salient points of each individual study are summarised below 'titles' I formulated from the main themes of each paper. As part of the process of summarising the relevant points of each paper (to test and develop this chapter's programme theory *rPT1*) I generated 'if... then... leading to...' statements about the theories underpinning each study. The exception was the Cavanagh and colleagues (2014) study, which yielded a summary of salient points but no programme theory.

The following studies and their programme theories are examined with links to my three primary case studies when they offer explanations of what is happening. In addition to the five papers identified within the men's shed literature, I added two sources of knowledge I was already familiar with from health promotion and evaluation literature. These addition are Green and Tones (2010) and Patton (2010). These records can also be found in Table 10.

Records Found	5	Included	5 + 2	Excluded	0
Ahl, H., Hedegaard, J. and Golding, B. (2017) How the Men's Shed idea travels to Scandinavia. <i>Australian Journal of Adult Learning</i> , 57 (3), 316-333		<i>Ahl et al. (2017)</i>			
Ang, S. H., Cavanagh, J., Southcombe, A., Bartram, T., Marjoribanks, T. and McNeil, N. (2017). Human resource management, social connectedness and health and well-being of older and retired men: the role of Men's Sheds. <i>International Journal of Human Resource Management</i> , 28 (14), 1986-2016.		<i>Ang et al. (2017)</i>			
Cavanagh, J., Southcombe, A. and Bartram, T. (2014). Leadership in Men's Groups/Sheds: The impact of leadership styles and value congruence on the participation and commitment of members. <i>Australian and New Zealand Academy of Management (ANZAM) Conference, Sydney, Australia.</i>		<i>Cavanagh et al. (2014)</i>			
Cavanagh, J., Southcombe, A. and Bartram, T. (2014). The Role of Collaborative Learning on Training and Development Practices within the Australian Men's Shed Movement: A Study of Five Men's Sheds. <i>Journal of Vocational Education and Training</i> , 66 (3), 365-385.		<i>Cavanagh et al. (2014)</i>			
Southcombe, A., Cavanagh, J. and Bartram, T. (2015). Retired men and Men's Sheds in Australia. <i>Leadership and Organization Development Journal</i> , 36 (8), 972-989.		<i>Southcombe et al. (2015)</i>			
Green, J. and Tones, K. (2010). <i>Health Promotion: Planning and Strategies</i> . 2 nd Ed. London: SAGE Publications Ltd.		<i>Green and Tones (2010)</i>			
Patton, M. Q. (2010). <i>Developmental evaluation: Applying complexity concepts to enhance innovation and use</i> . Guilford Press.		<i>Patton (2010)</i>			

Table 10: A full list of the identified records

Organisational arrangements in men's sheds literature

1) Theme: Organisational factors in successful organic, and socially engineered, men's sheds (Ahl et al., 2017)

The Ahl et al. article (2017) discusses 'How the Men's Shed idea travels to Scandinavia'. The authors note few examples of research focusing on the organisational components of men's sheds and refer to three main organisational factors associated with the success of Australian men's sheds:

- 1) Australian men's sheds are typically conceived 'bottom-up' by men in a local community with creators and participants feeling a sense of investment in their shed and empowerment as a 'shedder';
- 2) They are informal settings for conducting pragmatic tasks where learning takes place and;
- 3) There is a "relative absence of women, which for the older men participating in Sheds creates a relaxed, open, and forgiving atmosphere" (Ahl et al., 2017, p.318)

The study reports on the Danish Ministry of Health creating a men's shed 'top-down'. The 'social engineered' approach seems opposed to the formula that the authors suggest is predominantly used in Australia (Ahl et al., 2017). Local professional coordinators strategically target older, lower-educated men to enable a community-based setup of men's sheds. These coordinators are most helpful at the start of the men's shed setup and in the recruitment of members to form a local community of men. Coordinators support sheds to become self-sufficient. They are not involved in the daily activities of the sheds. Leadership and self-governance is expected from the participants.

Ahl et al. (2017) article as an ‘If... Then... Leading to...’ statement:

If men’s sheds are set up by community owner-members (with or without support from professional coordinators), and without interference from women and authority figures,

then the andragogy of older, male, adult learning ‘Shedagogy’⁶ (Golding, 2014) can be activated,

leading to enhanced social health and wellbeing.

Figure 17: The basic programme theory gleaned from Ahl et al. (2017)

The paper quotes the Western Australian (state) Men’s Shed Association (WAMSA) advice for anyone interested in starting a Men’s Shed: gauge local interest; arrange a local meeting; find funding (WAMSA, n.d., cited by Ahl et al., 2017).

This simple advice seems best demonstrated in Market Town, where a local professional coordinator (CDW) has been an initial driving force to ‘socially engineer’ (à la the Danish Ministry of Health) a functioning men’s shed. The programme theory gleaned from this paper aligns with the resources Market Town Men’s Shed used within similar contextual components of few women and no authority or unwanted interference, to produce an adult male group and learning environment which has enhanced participant health and wellbeing.

At the setup of Industrial Town Men’s Shed the public health host organisation seems to have gauged some local interest but did not involve members in organisational arrangements. The lack of consistent and supportive organisational arrangements, along with limited funding, has

⁶ ‘Shedagogy is seen as a ‘cheeky’ but useful rhetorical device to make a claim about the distinctive nature of men’s shed-based learning. Its most important element of is that learning for many older men should be neither fore-grounded nor named, but created collaboratively and ‘hands-on’ in communities of informal men’s practice. Other essential elements are that participants bring and share what they know and can do, rather than being problematised and patronised from ageist and deficit models and learners, customers, patients, clients or students.’ Golding, B. (2014a). Men learning later in life: floating the theory of shedagogy. Education and Learning of Older Adults conference, ‘Innovations in lifelong learning, (2014) p.2

negatively affected the group. Group members have now been galvanised to lead the shed themselves.

At City Men's Shed few men want to be owner/members. There is resistance to having an authority figure regarding the, arguably much needed, health and safety monitoring. There is also a lack of participation or group learning. Evidence from Ahl and colleagues (2017) offers explanations for how Market Town Men's Shed has developed and functions so effectively and how Industrial Town Men's Shed group is beginning to take their destiny into their own hands. The small size of City Men's Shed and the lack of cohesion between the men and willingness to meet, lead and volunteer could explain the lack of development, functionality and activity that makes successful men's shed thrive and facilitate health and wellbeing outcomes.

2) *Theme: Leaders and participants of men's sheds need to work together for each other (Ang et al., 2017)*

In a study of human resource management (HRM) within 200 Australian men's sheds, use of mediation analysis found that shed member's positive perceptions about leader's HRM practices support membership retention, social connectedness, and member's health and wellbeing (Ang et al., 2017). The quality of leader-member exchange (LMX) was also found to support retention of membership. However, LMX had no direct influence on the health and wellbeing of members beyond retaining membership (Ang et al., 2017). HRM was defined as the 'people management practices' of leaders of men's shed organisations.

Member perceptions of social connectedness as mediating factors between HRM and health and wellbeing impacts were explained using: social exchange theory (SEXT); self-efficacy theory (SEfT), and; self-determination theory (SDT) (Ang et al., 2017 citing Cropanzano & Mitchell, 2005; Bandura, 1977; Ryan & Deci, 2000, respectively). Firstly, SEXT suggests that with positive HRM, a climate of reciprocity will lead to positive participation, contribution and

feelings of social connectedness. SEfT is applied to speculate that sheds, as informal places for adult education, support members self-efficacy leading to social connectedness and health and wellbeing. Finally, SDT considers how a sense of competence, autonomy and connection to others – evidenced outcomes of men’s sheds (Markham, 2016a) – lead to benefits for health and wellbeing. As such, it is theorised that men’s sheds are conducive environments – characterised by leader’s positive people management practices – leading to members feeling socially connected, self-efficacious and inclined to help fellow members. The findings are represented in the following diagram (see Figure 18).

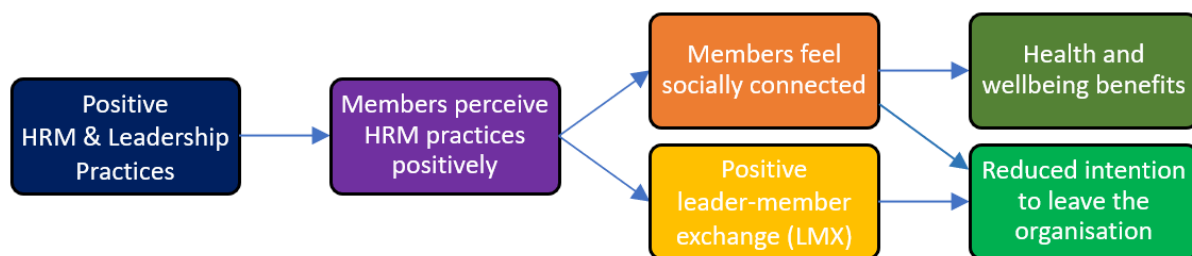


Figure 18: Potential relationships between Leader HRM practices, Members’ perceived HRM practices, social connectedness, LMX, retention of membership and health and wellbeing benefits (adapted from Ang et al., 2017).

Findings are also represented using two ‘If..., Then... Leading to...’ statements in Figure 19 (below).

Ang et al. (2017) article as an ‘If... Then... Leading to...’ statement:

If members have positive perceptions about leader’s human resource management (HRM) practices **then** member’s feel socially connected, **leading to** health and wellbeing benefits and member intention to stay at their men’s shed.

Furthermore, **if** members have positive perceptions about leader human resource management (HRM) practices **then** leader-member exchange

(LMX)⁷ will be good, also **leading to** member intention to stay at their men’s shed.

Figure 19: The basic programme theory gleaned from Ang et al. (2017)

The findings are presented as one-directional processes, for example: *Leader HRM practices* → *Members’ perceived HRM practices* → *Members’ social connectedness* → *Member Health & Wellbeing*. The depiction suggests that, for example, *Leader HRM practices* would not be influenced by *Members’ perceived HRM practices* or that *Members’ social connectedness* would not be influenced by *Member Health & Wellbeing*. There is an absence of feedback loops representing the potential for influences to be reversed, for example, *Members’ social connectedness* could influence *Members’ perceived HRM practices*. In the following diagram, I have inserted equilibrium arrows ‘↔’ to illustrate these possibilities (see Figure 20). This illustration adds a nuanced appreciation that LMX might influence health and wellbeing benefits through member retention and social connectedness.

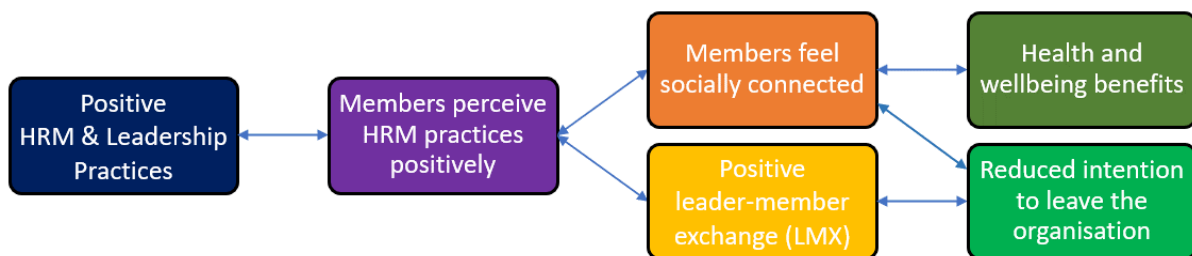


Figure 20: Potential relationships between Leader HRM practices, Members’ perceived HRM practices, social connectedness, LMX, retention of membership and health and wellbeing benefits (adapted from Ang et al., 2017).

⁷ LMX was not found to significantly mediate member’s positive perceptions about leader HRM practices and member health and wellbeing benefits. However, attendance is a critical factor in the men’s sheds environments being able to influence health and wellbeing and so the relationship between LMX and members remaining at the men’s shed will indirectly increase the likelihood of health and wellbeing benefits.

This improved diagram helps to demonstrate additional potential relationships. Still further possible relationships exist, for example, if an ‘outcome’ of *Member Health & Wellbeing* influenced future *Leader HRM practices*. There might not be the mediating factors of *Members’ social connectedness* or *Members’ perceived HRM practices* involved in such a relationship.

A further criticism is the lack of clarity on the *characteristics* of ‘HRM’ practices and Leadership practices. ‘HRM’ practices and Leadership practices are not defined or expanded upon beyond references to other studies that have discussed these generic terms. It is assumed that HRM and leadership practices were universally positive in the men’s shed. There was no discussion of the potential for detrimental practices. Suboptimal leadership styles – or poor HRM practices – might lead to negative perceptions of these practices by men’s shed members. This in-turn might lead to: a lack of social connectedness; negative LMX; members intending to leave, and; no effects, or detrimental effects, on member’s health and wellbeing. However, this paper did not discuss negative or detrimental HRM or leadership practices.

At Market Town Men’s Shed, the participants all seemed happy with the way the shed was run. They were socially connected and none of the membership suggested they were considering leaving the men’s shed. Along with this, the interviewed men said that the shed supported their health and wellbeing which aligns to the theory put forward by Ang et al. (2017). Several men’s shed participants were co-opted members of the constituted group and attended management committee meetings. This co-optation – along with my observation of one such meeting – suggests that group members hold positive perceptions about the leadership and human resource management (HRM) practices and positive leader-member exchange (LMX) which seemed to reinforce their intention to continue participating at their men’s shed. This, again, aligns to the theory put forward by Ang et al. (2017).

At City Men's Shed, tensions existed between some members and the leadership of the shed. Some of the members seemed socially connected. Members met only once a week with few activities (woodwork) and pragmatic engagement taking place. As such 'self-efficacy theory' (SEfT) applies to a lesser degree with fewer opportunities for informal adult education and self-efficacy support to enable social connectedness and health and wellbeing. In terms of time spent at the men's shed, and fewer leader-member exchanges (LMX) than at other sheds, there were fewer opportunities for health and wellbeing impacts.

At Industrial Town Men's Shed, the members experienced little interaction with the host organisation. This lack of leadership and the lack of autonomy held by the operational leader of the men's shed and the members ultimately led to the men, who were socially connected, deciding to lead the men's shed themselves. The negative perception of the strategic leadership, the lack of leader-member exchange (LMX) and lack of human resource management HRM led to members 'doing it for themselves'. Time will reveal the relationship between the new member-led team and future participants and how this affects participant's health and wellbeing.

3) *Theme: Charismatic leaders who focus on social connectedness increase the social connectedness of members which benefits member health and wellbeing (Cavanagh et al., 2014a)*

This third paper shares authorship with papers four and five below, using data from the same case study. Research on twenty Australian men's sheds, their (20) leaders and 60 participants found that leadership style was important in supporting men to feel involved and to facilitate a conducive environment for shed activities and participation. Some lead personnel were found to lack leadership skills and knowledge required to adequately support their men's shed. Leadership and systems must fit the needs of men's shed members with limited bureaucracy, enable participation and member commitment. 'Transformational' leadership, encouraging

mentorship, learning and inclusiveness was theorised to be most appropriate in aligning participant's values with the collective interests (values) of a men's shed; resulting in 'value congruence'.

No reference is made to different organisational models of men's sheds; such as being Public Health-led 'top-down' or community-led 'bottom-up'. However, the observations that some leaders lack knowledge, skills and the ability to bring in funding, suggests that these sheds might be more likely to be community-led organisations. This also concerns with Ahl and colleagues (2017) research that Australian men's sheds are typically conceived bottom up. Cavanagh and colleagues state that:

'It is not likely that men who have had corporate backgrounds would be attracted to a Shed that is lacking in leadership' (2014, p.12).

This statement suggests that the authors believed the participants possessed alternative work experiences (outside of corporate / leadership) and that those with corporate leadership background would not want to be involved in helping men's sheds.

Of the 20 men's sheds, 50% were Indigenous and 50% were non-Indigenous. Included sheds were described as being "from urban, regional and remote areas in Australia" (Cavanagh et al., 2014a, p.9).

Cavanagh et al. (2014a) article as an 'If... Then... Leading to...' statement:

If a men's shed has a charismatic leader that focuses on social connectedness,
then the members feel socially connected,
leading to enhanced wellbeing.
However, **if** a men's shed lacks charismatic leadership and social connectedness,
then members do not feel socially connected,
leading to limited benefits on wellbeing.

Figure 21: The basic programme theory gleaned from Cavanagh et al. (2014a)

‘Charismatic leaders’ and ‘charisma’ are subjective terms. From my ethnographic observations I felt that the leader of City Men’s Shed lacked acceptance by the participants. However, he did seem to want the participants to be, and to feel, socially connected. Although some participants were socially connected, the shed did not seem to operate as a functional men’s shed with all participants engaged in pragmatic activities.

With regards to Market Town Men’s Shed, the CDW could, subjectively, be described as a charismatic leader. Again subjectively, this description applies less – although still to some degree – to the current Chair of the group. Everyone at the men’s shed seemed to get on well with the current Chair and he was very proactive in attending to the needs of the men’s shed whilst managing the shed with a light touch.

At Industrial Town Men’s Shed, the operational leader (who became the Chair of the group) was not someone I might subjectively describe as a charismatic leader. However, as with Market Town Men’s Shed, he was liked by the other members and made the shed work for the members and to support the activities they were interested in pursuing. Regular breaks for tea / coffee and biscuits, as well as encouraging some people to work together, helped to encourage social connectedness.

4) Theme: Leader and participant ‘value congruence’ facilitates participant involvement and commitment leading to health and wellbeing benefits (Southcombe et al., 2015)

In this related study, it is suggested that *charismatic leadership* or mere ‘leadership’, was lacking in some of the 20 sheds. A few sheds lacked any sense of belonging; the antithesis of being, and feeling like, ‘a member’. Interestingly, some leaders were praised for their ‘leadership’, whereas other leaders secured conditional support from their members based on them ‘not trying to lead them’ as previous employers might have. This links to the ‘no boss’

philosophy (Ahl et al., 2017; Golding, 2015b; Misan et al., 2008; Munoz et al., 2015; Ormsby et al., 2010).

Some of the charismatic leaders, aimed to enhance social connectedness through displays of empathy; establishing an emotional connection while understanding member's needs and aiming to create an environment that fulfilled those needs (Southcombe et al., 2015b). At these charismatic leader's shed's, members were not 'service users' but 'contributing members', serving the (shed) community.

Southcombe et al. (2015) article as an 'If... Then... Leading to...' statement:

If there is a 'transformational' leadership style and 'value congruence' between participants and collective interests (values) of the men's shed,
then men will feel involved and committed in a conducive environment for participation,
leading to social connectedness of members and the enhanced wellbeing of members.

However, **if** lead personnel lack leadership skills and/or knowledge to adequately support their men's shed,
then men do not feel involved in decisions or committed to the men's shed,
leading to limited impacts on health and wellbeing.

Figure 22: The basic programme theory gleaned from Southcombe et al. (2015)

The first part of the gleaned programme theory aligns well to the situation at Market Town Men's Shed. Men at this shed did not consider themselves service users and felt they were contributing; which indeed the majority of them were. The second part of this programme theory aligns to City Men's Shed. The unsuitability of the space and members not feeling involved, or as committed to the shed, seemed to coincide with an unwillingness to volunteer to help with the needs of the shed and its organisation. The conduciveness of the environment and levels of involvement and commitment of shed participants and volunteers influences social connectedness and the wellbeing of the members.

5) Theme: Collaborative teaching / learning experiences encourage participation and autonomy enhancing member wellbeing (Cavanagh et al., 2014b)

The final article of three produced by these authors, focused on the role of collaborative learning on training and development practices within five men's sheds of the 20 discussed in previous two articles (Cavanagh et al., 2014a; Southcombe et al., 2015b). Training and development were found to be important, along with shared teaching and learning experiences and collaborative learning impacting individual members and groups. A need for training and collaborative learning policies was emphasised, including “soft” practices... encouraging participation, autonomy and member well-being’ (Cavanagh et al, 2014b, p.368 citing Nickson et al., 2008). A suggested primary consideration for shed leaders was to reduce bureaucracy and overt management systems that impede member’s participation.

No specific programme theory was apparent within this study. However, Market Town Men’s Shed demonstrates an environment that encourages participation, autonomy and member wellbeing. The leadership at both Industrial Town Men’s Shed and City Men’s Shed also demonstrate a willingness to encourage participation and member wellbeing. None of my case study sites maintained specific policies for training or collaborative learning. To men’s shed members, such a policy might seem overtly orchestrated and not, as Ahl and colleagues encourage, a ‘focus on *informal*, practical and social learning’ (2017, p.318, my italicisation).

6) Theme: Communities need readily available bespoke support/resources to change, or work with, local contextual factors to support health and wellbeing. ‘Health Promotion Planning’ (Green & Tones, 2010) and ‘Developmental Evaluation’ (Patton, 2010)

As described above, further to the five studies identified from the men’s sheds literature, I broadened my inquiry to include health promotion theory and evaluation. The topic of ‘community-led’ (or ‘*bottom-up*’) approaches align to community empowerment and are conceptualised by Green and Tones as the antithesis of ‘authoritarian’ Public Health-led (or

‘*top-down*’) approaches attempting to achieve external goals (Green & Tones, 2010, p.411). This health promotion theory links back to my initial programme theory that men’s sheds led by their community members (‘*bottom-up*’) are likely to lead to sheds controlled by their participants; with a good social environment to support the health and wellbeing of members. Whereas, men’s sheds led by public health organisations (‘*top-down*’) are less likely to be influenced and controlled by their participants; leading to less personal investment from participants and less added value in terms of personal and community health benefits.

However, other health promotion theory recognises that marginalised and disadvantaged communities might not have the synergy of resources to hold or exercise the power required to make changes to individual lives or communities. As such, the creation of community capacity might rely on authoritarian-led interventions (‘*top-down*’) to support community engagement and empowerment (Braunack-Mayer & Louise, 2008, cited in Green and Tones, 2010).

These health promotion theories are perhaps best articulated by evaluator Michael Quinn Patton, who used Hegelian dialectic reasoning (McTaggart, 1910) to suggest:

Thesis: The world is changed *top-down* through widespread dissemination and replication of validated best practices.

Antithesis: The world is change *bottom-up* through grassroots innovation grounded in indigenous knowledge and local context.

Synthesis: In the global village, change occurs in the middle where *top-down* and *bottom-up* knowledge and interests collide, intersect, get entangled together, do battle, find common ground, and otherwise encounter real-world complexities as effective general principles are adapted to local context’ (Patton, 2010, p.152, my italicisation).

City Men’s Shed, the ‘*bottom-up*’ intervention representing a community-led venture, possesses too few resources to create a functional and spacious enough men’s shed to support the pragmatic interests of its community members. It exemplifies a community that has lacked resources, such as the finance to afford an adequate venue size, and willingness from involved community members to volunteer their labour and commit time. This, in turn, has stunted the

activation of mechanisms required to make impactful changes; to individual lives or communities.

Industrial Town Men's Shed was until recently at the behest of a host organisations: *led* 'top-down'. Perhaps due to a lack of empowerment within the Public Health organisations that hosted Industrial Town Men's Shed, the Public Health organisations lacked the personnel and finance to adequately support the members and the men's shed. However, PH1 did set up the men's shed and all three Public Health organisations did support Industrial Town Men's Shed for a sufficient duration within which the group has now synthesised into more of a *bottom-up* entity; empowered to take control and lead itself.

Market Town Men's Shed was selected to represent a community-led men's shed that had received financial and leadership support. Perhaps the lack of community groups for men and the rural nature of the surrounding area meant that the community's men were to some degree *marginalised and disadvantaged* without the *synergy of resources to hold or exercise the power required to make changes to individual lives or communities* (Braunack-Mayer & Louise, 2008, cited in Green and Tones, 2010). The case exemplifies the creation of community capacity through the intervention of a Community Development Worker (CDW). The CDW engaged individual men and supported the newly found group over approximately three years to a point where the men's shed members became empowered to manage their own affairs.

Rather than implying that benefits derive from men's sheds being *either* community-led (bottom-up) *or* public health-led (top-down), evidence from the three cases and supporting realist review demonstrate that a balance of approaches leads to the most effective men's sheds. The approach needs to be specific to the context of the men and area where they live. Individual men sometimes need support to become organised to create groups that champion the interests

and needs of the community men. But as Kindervatter states “[e]xperts should be on tap not on top” (1979, cited in Green and Tones, 2010, p.429).

In such an approach, professionals ‘*on tap*’ to support rather than ‘*on top*’ to lead, ensure community men do not feel they are ‘service users’, but are instead empowered to make a contribution. The main asset is having community-based men involved who want to work together happily in each other’s company, adhering to health and safety because they value it, and feeling that they maintain sufficient autonomy within the men’s shed structure. The men involved must be able to take on the roles required to fulfil the tasks of running a men’s shed. In some cases when developing a men’s shed, paid workers might be needed to conduct these roles until suitable volunteers have the required inclination to take on these roles.

Tested Programme Theory (tPT) 1: Organisational arrangements

Building on *refined* programme theory (*rPT*) 1, and integrating the findings from the realist review data, *tested* programme theory (*tPT*) 1 is presented in Figure 23 as a $C_X \Leftrightarrow M_X \Rightarrow O_X$ configuration using ‘*if... then... leading to...*’ statements. As a reminder, ‘*pO_X*’ refers to ‘*proximal* outcome(s)’ and ‘*dO_X*’ refers to ‘*distal* outcomes’.

tPT1: Organisational arrangements of men’s sheds

C_A: If leaders create and maintain an environment that is: i. physically conducive (the physical shed and materials/equipment support participant interests), and; ii. socially conducive (leaders prioritises social connectedness); iii. without unnecessary outside interference, but iv. supported with outside influence when required,

M_i: then community members feel they can attend, positively contribute and influence their men’s shed,

pO₁: leading to participants sharing similar values to leaders about the men’s shed, such as objectives and rules of conduct (do’s and don’t’s)

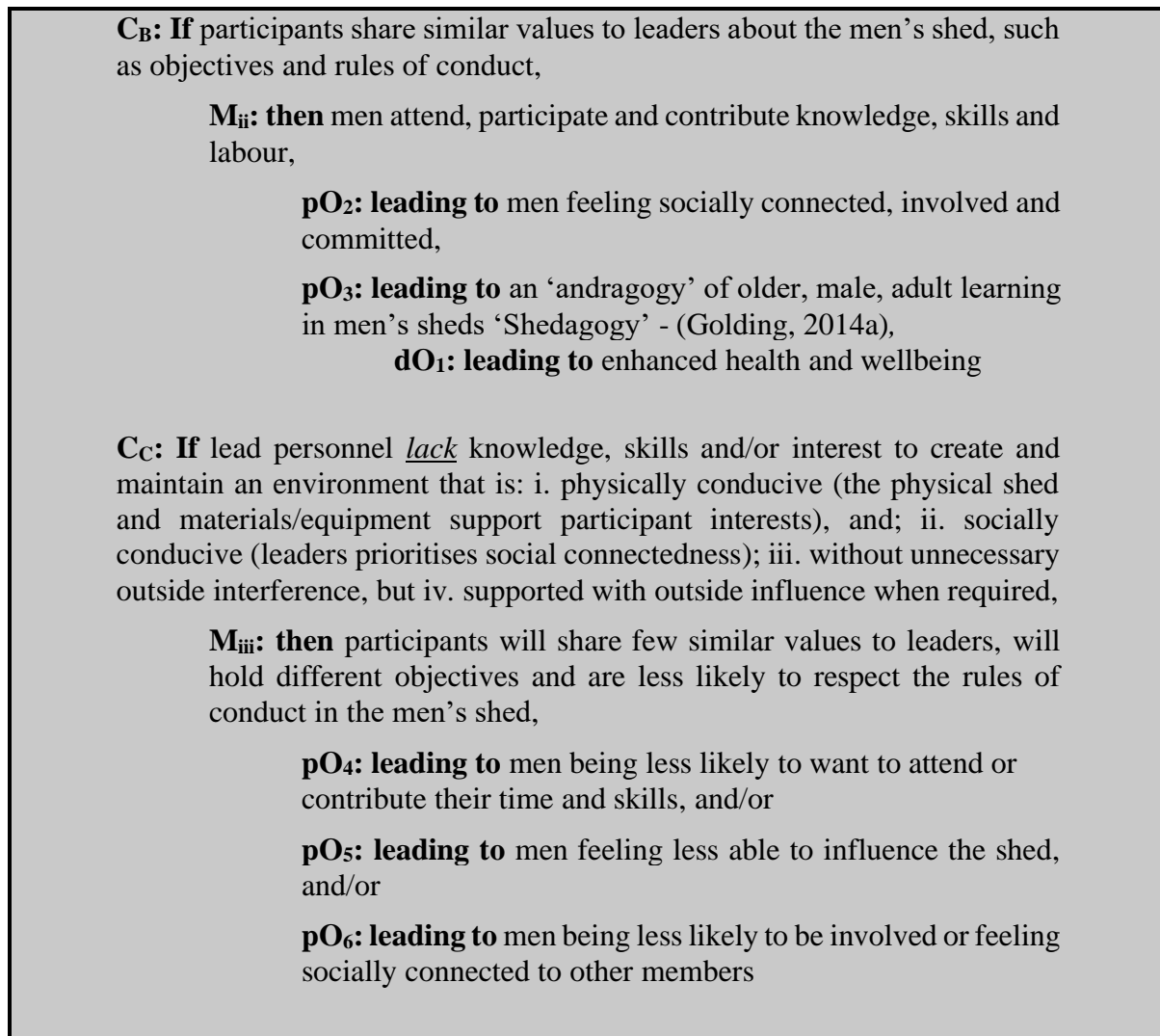


Figure 23: *tested* Programme Theory (*tPT*) 1 on organisational arrangements

Discussion

The *iPT* was found to be naïve in suggesting that bottom up, community-led organisations were more likely to enhance the health and wellbeing of men’s shed participants than Public Health-led interventions. Due to the findings from the three case studies the *iPT* was augmented. It was identified that men’s sheds need appropriate premises for the activities that they wish to engage in and for the numbers of men who wish to engage together. To acquire and maintain appropriate premises and resources to enable a functioning men’s shed takes *vision* and *inclination* from the leadership. Funding is often needed to make such a furnished premises a

reality. It takes groups of people, ‘a *community*’, to work together towards the shared and valued vision. Leaders must be dedicated and seen to be serving the needs of the shed, which in turn serves the participants of the shed. Leading by example is one method of recruiting participants to volunteer to help support a men’s shed. When participants value their men’s shed they are more likely to make the time and give the commitment required to support the organisation. Time and commitment ‘costs’ volunteers, but it also brings rewards such as a *sense of satisfaction* and *the feel good factors* of contributing to something they value.

The *rPT* was developed to include a more nuanced understanding. Participants who feel able to contribute to – and exert influence over – their men’s shed are more likely to feel they have volition over their men’s shed’s future. This will more likely make the physical and social environments conducive to men’s shed activities which the literature review suggests are associated with health and wellbeing benefits (see Chapter 4).

This refined programme theory has been tested and further developed against men’s shed literature referring to management and leadership. My empirical findings test well against Ahl and colleagues (2017) work (citing Golding, 2015b) which found that men’s sheds can be created bottom-up or top-down, but members need to be active and equal participants. *rPT1* is also further developed by noting well-managed sheds enable adult learning which can enhance wellbeing (this has been covered in Chapter 4 and will be discussed in more depth in Chapters 8 and 9).

The refined programme theory is not disputed by the findings of Ang et al. (2017). Ang and colleagues (2017) work complements *rPT1* with additional findings that: when members have positive perceptions about leader human resource management (HRM) practices, then leader-member exchange is good, which leads to members being less likely to leave the men’s shed and member’s feeling socially connected. These factors lead to health and wellbeing benefits.

Cavanagh and colleagues (2014a) findings – that charismatic leaders who focus on social connectedness increase the social connectedness of members – align well to the success seen at Market Town Men’s Shed. Here participants work well with both the current chair and the Community Development Worker (and previous chair) who drove the creation of the men’s shed. Adding to *rPT1*, this secondary source has also found that social connectedness has been found to benefit member health and wellbeing (Cavanagh et al., 2014a).

Again, in the sibling paper by Southcombe and colleagues (2015b), findings – that ‘value congruence’ between leaders and participants facilitates participant involvement and commitment – align well to what has been found at Market Town Men’s Shed. Conversely, at City Men’s Shed, members seem to want a different experience to that which leaders were able to provide. This seems to be an example of incongruence in values. Southcombe and colleagues (2015b) found that congruence in the values of leaders and participants facilitated participant involvement and commitment, which led to health and wellbeing benefits.

There was no specific programme theory to draw on in the last of the sibling papers. However Cavanagh and colleagues (2014b) findings align with leader intentions of all three primary case studies. These are: to encourage participation; autonomy, and: member wellbeing. Market Town Men’s Shed most closely aligns with the realisation of these intentions.

When testing *rPT1* against Health Promotion theory, the three case studies exemplify different local context. The support given by the CDW at Market Town Men’s Shed is a good example of there being a professional ‘on tap’. He supported a new group of individuals – previously without the synergy of resources or inclination to create a men’s shed – to become an engaged and empower community of men able to manage a men’s shed they all value. This theory also applies to Industrial Town Men’s Shed, whom – with the support of a local church group and a regional men’s shed forum – have become empowered to organise as a constituted group and

apply for funding; with future plans for relocation and expansion. City Men's Shed has yet to receive the support that this theory suggests is needed to gain and synergise resources.

Finally, the 'synthesis' proposal in Patton's (2010) 'Developmental Evaluation' that neither top-down nor bottom-up is always the most appropriate approach, but rather *knowledge and interests need to collide, intersect, get entangled together and adapted to the local context* supports the findings in the cases. This has helped to further refine *rPT1*.

Where possible, the theories underpinning each of the studies have been integrated into *tPT1*. This synthesis of the secondary sources with the *rPT* found that: contributing and influential participants; led by a charismatic leader with similar values, but; with the absence of women and authority figures; produces social connections and a conducive physical and social environment for participation in adult learning that enhances health and wellbeing. However, it was also found that when leaders lack charisma or if there conflicting values, members are less likely to feel socially connected and will lack volition and the *will* to contribute or feel committed to the men's shed. This restricts health and wellbeing benefits of men's shed participation.

Men's shed organisations are complex systems. However, focusing on bringing men together and working on things that support jointly held values helps groups work cohesively and creates a well-functioning men's shed. A well-functioning men's shed seems to naturally support participant health and wellbeing. This is useful information for the design and setup of new men's sheds. It is also useful information for existing men's sheds who might want to improve how they best serve their community and participants. The literature review, in the previous chapter (Chapter 3), brought together evidence that men's sheds are associated with health and wellbeing benefits for their participants. Well-functioning men's sheds require

appropriate organisational arrangements that support participants in men's shed's activities to best benefit participant health and wellbeing.

Conclusion

This chapter has taken an initial programme theory (*iPT1*), used primary data to develop it into a refined programme theory (*rPT1*) and tested and further developed this with secondary data in a realist review. This realist synthesis produced a tested programme theory (*tPT1*).

Having progressed through this process we have learnt that men's sheds are organisations that need leadership and support arrangements in place. A functional men's shed must appropriately serve the purposes for which its members want it to be. This takes resources: funding and labour that need arranging through leadership and coordination. The labour resources will likely need to be contributed in-kind by volunteers. If the financial resources (needed to house and maintain shed activities), the labour resources (required to enable the day-to-day running of a men's shed), or leadership and coordination (required to manage the financial resources and labour resources) are lacking then sheds cannot fulfil the aims and objectives of their members.

Health and wellbeing is supported when men's shed members are participating, and feel they are contributing to their men's shed and feel social connected with others at their men's shed.

Organisational arrangements are a key factor in whether these health supportive factors occur.

However, it is still unknown what resources are useful in men's sheds and what participants can bring to, and gain from, men's sheds. These issues will be covered in the following two chapters, chapter 8 and chapter 9, respectively.

Chapter Summary

This first findings and analysis chapter began with an initial candidate programme theory about organisational arrangements of men's sheds and developed this into a programme theory using primary data from three case studies. The three types of organisational arrangements of men's sheds were: a *Public Health-led organisation* (represented by Industrial Town Men's Shed); a *community-led intervention* (represented by City Men's Shed), and; a hybrid – community-led, yet financially supported – intervention (represented by Market Town Men's Shed).

The *refined* programme theory has then been further explored and tested (Gough et al., 2012) using secondary sources identified through a realist review. The result is a *tested* programme theory based on the synthesis of both primary data from realist investigation and secondary data from realist review.

The findings demonstrate *how* organisational arrangements and leadership of men's sheds *influence* men's sheds and their members. Chapter 9 will further demonstrate *how* men's shed members *influence* men's shed organisations. First, however, Chapter 8 will explain *how* men's sheds as places and space for men, influenced by leadership and organisational arrangements, impact the health and wellbeing of men's sheds members.

8) Shed-based resources: *Explored and tested*

Introduction

This chapter considers men's shed-based resources, which influence attendee's health and wellbeing. Men's sheds are social interventions that create community settings. These settings influence contexts that can change mechanisms of action and behaviours of participants (Rycroft-Malone et al., 2013). The previous chapter (7) describes how 'organisational arrangements' influence men's sheds as places and hence the resources they offer. Indeed, there is a reciprocal relationship with leadership and organisational arrangements influencing men's sheds and men's sheds – as places with resources – influencing what is led and arranged. Further to this complexity, in Chapter 9 we will also learn how men's sheds – with their respective resources – influence, and are influenced by, men sharing experiences, knowledge and skills.

This chapter starts by explaining what is meant by 'shed-based' resources. The *generated* 'initial programme theories' (*iPT2*) are *explored*, using primary investigation data on three types of shed-based resource, and are expounded to become 'refined programme theories' (*rPT2*). These *rPT2* are *tested* with two lines of enquiry using secondary data in a realist review. The chapter concludes with 'tested programme theories' (*tPT2*) based on the synthesis of primary and secondary data.

This linear representation does not, however, reflect the messy route of 'zig-zag[ging]' which has occurred over different time frames between 'fragile ideas', 'naïve conjectures', concepts, theory and 'evidence' (Emmel, 2013, p.6). Furthermore, I take the ontological position that theories are built, not upon a firm base (of evidence) but, upon piles in a swamp, in which these piles 'are firm enough to carry the structure...' (Popper, 1992, p.94). But, for the ease of the

reader, I have chosen to represent initial ideas, developed with primary data and then tested against secondary data, in a linear way. As Pawson, drawing on Karl Popper (1972), states ‘it is vital to... “rationally reconstruct” method’ (2006b, p.103) and this sequencing of events aids communication and understanding.

Generating *initial Programme Theory (iPT2)*

Men’s sheds are settings, and settings are places. ‘Place’ and ‘places’ are words with many potential interpretations and philosophical connotations. For clarity, whenever the word ‘place’ is used to mean something other than a physical entity I will make this explicit.

Place-based effects on health are sometimes referred to as universally affecting all who live in (or have lived in) a locality. However, there are no

...‘universal “area effect[s] on health” [; rather] there appear to be some area effects on some health outcomes, in some population groups, and in some types of areas’(Macintyre et al., 2002, p.128).

In health-related research it is claimed

‘...a crucial problem is the lack of any clear theorising about the mechanisms which might link [place] and health behaviours or health...’ (Macintyre et al., 2002, p.129).

Although it is beyond the scope of this PhD to assess individual’s ‘area of residence’ and health status, I will theorise on mechanisms that relate to men’s sheds as places and the benefits they offer to individual members (Macintyre et al., 2002, p.129). As stated at the start of this chapter, men’s sheds (through the lens of realism) are seen as *social interventions*. Although, often not set up to specifically promote health, participant health and wellbeing is influenced by men’s sheds, and so men’s sheds can be interpreted as ‘place-based’ health promotion interventions (Green et al., 2015). Just as ‘men’ are not part of a homogeneous group, ‘men’s sheds’ are diverse, and this is exemplified by the three chosen cases (see chapters 6 and 7 for more

information about the specific similarities and differences of each case). Each men's shed, as with each individual, is unique (see Chapter 9).

One of the main research questions I felt needed answering is: Why do men attend men's sheds? The question led me to consider factors covered in the '*Generating initial programme theories...*' chapter (3). To recap, this includes what might overtly appeal to potential participants and what factors might encourage their continued engagement. This *iPT* (2) follows in Figure 24.

Initial Programme Theory (iPT) 2: Shed-based resources

The initial programme theory about Shed-based Resources suggested that:

If men value the men's shed resources,
then men will make an initial attendance.

Continuation of attendance at a men's shed was initially theorised to be contingent on the value men placed on the resources they identified. So,

If men continue to value the men's shed resources,
then men will continue to attend,
leading to improved health and wellbeing.

However, a rival theory was needed to account for men who do not continue to attend or who only attend sporadically:

If men do not (continue to) value the men's shed resources,
then they will not attend regularly or at all,
leading to negligible changes to their health and wellbeing.

Figure 24: *initial* Programme Theory (*iPT*) 2 on shed-based resources

Refining *iPT2*: Exploring issues with Realist Investigation Data

The initial programme theories refer to ‘resources’ within men’s sheds. Whilst reading about the methodology of realism, I discovered a theory from Rycroft-Malone et al. (2013, p.14 citing Pawson & Sridharan, 2010) referring to realist ‘resource’ mechanisms as being either ‘social, cognitive, [or] material’. This can be interpreted as: physical entities; social factors, and; resources relating to individual minds. This conceptual framework led me to consider what resources might be overtly experienced during an initial attendance at a men’s shed and what additional (overt or covert) resources might be experienced through continued regular attendance.

Attending men (or people who encourage men’s first attendance) must be aware of some potential resources before a prospective participant enters a shed. It is these resources that make the specific men’s shed appealing or not. However, some resources can only be experienced after establishing relationships with other attendees, over multiple sessions. Men’s sheds often offer: *material* resources - wood, tools, workbenches to facilitate woodwork; *social* resources - social space and men to socialise with, and; *cognitive* resources - attending men’s knowledge and skills to utilise material and social resources (more details in the table below). These resources can also be divided into *physical resources* – such as, materials, space for social interaction, other men to connect with – and *intangible resources* – knowledge, skills, being heard by others and feeling listened to, empathy, and processes of social interaction. The experience of creating something from materials, connecting with other men, learning a skill or being heard, could provoke ‘emotion’; what sociologists call an ‘affect’.

The first column of Table 11 (below) refers to ‘resource’ types: material, social, and cognitive. The second and third columns of the table list material, social and cognitive resources that are encountered during men’s initial attendance, and those that can only be discovered through

continued attendance respectfully. For example, no-one makes *lasting friendships* within an initial visit; this only happens through a period of regular attendance.

Resource	Initiation of attendance	Continued attendance
Material resources	<ul style="list-style-type: none"> -A place to produce; -Machinery; -(Power) tools; -Wood; -Carpentry/Joinery peripheral objects (brackets, screws, hinges); -Metal; -Parts to fix bicycles; -A kettle and cups to make warm drinks 	<p>As before and...</p> <ul style="list-style-type: none"> -A space in which to work and leave 'works in progress'.
Social resources	<ul style="list-style-type: none"> -A social space for men; -Men to work alongside; -Men to talk to; -Men with similar former employment, for example, ex-forces personnel 	<p>As before and...</p> <ul style="list-style-type: none"> -Somewhere beyond the home or workplace; -Structure to day/week; -A social club for men; -A club that can fit around other life commitments; -(Workshop) Banter; -Friendships; -Demonstrations of men caring about each other; -Support at the shed; -Support and friendship beyond the realms of the shed; -Men learn how to communicate and show support to each other; -Men learn how to ask for help; -A social environment for fun and humour; -Feeling good about helping others; -Seeing people's happy faces; -Contributing to local community
Cognitive resources	<ul style="list-style-type: none"> -Men with knowledge and skills about woodwork, metalwork, fixing bicycles, glasswork, upholstery; 	<p>As before and...</p> <ul style="list-style-type: none"> -Creating things; -Men who inspire creativity and production

	-Men who want to share their knowledge; -Men who want to learn	
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Table 11: Resources (material, social and cognitive) identified in men's sheds that can initiate attendance and contribute to continued attendance.

Reasons for initiation of attendance and men's choices to continue attending, are evidenced below with extracts from interviews and notes from participant observation. The evidence helps to understand and explain the appeal and value of each of the identified resource mechanisms to which members emotionally 'react to' or cognitively 'reason with' and 'respond to'. These accounts and observations highlight how men's sheds, as settings influence contexts and resources to affect the extent to which participant's responses then go on to influence health and wellbeing outcomes. These explanations are then tested in the Realist Review section of this chapter.

Material resources

The following subheadings contain factors related to the material resources of the men's sheds I investigated.

The appeal of machinery

Some men found material resources very appealing. Many of the members were from trade-related backgrounds such as engineering, building and electricians. Once introduced to the concept of men's sheds, men could identify how they might amuse themselves within the setting.

A men's shed member, living in a care home, recalled his excitement when introduced to the men's shed and its physical resources by a social worker:

L5: "I am a mechanical engineer by trade, and wanted to be doing something. The social worker said 'I think I need to introduce you to the men shed.' I said, 'what is the men shed?' and she said, 'I will take you to show you, they make stuff'. I thought 'oh OK, it sounds OK.' So I came and I looked in the workshop there and I went 'wow, look at that!' I was just totally mesmerised by the machinery, 'it's incredible!'... I said 'this would be brilliant, it's fantastic, look at the machinery!'."

This member's reaction – to the size of his attended shed, equipment levels and scope of the physical space – was similar to my own reaction to first surveying Market Town's Men's Shed as a possible research site.

Another attendee recalled a similar reaction to the space and equipment:

L6: "I was quite surprised how big it was actually... there is more equipment than I expected; it [sic] was more here than I thought."

The above comments suggest that the equipment and size of the enclosed space constitutes a resource. Many people do not have large, covered areas at home within which to work on projects. The men's shed offers a setting for men, with space they can use to spread out materials and 'house' ongoing projects that they have yet to finish. The men's shed provides an opportunity for protected time and a place for undertaking activities which otherwise might not get done. The space and its recognised purpose reduce barriers to partaking in utilitarian tasks and achieving things. This is demonstrated by the following verbatim extract, which refers to thwarted intentions of using a table saw and associated barriers regarding space at home. The men's shed provides a facility, which overcomes these barriers and offers the additional benefit of social interaction.

Interviewer: "With regards to the equipment, is there everything at this men shed that you are looking for or did you not have anything in mind?"

L6: "Yes pretty much, because I brought some stuff to use at home, but I had not even got it out the box. Things like the big table saw you need setting up and leaving somewhere and that's not always convenient for me at home anyway. So, yes, there is that side of it – the actual practical side of it – having somewhere to do stuff, as well as the social side of it."

Material resources and space clearly appealed to men during their initial visits and played a part in them becoming members.

However, whilst observing participant behaviours, I found examples of men who claimed they had ‘enough friends’ and seemed to only use the shed for its material resources. This finding only applied to a minority of the attendees who might use the large table saw or take wood shavings and sawdust away to use as bedding for animals. As denoted, above, this behaviour of a minority of men demonstrates the variability of reasons for shed attendance and the need to acknowledge that not all *members* will participate regularly or in the same ways.

Beyond the appeal of machinery

Some men at all three study sites kept their own personal workshops; some with better items of equipment and with a better range of stock (for their interest) than the communal men’s shed. This insight demonstrates that for such men the shed’s material resources are not a primary attraction. The following extract highlights that some men own more machinery and tools than the men’s shed they attend:

Interviewer: “...with regards to metalwork, you have got more equipment than this men’s shed has got?”

L4: “Well I have got two lathes, a milling machine, a drill, grinders and then the forge.”

Interviewer: “Do you have particular projects that you are involved in?”

L4: “It’s been mostly making machinery, the milling machine I built so I cast the metal into the machinery fabricator and I have made lots of tools for the milling machine...”

Along with having an amply equipped workshop, this man also clearly possessed the cognitive abilities to use his equipment to fulfil tasks he wished to achieve. This suggests that for some men neither material resources, nor cognitive ‘know-how’, were primary reasons for attendance at the men’s shed; at least in regard to the specialism of metalwork. This, of course, does not mean that the man did not learn from others or did not respect their know-how on

topics beyond metalwork. It does, however, suggest that social resources, for some men, offer a strong draw for attending.

Size, layout, space available and how this impacts members

Finally, in relation to the material resources of the men's sheds, the current size of Market Town Men's Shed was mentioned with concern regarding the possibility of expanding the shed footprint or moving to even bigger premises. One interviewee felt that transferring to yet larger premises might change not only the physical and material potential of the men's shed, but also the type of social interaction facilitated:

L4: "I just have got a lot of reservations... when the companies I used to work for, [names a company], we started off in a small unit and it was really good fun and then we moved to a place three times bigger and it was never fun again, because it got more serious. ...here this is fun and I just wonder if it [moving somewhere bigger] might take the fun away."

Perhaps there is an optimum size of place, related to numbers of members attaining for a sense of comfort and social arena for 'fun' that can be facilitated by a place.

For some men, the material resources – including the physical entity and space within men's sheds – were the main reason for attendance. For a few, the material resources were the *only* reason for being members. However, the majority of men made more reference to the social resources of the men's shed in relation to their health and wellbeing.

It could be that the men's shed provides a resource, that supports men from lower socioeconomic backgrounds by increasing the place-based, material resources they can access via the men's shed. This interpretation aligns with the 'pull-up/pull-down hypothesis' (Astell-Burt & Feng, 2015; Cox et al., 2007) where 'pulling-up' occurs when a person on lower income benefits from access to an affluent area's resources and conditions; to which they would not otherwise have had access if they had been living in an area without such resources and conditions.

Further to this, the material resources contribute to the men's shed as a physical entity and a symbolic entity. A 'men's shed', as the title states, is a provision for men and the material aspects and pragmatic-based activities act as a draw for men's initial attendance; a 'reason' for attending. Men's sheds are socially recognisable and accepted places that are for men, that welcome men and in which members feel comfortable and secure. The material entities legitimise their presence and reasons for being in the company of other men. Feeling comfortable, and having a place to be beyond the home and work in a community, supports member health and wellbeing.

Social resources

Each of the men chosen for interview demonstrated that they valued the social aspect of the men's shed. Members often stated that they were looking for a social avenue. Some men specifically sought groups for men. Men's sheds are places that offer a 'social space' for men to meet other men and socialise.

Men and communication

Approximately one third of the regular attendees at the three men's shed sites were ex-forces; serving in the army or Royal Air Force (RAF). The following extract states how men might desire being able to re-experience a sense of camaraderie, as previously experienced with men in the army. Moreover, despite a good relationship with his female partner, this man's yearning for a humorous male group co-existed with his strong marriage to his wife:

L7: "I was looking for the camaraderie that I had maybe in the army. ...don't get me wrong, me and my wife have been married for nearly 50 years so we have a good relationship. But sometimes... the 'crack' that you have here is different to when you are at home. Yeah, [the shed] ticks a lot of boxes for me."

This sentiment for the company of a group of men with whom to communicate and laugh was corroborated by several men.

Further to this, L7's wife has encouraged him to attend the men's shed after he had been caring for her for three weeks; without a break, for either of them:

L7: "...it certainly... I wouldn't say [the men's shed] 'saved my sanity', but I look forward [to attending], and – this is awful isn't it to say, but – particularly as my wife is not so good [recovering from an operation]; I have left her in bed this morning. Its a release for me to get out and just do what I want to do..."

The men shed was recognised as 'good' for the participants; providing respite from family life and their roles as partners or fathers, or in circumstances when they were caring for someone. A subsidiary benefit is that partners and family members get time away from the participant. This was viewed positively by both parties.

Interviewees made reference to non-interviewed members who benefit from social interaction in the sheds. I observed men, to whom interviewees referred, enjoying social interaction, while working and, particularly, during lunchbreaks. One such example is noted below in Figure 25:

[11/10/2019]: 'LO10 often starts a conversation about something in the news. If L7 makes a comment, which he often does, LO10 will make reference to L7's newspaper of choice and mock him and/or the newspaper's bias; as LO10 perceives it.'

Figure 25: Fieldnote made on 11/10/2019

Discussions of current affairs usually ended in humour or laughing with a sense of disbelief at what was happening in the world. Whilst on a group lunchbreak, a member told me early on in my time at the research site, that BREXIT (*Britain's* political and economic *exit* from the European Union) was a topic off-limits at the shed because it was too contentious; not ending humorously. For context, my investigation took place at a time when the British Government had a change of Conservative Party leader (and hence Prime Minister) and were negotiating a 'deal' with the European Union. Before a deal was made the country had a general election in early December 2019 and so Politics was a prominent topic in the preceding months. For the good of getting along with each other, however, it was decided BREXIT was a topic best not broached.

The type of humour and acceptable social interaction between men was exemplified by one of the interviewees. In this first of two extracts from participant 'L4' – whilst talking about feeling fulfilled by fixing something – the man describes how men might give a compliment and others will jokingly suggest they dampen down flattery:

Interviewer: “*So it must be quite fulfilling to be able to fix things and fabricate things?*”

L4: “It’s very nice and especially when people go, ‘oh, that’s good’, it makes me feel good.”

Interviewer: “*Does that happen often?*”

L4: “Occasionally, we don’t walk around telling everybody what a good job they have done.”

Interviewer: “*And at the same time you notice when people do?*”

L4: “Yes it was [name of participant] that was saying, ‘God that’s fantastic!’ and [name of another participant] was saying, ‘no, don’t tell him that, say it’s ‘alright’ or ‘adequate’.”

This type of interaction was something I observed when a group of men were dismantling a machine (see Figure 26).

[25/10/2019]: One member, realising that a specific tool would be needed, went to look for the required tool. He brought this tool for the man who was working on the machine. As he was handed the tool, which his colleague had silently spent time finding, the man responded with surprise and sincerity, “oh, thank you, I appreciate that”. A third man immediately retorted, “don’t...it [the compliment] will go to his head!”. Wry smiles / laughter followed.

Figure 26: Fieldnote made on 25/10/2019

In the second extract (below), I asked a question about how ‘L4’ experienced health and wellbeing impacts. The man introduced the phrase ‘emotional wellbeing’ to our conversation and went on to explain how swearing demonstrated social acceptance and that these social interactions exemplified his enhanced wellbeing:

Interviewer: “*Do you feel that the men shed has benefited your health or wellbeing?*”

L4: “My emotional wellbeing.”

Interviewer: “*Emotional wellbeing?*”

L4: “Yes, greatly! Oh yes, it’s fantastic! I absolutely love coming here. I made them all laugh one time, I think it was to [a volunteer coordinator] I said, ‘do you know, I have never enjoyed been told to ‘fuck off’ as much as I have since I have come here?!’ Because that’s how it is, you see, it’s a good relationship with everybody.”

For some, feeling comfortable enough with another member to aim profanity at him, was recognition that one man accepted and liked another. It also seemed that the blasphemer felt L4 could receive such a comment and not feel offended; and so was accepted and admired. The use of profanity might be interpreted as abusive, inappropriate and/or confrontational. However, in this context the use and acceptance of meaning within the interaction was shared by the men and was considered positive and remembered fondly.

Regarding the nature of the abrupt communication style displayed and enjoyed by some members, I found that members at Market Town Men’s Shed encouraged me to engage with them in a similar manner, as demonstrated here:

[6/09/2019]: ‘I was introduced to a number of members by the Chair of the men’s shed. I also introduced myself to a number of members, one-to-one, and explained that I was hoping to conduct some research at their men’s shed. The first time I addressed the whole group was at a lunchbreak and the Chair briefly explained that I had come to talk to them. Some men were still looking for their lunches or finding a seat and some of the men were clearly more alert and initially interested than others. The group encouraged me to take control of the conversation and told me to tell noisy group members to “shut up”. I was polite, but did state, “Right then, shut up a minute.” This pleased the group with calls of “that’s it!” and “that’s better lad”. I projected my voice and addressed the 12 attendees as they mostly sat, eating sandwiches, in the kitchen area.’

Figure 27: Fieldnote made on 6/09/2019

Social interaction

Following on from the previous extract, L4 was not ex-forces but formerly worked with other men and noted that he enjoyed these experiences. Before finding the men’s shed, around 18 months earlier, he felt very socially isolated and moved into social housing near the town to proactively find more opportunities to engage with other people:

Interviewer: “How did you find out about the [Market Town] Men Shed?...Were you living locally at the time?”

L4: “No, when I was coming here [to Market Town] I decided that I wanted to get lots to do, because where I was, I was very isolated. There were several things: there was a men shed, I think I found it online I was looking of men’s sheds, and; I was going to join the University of the Third Age [U3A], and; I joined the archery club, but I didn’t do the U3A thing, the archery club I dropped out of and I just come here now.”

This extract shows that of three possible social activities the man had planned to take part in, the men’s shed was the one he joined and stayed engaged with. It fulfils his *social* needs. In addition, an extra session voluntarily teaching for a shed related group, keeps him socially engaged four mornings a week.

During one encounter at a men’s shed, I observations a man (L011) talking about how his wife refers to the men’s shed as a “men’s creche”; a place she drops him off at on a Friday whilst she conducts other business. This seemed to provide her with reassurance that he was entertained, safe and well. Furthermore the men’s shed, as a social group for men, provided another man’s family with some reassurance that there was no need to be concerned about him during his hours at the men’s shed:

L3: “[All the men’s shed participants are] ever-so helpful and I just appreciate that, that I’ve got this opportunity of working in here with the good brunch of lads and a bunch of people that understand my situation... [and] ...even my family, they all know not to contact me Monday, Wednesday or Friday [laughter] because they know I’m at the man’s shed [sic]...”

Most of the interviewees made reference to their fellow men’s shed participants, and the company of other men, as a benefit of the men’s shed. Family members, reportedly, benefitted by knowing their man was cared about and had something to keep them occupied.

Conversely, however, some men were found to limit social interaction or to *keep themselves to themselves* more than others. In an interview, one man suggested that to work in the company of a few other men, for a couple of hours a day was pleasant to him, but ‘socialising’ was not what he cared for:

Interviewer: "...do you find that there's any social benefit, as in do you find it's good that there's other people here, or it doesn't really matter...?"

L8: "I like it when there's a few people here. I don't like it when it's crowded because it's just too much in there. Four or five people down here, the regulars, you know. I don't talk an awful lot to them, there's a few bits of conversation. I only spend two hours down here."

Interviewer: "Is that because of the environment or because of your interests, you just want to do something else?"

L8: "I can only do things for a short period of time. Two hours is enough."

Since becoming a member, this man bought his own wood lathe and used it at home. Even with this equipment at home, and his seeming disinterested in interacting with the other men, he still attends the shed each morning to use the wood lathe. Later on in the interview, the man (L8) recognised that the other attendees were there for him if he needed help. It also suggests that he engaged in some meaningful interactions:

L8: "But really this place has just been, it's just good. It's a load of blokes and we can insult each other, it's like being back in the military. If you've got a problem they'll solve it, even if it's got nothing to do with woodwork. If you want to talk to somebody they're here to talk to. It's like one of the sergeant's roster's messes where you can just come in and whatever you say, and whatever you're doing down here, no-one outside needs to know or find out about it. And sometimes I'll come in, I just want a coffee, come in and just have a coffee and chat, just to do something else. And if I sit at home it drives me mad."

Despite his observed, and vocal, distain for prolonged social interaction, it seemed that *men's shed resources* were there for him and he recognised the shed's social value to him and other shed members.

A further interviewee articulated that even though he owned a workshop, and would conduct similar projects to those at the men's shed in his own premises, he works in the community men's shed due to the working environment and the social interaction:

L9: "I enjoy doing it [being a member of the men's shed] and it's a nice environment to work in, because working in your own shed can be a bit tedious to be honest, so this is a bit more social. Well, it's a lot more social obviously." [He smiled wryly.]

It was clear that the end product, in this case bicycle maintenance and upcycling, was important, but so too was the process. The men's shed provided a pleasing environment with pleasant social interactions.

A gendered generation and how females change the dynamic

On my first visit to all three men's sheds, I was soon invited to enjoy a warm beverage. In future visits, I was making my own cup of tea and was asking my new associates if they would like one too. The social environment was made up of men, mostly over 50 years of age, with some in their 80s. The make-up of social interaction and the company of other men, often at work, was different to any environment I had previously experienced; I, a man, felt very welcomed.

In 2006, the Equality Act established a 'Gender Equality Duty' (GED) which placed new statutory duties on public bodies in England, Scotland and Wales. The Equality Act 2010 which includes a Public Sector 'Equality Duty' applying to 'sex' superseded the previous GED. The Equality Duty requires public bodies to have due regard to the need to 'advance equality of opportunity between people who share a protected characteristic' such as sex (Government Equalities Office, 2011; Moriarty & Manthorpe, 2017). With regards to the needs of 'men' and reducing male-specific 'health inequalities' this means reducing 'gender mainstreaming' (Walby, 2005) to minimise health disadvantages suffered by men and to encourage men to participate in public health activities where their participation is low.

I asked some of the interviewees about the shed being *for men* and if their experience of this was positive. Several interviewees said that it did not matter to them that the men's shed was for men only and that they would welcome women. One of the interviewees said:

LI: "To be honest the only reason we have kept it men only, apart from Thursdays [when a session takes place for women], is for the other members really. It wouldn't bother me, but obviously some of the banter that goes on between all male company, wouldn't necessarily go down the same, if you were in mixed company. Some of it, would go down quite well, depending on the

female aspect. If you get some ex-factory workers they can swear better than I can but others might be a bit oh, that's not a very nice thing [to say]."

Females sometimes visited the shed with enquires or commissions of work. They were always treated respectfully, as were male visitors, and often offered a warm beverage. One of the commissions was to make a wooden plinth to hold the not inconsiderable weight of a pair of antlers, approximately 1 metre in length, cast-off by a 7 year old stag. I was told that when the female owner of the antlers re-visited the workshop one of the men quipped to another, "*Oi [name of participant], that woman's come to see you, she's horny for you*". The female was said to take this 'humour' in good spirit. The butt of the joke, whose name has been removed, was slightly embarrassed by the comment but not offended. Opportunities to display this type of banter were often taken up. This is one of the reasons why the common and continued presence of women could be likely to change the dynamic in the men's shed. Some men behave differently.

As the above anecdote suggests, the presence of females might add to the topics of conversation and change the focus of the social interactions. On a personal level, it seems that the majority of the men are happy for women to be involved. It became apparent that a number of the men were in happy relationships with females or were now widowed having been previously happily married. However, when developing men's sheds, and making choices about whether to host a men's shed or a *non-gendered shed intervention*, committees agreed they wanted a gender-specific intervention for men. I asked all men's sheds leaders about this. One founder replied:

L2: "Women have their part in their [member's] lives because most of [the men] are married, but... when there is a woman... in the building the dynamic changes completely. Most of them [men] are polite anyway but it does change the dynamic of it."

During my time observing, I heard no ill-will towards women during interactions between the men. The men's shed is a setting for them to experience a different context, with a different group of people to the majority of their lives. Their wellbeing is enhanced by this. It seemed

that, as the ‘antler anecdote’ and observation by L2 suggests, the group dynamic of men, and the conversations that the men were having between one another, might not exist if women were – or even a singular woman was – present. I asked one of the founders further about this, and recalled that as referred to in the previous chapter, some female community members were not supportive during the formation of the men’s shed:

Interviewer: “...you mentioned earlier about women and there seemed to be some... resistance there [from some community members]...”

L2: “There was originally, I think what it was this idea from some people, ‘put a load of men together and they can only make trouble’. But in actual fact it’s completely different because if you look at the research and things like that... men relate better to each other if they are in a setting without women. They are all married and they are OK with that [women], but they relate to each other differently. So if I threw [invited!] a woman in that shed tomorrow the dynamic would change completely.”

Interviewer: “And do you think it would take [just] one female?”

L2: “Yes, it would change completely... I think the guys wouldn’t have the conversations about the things they have down there with a woman there. They [a woman or women] would change the dynamic [for men] completely.”

Men’s sheds, beyond being physical entities, contain groups of men who enjoy social interaction; resources that members bring and share within the men’s shed setting. It seems that the groups of men benefit from the settings catering exclusively for men.

When men were questioned further about the male-only dynamic, they tended to think about the experience for the wider shed community, beyond their own experience at the shed, and were likely to agree that the men only ethos was beneficial:

Interviewer: “With regards to the men shed, is there anything about it being ‘for men’? Is there anything good about that or anything that makes a difference?”

L5: “It wouldn’t bother me if women were here as well, but it is also like... ‘man-to-man’ [talk] its nice sometimes isn’t it? Men like men friends just to talk to and when you are talking about men stuff. Like women say, ‘we are talking about women’s stuff’.”

It seems that men benefit from an exclusively male setting whilst females were beneficiaries of the men’s activities (through commissioned works) and as recipients of Market Town’s

‘Hen’s Shed’; a provision for a closed group of women. It was also clear that many female partners supported their male partner’s attendance.

Through the interview process, the majority of those interviewed supported the gendered nature of the intervention. The following extract on the social resources of the men’s shed demonstrates how the need for the gendered intervention might be connected to the generation, and socialisation experience, of the attendees.

L9: “...I think it has to be [men only] really, to be honest. I know that sounds, it’s not sexist, but a lot of the guys, especially with this generation that we are encouraging [to attend], have always worked in... male-dominated industries. So when they retire... it’s a more comfortable environment and they perhaps do talk about things differently. I think it works because it is gender specific. And ...it may not be quite the same thing in 20 years’ time, in terms of ‘would you need a men’s shed?’ If that makes sense?”

“I think there is a generation who were born in the fifties and worked through the seventies... I can identify with the guys who come, they have always [worked in] a male dominated environment. And there is a kind of conditioning to that environment I suppose which appeals to them to come here. And I am not sure, maybe in 20 years’ time men of your [younger] age group may not feel they need to be with other men. It’s... maybe an era change.”

Many participants previously spent their working lives working in exclusively male or predominantly male environments. As such, it makes sense that they find comfort in spending time, somewhere, with other men. It is an interesting hypothesis proposed that men’s sheds appeal most to men who have been used to working in predominantly male environments. This was not a line of enquiry I pursued further.

Social resources at the men’s shed include the members and the way they interact with each other. They are all men, most of whom are of a similar age group (mid-60’s to mid-70’s), and are all interested in the options available to engage in work whilst in each other’s company. With few exceptions (for example, men who only came to use the machinery), the male membership exercised their social skills in various ways, but all recognised that the presence of other men enhanced their overall experience of the men’s shed.

Cognitive resources

A final set of resources in the men's sheds relates to cognitive knowledge and skills. Related to these skills are the enjoyment of sharing with, and learning from, each other. Cognitive resources also refer to the men's thought processes and what it took to get men through the door for their initial attendance.

Wanting to share knowledge and skills

Most attendees spent many years working, gaining life experiences with a wealth of knowledge and skills they could share. The first extract of this section demonstrates how some desired to share their skills and help others:

Interviewer: "Did you have something in mind of what you wanted to do after you retired or did you just need to do something?"

L1: "I hadn't got a particular plan, I had got my old workshop at home so I had got things to keep me busy, but this [the men's shed] was an opportunity to pass on my skills to other people. Because I was a trained instructor... [with the RAF] ...so I had done an accredited instructors course, so it gave me the ideal opportunity to be able to... [pass on skills]... I would quite happily spend all day showing people how to do different things if that's what was required."

Most of the men engage with woodwork, however, some of the sheds support diverse activities with the potential for more. With the extensive expansion of Market Town Men's Shed (referred to in chapter 6), an area was dedicated to maintain and fix bicycles. The main proponent of this explained that cycles are small engineering projects and the skills needed are easily taught and learnt:

L9: "it's a good activity for some guys who just want a really basic, simple tech thing, [for which] you just need your hands and a few tools. And most people are kind of interested in bikes, whether they actually cycle is another thing. But just the technology is really basic... and once you have shown them how easy bikes work you can see they are kind of learning something hopefully..."

The interviewee worked with other men's shed members and some people with mild mental health problems. The extract suggests that he enjoyed seeing others learn.

There was clearly a large knowledge base in the men's sheds and men, whilst often communicating with humour, would convey admiration for knowledge and skill. In a more candid manner, to the general interactions at the men's shed, one interviewee stated:

L2: "...People like [men's shed member], he is a fountain of all knowledge... he is an amazing man he really is..."

Men demonstrated a desire to share skills and help other shed users when they could be useful.

Wanting to learn

Further to the desire to share what was known, there was also a desire by many of the men to learn. Some of the men rarely worked with wood before and enjoyed learning new things:

Interviewer: "Is there anything else about the men shed? You focus on tasks, have you learnt anything?"

L7: "Oh God, yes, I mean, I have never done wood-turning or routering, I have never done carpentry, I have always been an engineer with metal, y'know ..."

In the same interview this topic reoccurred and the member exhibits acknowledgement that learning is challenging but that answers are found with his colleagues. This seems resourceful and empowering:

Interviewer: "So you have learnt about woodwork here?"

L7: "Yeah... and things I never thought... and I mean [name of Chair] here is a source of information and it is, I feel when you are here it's like a massive learning curve it really is... [T]here are always people you can turn to for advice or you know, 'how do you think we should do this?', 'this way'."

The extract demonstrates that achieving some tasks are challenging and that overcoming these challenges in a supportive environment is enjoyable and fulfilling. As one of the founders states, men's shed resources enable learning, and men can see produce from their efforts:

L1: "...it also gives the guys chance to learn new skills because they utilise them to build these items. And they learn things..."

In the following extract about learning, a member agreed with the suggestion that the other men and their constructions inspire them to realise their own creative visions:

Interviewer: "There are obviously other people here already working, do you think that inspires..."

L6: “Yes that helps as well because... I have never done this sort of stuff, I’ve just had ideas... I ask people ‘what do you think?’, ‘does this work?’ or ‘what do I do with this?’ and [I ask] how to use the machinery.”

There were rich knowledge and skills exchanges observed in the men’s sheds and this was clearly *a draw* to maintaining attendance at the men’s shed.

Who benefits and how

In addition to shed-related health and wellbeing benefits for participants, there were also reports of other beneficiaries of men’s shed activities. In the extract below, a shed leader confirms their men’s shed was setup to support older men’s health, but they are open to supporting other groups. It was recently agreed to develop the employability of two younger men through activities to build their confidence and social skills.

Interviewer: “With regards to the ethos of the Shed is it designed to cater for specifically older men or any men... I know there is the women’s group?”

L1: “The initial ideas of the men shed was obviously aimed at older men because of the historical problems of older men dying early [and] because of isolation and social exclusion, so... it’s designed to be for older men to associate [socialise] but we don’t discriminate... In fact we have two young men coming on Monday, one is 18 and one is 23. I think and they have confidence issues, so they are going to come along... because they want to learn how to do woodwork. So we are going to give them some basic instruction and also hopefully help to improve their confidence with people that they don’t know so well. And we are hoping that will work out quite well.”

Interviewer: “Were they referred by an agency or...?”

L1: “Yes...”

It is apparent, that the reputation of the community resource – and the knowledge, skills and confidence gained through attendance – was sought after by employability agencies (Job Centre Plus), and their clients.

As well as knowledge and skill exchanges, the men were also improving their mental agility by engaging in problem solving. The next statement documents a man’s experience of retirement and their awareness that some retirees stop exercising their interests and learning:

L7: "...you are constantly on a learning curve thinking how to do things... I have a lot of friends who have retired and have just stagnated... I don't think I stretched myself, after I retired. Yes, I joined the gym and I went down the gym twice a week; we [he and his wife] went walking, but it wasn't the same as working out something. And when I had a job at home... laying a laminate floor... and [getting] the old grey matter... to wind up again... I think it's important that you have that ability still to work it out."

Participants get the opportunity to experience mental challenges at their men's shed. The sheds offer 'thinking space'; a place with protected time to contemplate and have resources available to experiment with ways to problem-solve. Participants can get a mental workout through solving resolvable problems, whilst not experiencing stress through time-limited targets that create pressure.

Moreover, regarding retirement and stagnation, the following extract is from a man who first learnt about the men's shed at the end of 2017. His retirement started in mid-2018. Despite attraction to the idea of attending a men's shed, he procrastinated. His first attendance was at an open day for the men's shed advertised in late 2019, nearly 18-months after his retirement began.

Interviewer: "...had you been looking out for a men shed?"

L6: "I had been yes. I had been looking at doing it ever since I was planning to retire, but never actually got round to, doing it."

Interviewer: "So when was it that you retired?"

L6: "I finished work June or July last year [2018]"

Following attendance at a shed's open day – which occurred one weekend during my four months of observations – the man had since attended every available session that the men's shed was open. The next extract explains that participation at the men's shed already supported his wellbeing despite only attending approximately 10 sessions over four weeks. The text gives insight into the shock of becoming retired and some of the processes behind the procrastination that occurred before his attendance at the men's shed open day:

Interviewer: "Is there any way that you think the men shed has contributed to your health or your wellbeing?"

L6: “My wellbeing, as I was saying, I really struggled in the first year after I left work, I didn't know what to do. I was not quite moping around, but it was sort of just “what have I done?!” , “why, have I left work?” ... Because you have visions of being sort of time-rich... its, ‘I will go out on my [motor] bike’ but once you have done that and she [his partner] is working so there is only so many times I can ride round on my own and go for cups of tea somewhere. So, yes it has [helped improve his wellbeing].”

The exchange of cognitive resources, in the form of knowledge and skills, was very evident in men's sheds environments. Teaching and learning were, for some, primary reasons for membership of the men's shed. There were also examples of changes in behaviours as a result of being inspired by others at the men's shed. Procrastination and mental stagnation were less likely to occur as members of the men's shed.

The desire to teach and learn were present before some of the men first attended the men's shed. However, the depth and breadth of knowledge, skills and possibilities are more likely to *maintain membership* than being an *initial pull towards* attending the men's shed.

Bringing the primary evidence together

The evidence above demonstrates that older male participant health and wellbeing is supported through social interaction and mental engagement with pragmatic tasks at men's sheds. Many of these men are ex-military and/or previously enjoyed working in male-dominated environments. Additionally, other beneficiaries of the men's sheds include women, families of the men, and younger men.

The material, social and/or cognitive resources within the men's shed pique potential members interest and continue to engage members longer term. There is evidence that some men are primarily attracted to either the material, social or cognitive resources of the men's shed. However, it was rare for just one of the three resource types to draw the men to maintain attendance. The majority of members experience the appeal of all three types of resources.

Moreover, it seems that a combination of factors within each resource appeals to the regular attendees. For example, some men *enjoy* turning wood on a lathe (material resources), benefit from advice on how to improve their technique (cognitive resources) and *enjoy* banter, such as, at a lunch time with their fellow shedders (social resources). This *enjoyment* is an emotion or 'affect'.

The findings and analysis suggest that men who are used to working with other men are attracted to attend men's sheds due to the material, social and cognitive resources found within men's shed environments. These findings support the *refinement* of the previous initial programme theory to produce *rPT2*.

Refined Programme Theory (rPT) 2: Shed-based resources

Building on *iPT2*, the exploration of primary data has *refined* the programme theory to produce *rPT2* represented by 'if... then... leading to...' statements in Figure 28.

The refined programme theory about shed-based resources suggested that:

C: If men perceive a men's shed is in an accessible location, that they can benefit from the shed's resources (material, social or cognitive), and that it could be socially acceptable for them to attend,

M: then men make their first attendance at the men's shed,

O: leading to men choosing to have little to no exposure to the men's shed and its resources, or

O: leading to men choosing to regularly attend

These two potential proximal outcomes – 'regular attendance' or 'little to no attendance' –

became two separate contexts for different groups of men. The first of these was:

C: If the men's shed does not provide enough of the following or men do not value the following: i. material resources, and/or ii. social resources and/or iii. cognitive resources for men's interests,

M: then men will not attend regularly or at all,

O: leading to little or no exposure to resources from which men help themselves

However, the alternative positive scenario was that:

C: If the men's shed provides enough: i. material resources and/or ii. social resources and/or, iii. cognitive resources for men's interests,

M: then men will attend the men's shed,

O: leading to men spending time at the men's shed

Again, this proximal outcome became a context within which mechanisms might activate to cause further proximal outcomes. So,

C: If men spend time at the men's shed,

M: then men can interact, socialise and create in the company of other men;

O: leading to enhanced social interaction;

O: leading to i. men getting respite from family, and;

ii. family getting respite from the participant;

iii. extended family are less worried about the participant because they have their men's shed activities and supportive friends;

iv. participants get out of the house and into different surroundings;

v. participants enact a different 'role', for example, they are no longer enacting the role of 'husband' to a wife, or being a 'father' to a child, and/or

O: leading to a broadening of the resources from which men can help themselves

Further to the above mechanism and outcomes, the same context of *men spending time at a men's shed*, then causes other resources to be activated, leading to other outcomes. So,

C: If men spend time at the men's shed,

M: then men gain access to resources that facilitate them taking part in pragmatic projects;

O: leading to men sharing knowledge and skills (informal, peer, 'in the moment teaching'), and/or

O: leading to using their labour to craft items and fix items

Each of these (proximal) outcomes was theorised to enhance men's health and wellbeing.

Figure 28: *refined* Programme Theory (rPT) 2 on shed-based resources

Further refining *rPT2: Exploration and Testing of issues with Realist*

Review Data

One review of men's sheds literature suggests that community men's sheds are a...

‘response to the gradual loss of the traditional backyard shed... [and that] ...central to every Men's Shed is the creation of a space for social and occupational engagement’ (Wilson & Cordier, 2013, p.452).

To test and further confirm, refute and develop the programme theory (*rPT2*), I searched within the men's shed literature for terms relating to ‘third place’ and ‘occupation’ in relation to men's sheds as ‘places’ and ‘spaces’ and as sites enabling ‘meaningful occupation’ and ‘occupational therapy’.

The term ‘third place’ was identified in the systematic review (Golding, 2011a; citing Oldenburg, 1999). It describes a community space for social interaction; in contrast to an individual or family-based domain of a home (a first place) and a space designed exclusively for work (a second place). Eleven men's shed articles were found to be useful. These articles are listed in Table 12.

Occupational therapy features in the men's shed literature (Martin et al., 2008) and was suggested as an area of investigation by an occupational therapy PhD candidate. This PhD candidate suggested this avenue of investigation after I presented some findings and my current thinking about my research. Seventeen men's shed articles related to this enquiry. These are listed in Table 13.

After searching the men's sheds literature, I supplemented both lines of enquiry with wider searches to discover more about these theories. I included four items on ‘third place’ and a further six items on the adjoining ‘place attachment’ theory and three items on ‘social support’. These theories and their links to ‘third place’ will be explained in the narrative below. Finally,

three further items were found relating to the therapeutic benefits of meaningful occupation. These sixteen additional items are listed in Table 14.

To present the findings, I collated all evidence within the two main themes relating to ‘third place’ and ‘occupation’, and added a further section to demonstrate links to ‘wellbeing’.

Records Found	11	Included	11	Excluded	0
Anstiss, D., Hodgetts, D. and Stolte, O. (2018). Men's re-placement: Social practices in a Men's Shed. <i>Health & Place</i> , 51, 217-223.		<i>Anstiss et al. (2018)</i>			
Culph, J. S., Wilson, N. J., Cordier, R. and Stancliffe, R. J. (2015) Men's Sheds and the experience of depression in older Australian men. <i>Australian Occupational Therapy Journal</i> , 62 (5), 306-315.		<i>Culph et al. (2015)</i>			
Ford, S., Scholz, B. and Lu, V.N. (2015) . Social Shedding: Identification and Health of Men's Sheds Users. <i>Health Psychology</i> , 34 (7), 775-778.		<i>Ford et al. (2015)</i>			
Golding, B. (2011a). Older Men's Wellbeing Through Community Participation in Australia. <i>International Journal of Men's Health</i> , 10 (1), 26-44.		<i>Golding et al. (2011a)</i>			
Golding, B. (2014a). Men learning later in life: floating the theory of shedagogy. In: Education and Learning of Older Adults conference, 'Innovations in lifelong learning. pp. 22-24.		<i>Golding et al. (2014a)</i>			
Golding, B. (2015a). Men Learning through Life (and Men's Sheds). <i>Adult Learning</i> , 26 (4), 170-172.		<i>Golding et al. (2015a)</i>			
Golding, B. (2015b). The Men's Shed Movement: The Company of Men. Common Ground Publishing.		<i>Golding et al. (2015b)</i>			
Hedegaard, J. and Ahl, H. (2019). Learning to deal with freedom and restraints: Elderly women's experiences of their husbands visiting a Men's Shed. <i>Australian Journal of Adult Learning</i> , 59 (1), 76-93.		<i>Hedegaard and Ahl (2019)</i>			
Moylan, M., Blackburn, R., Leggat, S., Robinson, P., Carey, L. and Hayes, R. (2011). Shed power: collaboration for better men's health outcomes Occupational Therapy Australia, 24th National Conference and Exhibition, 29 June - 1 July 2011. <i>Australian Occupational Therapy Journal</i> , 58, 69-69.		<i>Moylan et al. (2011)</i>			
Ormsby, J., Stanley, M. and Jaworski, K. (2010). Older men's participation in community-based men's sheds programmes. <i>Health & social care in the community</i> , 18 (6), 607-613.		<i>Ormsby et al. (2010)</i>			
Taylor, J., Cole, R., Kynn, M. and Lowe, J. (2018). Home away from home: Health and		<i>Taylor et al. (2018)</i>			

wellbeing benefits of men's sheds. <i>Health Promotion Journal of Australia</i> , 29 (3), 236-242.		
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Table 12: A full list of the identified records related to 'third place'

Records Found	17	Included	17	Excluded	0
Carragher, L. (2017). Opportunities for generativity in later life for older men. <i>Australian Journal of Adult Learning</i> , 57 (3), 351-365.		<i>Carragher (2017)</i>			
Fisher, J.C., Lawthom, R., Hartley, S., Koivunen, E. and Yeowell, G. (2018). Evaluation of Men in Sheds for Age UK Cheshire Final Report.		<i>Fisher et al. (2018)</i>			
Golding, B. (2014a). Men learning later in life: floating the theory of shedagogy. In: Education and Learning of Older Adults conference, 'Innovations in lifelong learning. pp. 22-24.		<i>Golding (2014a)</i>			
Lefkowich, M. and Richardson, N. (2018). Men's health in alternative spaces: exploring men's sheds in Ireland. <i>Health promotion international</i> .		<i>Lefkowich and Richardson (2018)</i>			
Mahoney, N., Wilson, N. J., Buchanan, A., Milbourn, B., Hoey, C. and Cordier, R. (2020). Older male mentors: Outcomes and perspectives of an intergenerational mentoring program for young adult males with intellectual disability. <i>Health Promotion Journal of Australia</i> , 31 (1), 16-25.		<i>Mahoney et al. (2020)</i>			
Martin, K., Wicks, A. and Malpage, J. (2008). Meaningful occupation at the Berry Men's shed. <i>Journal of Occupational Science</i> , 15 (3), 194-195.		<i>Martin et al. (2008)</i>			
McGeechan, G. J., Richardson, C., Wilson, L., O'Neill, G. and Newbury-Birch, D. (2017). Exploring men's perceptions of a community-based men's shed programme in England. <i>Journal of Public Health</i> , 39 (4), E251-E256.		<i>McGeechan et al. (2017)</i>			
Milligan, C., Payne, S., Bingley, A. and Cockshott, Z. (2012). Evaluation of the men in sheds pilot programme. <i>Report for Age UK, London</i> .		<i>Milligan et al. (2012)</i>			

Milligan, C., Payne, S., Bingley, A. and Cockshott, Z. (2015). Place and wellbeing: shedding light on activity interventions for older men. <i>Ageing & Society</i> , 35 (1), 124-149.	<i>Milligan et al. (2015)</i>	
Misan, G.M.H., Oosterbroek, C. and Wilson, N.J. (2017). Informing health promotion in rural men's sheds by examination of participant health status, concerns, interests, knowledge and behaviours. <i>Health Promotion Journal of Australia</i> , 28 (3), 207-216.	<i>Misan et al. (2017)</i>	
Ormsby, J., Stanley, M. and Jaworski, K. (2010). Older men's participation in community-based men's sheds programmes. <i>Health & social care in the community</i> , 18 (6), 607-613.	<i>Ormsby et al. (2010)</i>	
Rahja, M., Scanlan, J.N., Wilson, N.J. and Cordier, R. (2016). Fostering transition to adulthood for young Australian males: an exploratory study of Men's Sheds' intergenerational mentoring programmes. <i>Australian Occupational Therapy Journal</i> , 63 (3), 175-185.	<i>Rahja et al. (2016)</i>	
Sunderland, J. and Wilson, L. (2014). The men's shed movement viewed through an occupational lens. <i>British Journal of Occupational Therapy</i> , 77, 30-30.	<i>Sunderland and Wilson (2014)</i>	
Stanley, M., Jaworski, K. and Rofe, M. (2011). Exploring The Shed space: the meaning of the Shed for older Australian men. <i>Occupational Therapy Australia</i> , 24th National Conference and Exhibition, 29 June - 1 July 2011	<i>Stanley et al. (2011)</i>	
Thomson, M. (2008). Comment: Mark Thomson talking about shed culture. <i>Journal of Occupational Science</i> , 15 (3), 190-193.	<i>Thomson (2008)</i>	
Wilson, N.J., Cordier, R., Parsons, R., Vaz, S. and Buchanan, A. (2016). Men with disabilities - A cross sectional survey of health promotion, social inclusion and participation at community Men's Sheds. <i>Disability and health journal</i> , 9 (1), 118-26.	<i>Wilson et al. (2016)</i>	
Wilson, N.J., Cordier, R. and Wilson-Whatley, L. (2013). Older male mentors' perceptions of a Men's Shed intergenerational mentoring program. <i>Australian Occupational Therapy Journal</i> , 60 (6), 416-426.	<i>Wilson et al. (2013)</i>	

Table 13: A full list of the identified records featuring included articles, excluded articles and reasoning for these decisions

Records Found	4 + 6 + 3 + 3	Included	16	Excluded	0
4 items relating to 'third place' ↓					
Glover, T.D. and Parry, D.C. (2009). A third place in the everyday lives of people living with cancer: Functions of Gilda's Club of Greater Toronto. <i>Health & place</i> , 15 (1), 97-106.		<i>Glover and Parry (2009)</i>			
Oldenburg, R. and Brissett, D. (1982). The third place. <i>Qualitative sociology</i> , 5 (4), 265-284.		<i>Oldenburg and Brissett (1982)</i>			
Montgomery, S.E. and Miller, J. (2011). The third place: The library as collaborative and community space in a time of fiscal restraint. <i>College & undergraduate libraries</i> , 18 (2-3), 228-238.		<i>Montgomery and Miller (2011)</i>			
Samadi Ahari, A. and Sattarzadeh, D. (2017). "Third Place", A Place for Leisure Time and its Relationship with Different Social Setting in Tabriz, Iran. <i>Iran University of Science & Technology</i> , 27 (2), 95-103.		<i>Samadi Ahari and Sattarzadeh (2017)</i>			
6 items relating to 'place attachment' ↓					
Altman, I. and Low, S.M. (2012). <i>Place attachment</i> . Vol. 12. Springer Science & Business Media.		<i>Altman and Low (2012)</i>			
Budruk, M. and Wilhelm Stanis, S.A. (2013). Place attachment and recreation experience preference: A further exploration of the relationship. <i>Journal of Outdoor Recreation and Tourism</i> , 1-2, 51-61.		<i>Budruk and Wilhelm Stanis (2013)</i>			
Ramkissoon, H., Weiler, B. and Smith, L.D.G. (2012). Place attachment and pro-environmental behaviour in national parks: the development of a conceptual framework. <i>Journal of Sustainable Tourism</i> , 20 (2), 257-276.		<i>Ramkissoon (2012)</i>			
Scannell, L. and Gifford, R. (2017). The experienced psychological benefits of place attachment. <i>Journal of Environmental Psychology</i> , 51, 256-269.		<i>Scannell and Gifford (2017)</i>			
Tsinaslanidou, C. (2015). Social support in the workplace and its relation to employees' job performance.) School of Economics and Business Administration. International Hellenic University.		<i>Tsinaslanidou (2015)</i>			
Verbrugge, L. and van den Born, R. (2018). The role of place attachment in public perceptions of a re-landscaping intervention in		<i>Verbrugge and van den Born (2018)</i>			

the river Waal (The Netherlands). <i>Landscape and Urban Planning</i> , 177, 241-250.		
3 items relating to 'social support' ↓		
Rosenbaum, M.S., Ward, J. Walker, B.A. and Ostrom, A.L. (2007). A cup of coffee with a dash of love: An investigation of commercial social support and third-place attachment. <i>Journal of Service research</i> , 10 (1), 43-59.	<i>Rosenbaum et al. (2007)</i>	
Kirmeyer, S.L. and Lin, T. (1987). Social support: Its relationship to observed communication with peers and superiors. <i>Academy of Management Journal</i> , 30 (1), 138-151.	<i>Kirmeyer and Lin (1987)</i>	
Mueller, D.P. (1980). Social networks: A promising direction for research on the relationship of the social environment to psychiatric disorder. <i>Social Science & Medicine. Part A: Medical Psychology & Medical Sociology</i> , 14 (2), 147-161.	<i>Mueller (1980)</i>	
3 items relating to 'therapeutic benefits of meaningful occupation' ↓		
Gradman, T.J. (1994). Masculine identity from work to retirement. In: THOMPSON, E. H. (Ed.) <i>Older men's lives</i> . Vol. 6. California: SAGE Publications Ltd, pp.104-121.	<i>Gradman (1994)</i>	
Macdonald, J.J. (2005). <i>Environments for health: A salutogenic approach</i> . Earthscan.	<i>Macdonald (2005)</i>	
Reilly, M. (1962). Occupational therapy can be one of the great ideas of 20th century medicine. <i>American Journal of Occupational Therapy</i> , 16 (1), 5-19.	<i>Reilly (1962)</i>	

Table 14: A full list of the identified records featuring included articles, excluded articles and reasoning for these decisions

Men's sheds offer a 'third place'

Evidence suggests that a third place – beyond the home or a place of work – is needed for human sociability and health (Glover & Parry, 2009; Montgomery & Miller, 2011; Oldenburg & Brissett, 1982; Samadi Ahari & SattarZadeh, 2017).

For context, consider the life-course of human beings in western society. Young children are encouraged to play and be social with their peers at playgroups and nurseries. School is a more formal institution where children and adolescents are part of a community away from their homes. Adults are, when possible, encouraged to work or gain further education and skills. When this is not possible, for example parents rearing children full-time, we find they have lower self-efficacy compared to working parents (Sahu & Rath, 2003) and have worse mental health with a lack of social interaction being 'a major stressor' (Rout et al., 1997, p.264). Indeed, beyond possible financial benefits, people who continue to work beyond retirement age, cite as their reasons: maintaining daily routines, health and social factors, along with; sustaining purpose in life (Sewdas et al., 2017). These factors are associated with going to a place beyond the home for purposeful interaction that benefits wellbeing. This links with Maslow's (1943; 1954) Hierarchy of Needs, where place can offer: safety and resources; love and belonging and a sense of connection; esteem and somewhere to be respected, boost self-esteem, acquire status, gain recognition and build strength, all as part of self-actualisation.

The need for a third place is noted in the men's shed literature (Anstiss et al., 2018; Golding, 2015b). Men's sheds, as a third place, initially attract men with their activities; however, sheds become a social gathering for men to enjoy the 'company of fellas' (Ormsby et al., 2010, p.609), and to share stories and experiences. Attendees put great value on the social interaction they partake in at their men's shed (Culph et al., 2015; Ford et al., 2015). Commentators suggest that we have a human need to feel we belong to a community of people, beyond our own family

and domestic interactions (Griffin & Tyrrell, 2013). Men are theorised: to feel ‘*at home*’ in their men’s shed, and: to be ‘remaking themselves’ with a new identity, as a shedder, as part of their third place (Golding, 2015a, p.172).

Further to this men’s sheds, as third places for men, can also benefit partners of attendees where they are suffering ‘retired husband syndrome’ (Golding, 2011a, p.40); men ‘encroaching’ on their partner’s domain. In relation to men going ‘from work to retirement’, one man’s female partner succinctly explained: “I married him for better or worse, but not for lunch” (Gradman, 1994, p.106, in Golding, 2011, p.40). Respite for partners of men’s shed participants is a recognised benefit of men’s participation in men’s sheds (Hedegaard & Ahl, 2019; Moylan et al., 2011).

‘Place attachment’ theory recognises that people feel emotionally strong bonds to places (Altman & Low, 2012, p.3). A body of literature from multiple disciplines supports this proposition (Budruk & Wilhelm Stanis, 2013; Ramkissoon et al., 2012; Verbrugge & van den Born, 2018). The cognitive-emotional bonds formed between people and meaningful places are:

‘...a common human experience with implications for...’ wellbeing such as psychological benefits including: fond ‘...memories, belonging, relaxation, positive emotions, activity support, comfort-security, personal growth, freedom, entertainment... [and] practical benefits...’ (Scannell & Gifford, 2017).

This explains why some participants will feel strong emotional bonds to their men’s shed with benefits to their wellbeing.

Further to this, workplace-based ‘social support’ influences worker satisfaction, engagement and wellbeing (Tsinaslanidou, 2015). This connection with *social support*, supports the view that valuing and bonding with a men’s shed as a place, and with fellow shed colleagues,

enhances a sense of satisfaction, wellbeing (Rosenbaum et al., 2007) and mental health (Kirmeyer & Lin, 1987). ‘Social support’ is categorised as:

- ‘a) emotional support closely related to acceptance
- b) instrumental support providing material assistance[,] and
- c) companionship that is associated to social network’ (Tsinaslanidou, 2015, pp.10-11, citing: Mueller, 1980).

In my primary research, there are examples of: men’s shed personnel and organisations offering material assistance (material resources), instrumental support by giving advice (drawing on cognitive resources), and; of acceptance of fellow participants, emotional support and companionship within shed’s social networks (social resources). For example, my primary data analysis features participants describing their attended men’s shed as “fun”, “incredible”, great for “[e]motional wellbeing”, a place where they have “a good relationship with everyone” and having “incredible” machinery. These are all affective responses. It is further evidenced in published literature, with a man referring to his attended shed as a “home away from home” (Taylor et al., 2018, p.239). This is an emotional response (feeling) to the resources of a social intervention (men’s shed); socio-affective.

This theory of the need for a third place, emotional attachments to places, and evidence of social support within men’s sheds, supports the programme theory that men’s sheds contain (material, social and cognitive) resources leading to improved attendee wellbeing. To test and further refine the programme theory, I searched within the men’s sheds literature for the term ‘occupation’ to find subjects relating to ‘meaningful occupation’ and ‘occupational therapy’.

Men’s sheds offer therapeutic, meaningful occupation

As the men’s sheds in my primary study all focus on woodworking and other types of pragmatic activities, I searched for literature relating to what is known about health and wellbeing benefits of occupational engagement. Academics refer to men’s sheds as beneficial ‘community-based,

occupation-focused’ programmes (Martin et al., 2008, p.194 my italics). This observation supports the programme theory that men’s sheds are a local community setting enabling ‘meaning’ through their occupational focus. This ‘meaningful occupation’ and/or ‘occupational therapy’ focus of men’s sheds also reaps the benefit of enabling men to feel useful and to facilitate teaching and learning. The following extract from a study within the men’s shed literature illustrates this:

‘Peter, a cabinet maker by trade, said “I enjoy coming to the shed to spend my time in what has always been a meaningful occupation. I enjoy putting my skills to use and helping to teach others”’ (Martin et al., 2008, p.195).

Internationally, men’s sheds are recognised as benefiting their participants to feel like proactive contributing members, rather than deficient ‘service users’, within a welcoming community of peers. This benefit is articulated within a published description of the main purpose of men’s sheds as:

‘...a space for men to congregate together and take a ‘shoulder to shoulder’ approach to *engaging in meaningful and productive activities*... [with sheds being] ...*uniquely helpful (a place for productivity and mateship rather than a place to go for ‘treatment’)*’ (Rahja et al., 2016, p.183, citing Australian Men’s Shed Association, 2014, my italics).

The occupational focus of men’s sheds can support men who are transitioning from regular employment. This transition period is a time when men’s health and wellbeing is at risk – as their identity is no longer associated with an occupation – and they experience more free time possibly spent in less productive ways. It is stated that:

‘[o]lder adults transitioning to retirement can feel deprived of a sense of purpose and identity that their work previously provided. If these feelings and lack of engagement in meaningful occupations is prolonged, retirees could become disengaged and be at risk of developing depression, health issues and having reduced quality of life’ (Wilson et al., 2013, p.417, citing Hewitt et al., 2010; Jonsson et al., 2000).

Although men’s sheds, constitute social interventions, they are not always setup to improve health or designed as anything other than a community resource for conducting pragmatic activities. However, it is recognised that men’s sheds help to support those men who are lacking

a sense of meaning, purpose and of feeling useful. Men's sheds offer a useful and perhaps unique physical and social intervention that facilitates getting these needs met.

This function is further supported in literature:

'...for some men having an occupation gives a sense of meaning and purpose, and the feeling of being useful... [L]imited attention has been given to the implications of this in terms of interventions to preserve meaning and purposefulness for men, especially during times of transition such as from paid work to unemployment or retirement' (Carragher, 2017, p.353).

People need meaning in their lives (Griffin & Tyrrell, 2013). Central to the culture of men's sheds is that they attract men who experience these environments as fun and enjoyable places to spend time. On a deeper level sheds generate meaning for their participants:

'SHED = PRACTICAL = PURPOSE = MEANING. A shed is a practical place that provides a sense of life purpose and, as a result provides a sense of life's meaning' (Thomson, 2008, p.193).

The foundation, indeed the very essence, on which occupational therapy is based on is the theory that:

'man [sic], through the use of his [sic] hands as they are energized by mind and will, can influence the state of his [sic] own health' (Reilly, 1962, p.6).

In the community-based context of men's sheds, men's health and wellbeing is enhanced through being together (socially connected) and through being productive. The men's sheds in my primary research, in common with many men's sheds across the world, provide 'workspaces for maintaining, learning or regaining' occupational skills (Fisher et al., 2018, p.62) and engaging in meaningful occupation. These places and spaces offer social and recreational opportunities (Fisher et al., 2018) to reduce social isolation and loneliness. Adult learning, meaningful occupation and enhanced social interaction within a community all enhance health and wellbeing. A study spanning two men's shed research sites identifies how these similar outcomes of health and wellbeing are achieved:

'The men reported a sense of mutual support, camaraderie and enhanced social connections gained through participation in the sheds' activities. Importantly, they stress that the shed environment, the activities that are pursued and the

sense of meaning derived from participation in the sheds' activities can positively enhance the men's health and well-being' (Wilson and Cordier, 2013, p.460, citing Ormsby et al., 2010).

Additionally, studies have highlighted the untapped role of occupational therapy in programmes aiming to improve men's health and wellbeing (Wilson et al., 2013). Furthermore, therapeutic benefits for men in mid-adulthood (aged between 40 to 64 years) and beyond have been attributed to shed's occupational focus (Carragher, 2017; Mahoney et al., 2020).

It is noteworthy that even when there is an absence of social interaction there remain benefits derived from the occupational activities. These residual benefits are highlighted in a study about older men with disabilities who were less able to freely engage with the unimpaired men of a men's shed group:

'[O]lder men with physical and cognitive limitations... [who have] ...limited ability to benefit from the social aspects of the Shed... still gained a sense of achievement and self-worth from their engagement with Shed activity' (Milligan et al., 2015, p.139).

This evidence further supports the theory that therapeutic benefits of meaningful occupation within men's shed activities can be achieved, beyond reductions to social isolation. Productive elements of men's shed activities are initially attractive and are beneficial longer term providing challenges to overcome and gain satisfaction. This is exemplified in the following quote:

'...meaningful constructive work is the foundation for attracting membership and providing benefits to individuals... [We] need to acknowledge, understand, and value the occupations of constructive work in men's shed communities. Potential benefits are dependent on the maintenance of 'real' work, which provides challenge and enables occupational satisfaction' (Sunderland & Wilson, 2014, p.30).

Men's sheds provide a community resource that enables men to have purpose and structure their lives to these organisations beyond paid employment (Stanley et al., 2011). The 'material' resource of these third places for men: the buildings, the space within the place, the machinery and tools and the materials available, facilitates the bringing together of men. Within men's

sheds as community settings men can give, share and benefit from ‘social’ and ‘cognitive’ resources along with meaningful occupation that makes men’s sheds support participant health and wellbeing.

Men’s sheds offer qualities that enhance participant wellbeing

Wellbeing maintenance and enhancement are themes woven throughout the primary data in this findings chapter (along with chapters 7 and 9). The place, its space and the material objects therein are physical resources. When met with reasoning (of the mind) and/or (emotional) reaction, physical resources are identifiable as ‘*mechanisms*’ within C ‘*M*’ O configurations. They are mechanisms that support outcomes which enhance wellbeing.

Intangible social resources and the sharing of intangible cognitive resources (knowledge and skills) – enriching for the teacher ‘giving’ and the learner ‘receiving’ – can also be resources within mechanisms when reasoned with and/or reacted to; producing outcomes that enhance wellbeing.

Literature on men’s sheds refers to theories and evidence of wellbeing maintenance and enhancement. For example, men’s sheds are not overtly advertised as health promotion interventions, which might, contrarily, contribute to *why* they attract the demographics of attending men:

‘It is important ‘to ensure that the Men’s Shed does not become another ‘health service’, as doing so would risk the very thing that makes Men’s Sheds uniquely helpful...’ (Rahja et al., 2016, p.183).

Despite the absence of health and wellbeing *promotion* and ‘*service provision*’ advertising of men’s sheds, they offer an environment that is beneficial for the wellbeing enhancement of attendees:

‘While not foregrounded as health settings, sheds offer a safe, occupationally familiar, non-judgemental environment which can make the discussion of health and emotional issues more comfortable (Milligan et al., 2012). In that way they

are salutogenic (health promoting) for participants and provide flow on effects for friends, family and community (Golding, 2014a)' (Misan et al., 2017, p.8).

It is noted that 'work enables a man to meet the social norms for masculine attitudes and behaviours' (Gradman, 1994, p.105, cited in Hlambelo, 2017), and that men feel, identify and experience self-worth in relation to their work (Macdonald, 2005, cited by Hlambelo, 2017). Men's sheds accommodate health-giving opportunities. It is also suggested that sheds counter some of the social determinants of chronic illness and disability (Wilson et al., 2016). Participation in men's sheds supports participant health and particularly wellbeing (Hlambelo, 2017). The absence of females, as in my primary research sites, was identified in secondary sources as a key supportive factor (along with 'male-based occupations') for attracting men to these interventions:

"I went to a boys-only school. I was in the Navy which was exclusively men then. I worked in the [production] industry... that was mainly men... and I wonder if part of the reason I'm comfortable with blokes is 'cause... most of [my] life I've been with blokes..." (A man quoted in Milligan et al., 2015, p.140).

The men-only nature of men's sheds was theorised to appeal because women and men interact and communicate differently:

"My experience is men don't communicate as well as women and it's easier to communicate in an all-male group for... [men], than it is in a mixed-gender group" (Another man quoted in Milligan et al., 2015, p.140).

Further reasons, given in men's sheds literature, to keep community sheds as male-only spaces, was to make them male-friendly (Lefkowich & Richardson, 2018) and allow expression without feeling restricted or needing to hold back (McGeechan et al., 2017). Both of these reasons can be seen as *wellbeing enhancing* factors for male participants.

The following comment about wellbeing improvements, from the coordinator of an Australian men's shed intervention, is typical of the testimonies of self-reported wellbeing improvement that come directly from participants or, as in this case, indirectly from leaders of men's sheds:

...“the most rewarding part is hearing the stories from the people who come and from their families. These personal stories are more important than the finished products [made in the men’s shed] because the stories reflect how the shed is contributing to [participant] well-being” (Martin et al., 2008, p.195).

Realist Synthesis

The evidence identified for this realist review helps to confirm the appeal and value of each of the identified material, social and cognitive ‘resources’ that members ‘reasoned with’ and/or ‘responded to’ making these resources part of realist ‘mechanisms’ which contribute to C \rightleftharpoons ‘M’ \Rightarrow O configurations.

Although no quality assessment frameworks were used to appraise the literature in this realist review, I made conscious judgements about rigour and the credibility of what is said; relevance to the theories discussed or the cases sampled, and richness of the evidence or theorising (Booth et al., 2013; Maidment et al., 2020; Pawson, 2006a). Further to this, I generated my empirical primary data using a robust methodological approach and purposefully chosen cases (Emmel, 2013; Emmel et al., 2018).

Men’s sheds offer a ‘third place’ for their attendees. This third place affords the potential for meaningful occupation. Meaningful occupation within men’s shed environments – with material, social and cognitive ‘resources’ – facilitates the maintenance and enhancement of wellbeing for participating men.

The final extract, is primary data from one of the chosen cases. It exemplifies how material resources combine with cognitive abilities and desires, to exchange (teach and learn), in sync with a social environment where men are comfortable in the company of one another. Men’s sheds are a relaxed environment, an...

L2: “...opportunity to... just have a laugh without anyone turning round and saying ‘what are you laughing at?’ or... ‘why are you doing that?’

“The interesting thing I think... is the skills... [I]f guys can't use any of the tools, because not everybody can... there is somebody there to show them how to do it and there is no embarrassment by saying ‘can you show me how to do that?’ ...They have a laugh and they piss-take out of each other but they won't actually do something to embarrass each other... [T]hey will show them how to do it and they will say ‘just let me know if you need any more help’... [T]here is this almost like paternal thing, I think, teaching their friends – because they are friends now...”

Tested Programme Theory (tPT) 2: Shed-based resources

Building on the refined iteration rPT2, and integrating the findings from the realist review data, the final version of this programme theory is presented as a $C \leftrightarrow 'M' \Rightarrow O$ configurations using ‘if... then... leading to...’ statements. The result is a *tested* programme theory consisting of connected causal chains:

C_D: If men perceive a men's shed is in an accessible location, that they can benefit from the shed's resources (material, social or cognitive), and that it could be a socially acceptable ‘third place’ for them,

M_{iv}: then men make their first attendance at the men's shed,

pO₇: leading to men regularly attending, or

pO₈: leading to men having little to no exposure of the men's shed and its resources.

The next phase of programme theory explains that with regular men's shed attendance, men can have a place to ‘be’ and a place to ‘do’. So, following a first attendance,

C_E: If the men's shed provides enough: i. material resources and/or ii. social resources, and/or iii. cognitive resources,

M_v: then men will attend the men's shed,

pO₉: leading to men spending time at the men's shed and having somewhere to ‘*be*’ (a third place), and

pO₁₀: leading to men spending time at the men's shed and having somewhere to actively ‘*do*’ (engage in therapeutic, meaningful occupation)

However, as identified in *refined* programme theory 2, above, if a men's shed does not provide the types of resources that men are interested in then, these men will either not attend or will only attend infrequently.

C_F: **If** the men's shed does not provide enough of the following or men do not value the following: i. *material* resources, and/or ii. *social* resources and/or iii. *cognitive* resources for men's interests,

M_{vi}: **then** men will not attend regularly or at all,

pO₁₁: **leading to:** little or no exposure to resources from which men help themselves

Humans 'being'

Proximal outcome 9 (pO₉), men spending time at the men's shed and having somewhere to 'be', becomes a context (C_G) for four further C \leftrightarrow M \Rightarrow O configuration chains:

C_G: **If** men spend time at the men's shed and have somewhere to 'be',

M_{vii}: **then** men can interact, socialise and share in the company of other men,

pO₁₂: **leading to** enhanced social interaction,

pO₁₃: **leading to** a sense of belonging,

pO₁₄: **leading to** i. men getting respite from family, and;

ii. family getting respite from the participant;

iii. extended family being less worried about the participant because they have their men's shed activities and supportive friends;

iv. participants get out of the house and into different surroundings;

v. participants enact a different 'role', for example, they are no longer enacting the role of 'husband' to a wife, or being a 'father' to a child,

pO₁₅: **leading to** men gaining access to a community resource - space, equipment, tools, materials

dO₁: **leading to** enhanced health and wellbeing

These four proximal outcomes (pO_x) lead to distal outcome 1 (dO₁) enhanced health and wellbeing.

Humans 'doing'

As with proximal outcome 9 (pO₉) which became a context (C_G) for the four C \leftrightarrow M \Rightarrow O configurations above, proximal outcome 10 (pO₁₀) *men spending time at the men's shed and*

having somewhere to actively 'do' also becomes a context (C_H) in the following outcome chains. These four pO_X also lead to distal outcome 1 (dO₁).

C_H: If men spending time at the men's shed and having somewhere to actively '*do*',

M_{viii}: then men gain access to resources that facilitate them taking part in pragmatic projects,

pO₁₆: leading to men engaging in purposeful activities,

pO₁₇: leading to men sharing knowledge and skills (informal, peer, 'in the moment teaching'),

pO₁₈: leading to using their labour to craft items and fix items,

pO₁₉: leading to men having a sense of meaning to life,

dO₁: leading to enhanced health and wellbeing

Figure 29: *tested* Programme Theory (*tPT*) 2 on shed-based resources

Discussion

The '*initial* programme theory' (*iPT*) 2 suggest resources within men's sheds attract some men. Moreover, when men choose to regularly attend, resources *within* men's sheds, and *facilitated* by men's shed interventions, lead to improved wellbeing. Primary data was categorised into 'physical', 'social' and 'cognitive' resource types. The primary findings clearly support *iPT*2 and helped to develop this into *refined* programme theory (*rPT*) 2.

These *rPT*2 were tested with a realist review of literature relating to the importance of having a place beyond the home where men can be accepted and be part of a community. The men's sheds in this study offer a community-based 'third place' for men; where they feel safe, have a reason to socially connect with other men and can have fun and learn together. Furthermore, these third places are gender-sensitive workspaces with resources that facilitate 'occupational therapy'. Men's sheds give the men in this study a post-employment identity that work might have previously provided. Sheds engage participants with ways and means to be productive, to

contribute, and be purposeful in mind and will. They present nourishing opportunities to put new and existing skills to use to overcome challenges, gain a sense of achievement, and experience occupation-based satisfaction. These experiences enhance participant health and wellbeing by preserving and heightening men's sense of purpose, giving their lives meaning and contributing to their quality of life. This signifies that men's sheds provide resources that participants engage with and, through meaningful occupation, help themselves to enhance their health wellbeing.

The culmination of this testing against realist review data is the '*tested* programme theories' (*tPT*) 2 in Figure 29.

Conclusion

This second findings and analysis chapter set out to explain how and why shed-based resources enhance men's health and wellbeing. *iPT2* was developed into a *rPT2* using primary data from the three case studies. The rationally constructed sequence of events in this chapter have led to an explanation of what resources might prompt an initial attendance at a men's shed. More importantly for health and wellbeing benefits, *rPT2* explains that material, social and cognitive resources attract men to regularly participate in men's shed-based activities. Men can benefit from and/or can contribute towards these resources; benefiting by contributing.

rPT2 was tested against secondary sources. Secondary data was used to further develop *rPT2* recognising men's sheds as 'third places' for members; enriching health and wellbeing through social support. Further to this, health and wellbeing is enhanced through meaningful occupation and resources from which men can help themselves to enhance their wellbeing. Regular participation enables access to a welcoming, community-based, third place where men have a

reason to be in the company of other men and experience therapeutic benefits of meaningful occupation.

The resulting *t*PT2, based on the synthesis of both primary data from realist investigation and secondary data from realist review, give reasons for: the types of men that attend men's sheds; what the benefits are; how men's sheds achieve these benefits, and; why this is so. The enhanced explanation of how and why these social interventions are beneficial to men's health and wellbeing is a new contribution to knowledge.

In the third and final findings and analysis chapter (Chapter 9), I will discuss types of resources attending men bring to men's sheds. This will lead to new insights as to how and why men's sheds facilitate the sharing and enhancement of these health promoting resources; transforming contributions into capacities greater than the sum of parts.

9) Human-based resources - *Explored and tested*

Introduction

The previous two chapters have explained how the organisational arrangements of men's sheds, along with shed's physical, cognitive and social resources, influence the health and wellbeing of participants. This chapter builds upon these factors by exploring what participants bring and share within men's sheds and explaining how these influence health maintenance and wellbeing promotion. The final *initial* programme theory (*iPT*) 3 in Figure 30 refers to the attending men who bring sharable experiences, knowledge and skills that can improve their own and others' abilities to maintain and enhance health and wellbeing.

Initial programme theory (iPT3): the role of human-based resources

If men bring, share and learn from experiences, knowledge and skills through social interaction,
then men can enhance their own and others' abilities,
leading to improved health and wellbeing and resilience to negative effects on wellbeing

Figure 30: *initial* Programme Theory (*iPT*) 3 on human-based resources

Refining iPT3: Exploring issues with Realist Investigation Data

Each of the three research sites provides support for *iPT*3. The following themes will support the refinement of this *iPT* and how and why men's sheds work to enhance participant's health and wellbeing.

Physical space and equipment for pragmatic activities

The previous chapter discussed space in men's sheds as a 'resource' mechanism. Space, in this chapter, is a 'context' rather than a 'mechanism'; because it is a circumstance that increases the likelihood that other mechanisms will be activated.

Starting with Market Town Men's Shed, leaders lease the largest workshop of the three research sites. As previously noted (in Chapter 6), this shed is furnished with industrial equipment in a professional and well maintained layout. The regular (circa 12) attendees are well-served for materials, equipment and space in which to realise their creations. By contrast, City Men's Shed suffers physical limitations, both in terms of the size of the space and in how it is used. City Men's Shed has the smallest physical footprint and room for activities is limited.

Having enough space for desired activities, or there being a lack of space for attendees, is a context which alters the likelihood that participants will or will not use their pragmatic skills, or share their pragmatic skills with others, to engage in purposeful activities. Limitation to the space, or reduced access to appropriate equipment, can impede endeavours and reduce sharing, learning and fulfilment through creating. The most striking example of reduced access impeding the sharing of human resources applies to Industrial Town Men's Shed when the organisation was (incorrectly) told they needed to vacate their premises. At this point there were only minimal opportunities for the sharing of social interaction.

Knowledge of funders and skills at writing funding bids

In Chapter 7 on organisational arrangements, 'knowledge of funding bodies and skills in how to access funding' is a (realist) 'resource' when it initiates a 'response' (as part of a 'mechanism') to gain money to fund shed activities. Again, as in the previous subsection, what was potentially a mechanism, in this chapter, is viewed as a contextual factor that can influence new mechanisms.

The majority of Market Town Men's Shed's overheads are financed from successful funding applications. The Community Development Worker (CDW), as a cofounder of the shed, uses his knowledge of funding bodies and skills in writing funding bids to attract funding for the community based activities. This benefits the men's shed members.

City Men's Shed also seeks funding, but in far smaller amounts and without support from an experienced fundraiser. Industrial Town Men's Shed personnel had, at the time of data generation, never 'applied' to an external funding body. They are dependent on asking their host organisation for financial assistance when monies collected from participant's subs were not enough to cover replacement tools or repairs. Reliance on this one limited source of funds limits what is bought or enabled at this shed.

Market Town Men's Shed enjoys the largest premises, the most equipment and the lowest fees for their larger number of members. Although City Men's Shed obtains funding it struggles for space and therefore is also constrained in the amount of equipment, and resourceful space, it can provide its members. Much of this is due to a lack of financial investment.

Industrial Town Men's Shed uses an adequate sized premises for its number of members. However, members felt uncertain about the shed's future largely due to the lack of financial security; being dependent on their host organisation as the provider of the workshop. Members also endure the highest membership fees whilst its venue and the majority of its participants live within economically deprived neighbourhoods. Of the three sites, Industrial Town Men's Shed members are paying most whilst Market Town Men's Shed, which has the most knowledge and skills at bringing in funder's monies, are better served for a lower yearly subscription.

Contacts with whom to trade

At Market Town Men's Shed a core number of members help to raise money at the town's Christmas market selling Christmas decorations and presents and by holding raffles, games and competitions. Before the Christmas Market of 2019, it was identified that no committee member had booked a stall by the usual deadline. On realising this oversight, the Chair negotiated with the market organisers to squeeze the community group into the tight line up of stalls.

The use of contacts and negotiation skills is seen in the ability to gain access to a Christmas Market stall and profit financially by trading goods and experiences. This exemplifies the social contacts that the shed's personnel were able to mobilise, to help achieve one of the shed's aims; to bring in money to cover their expenses and keep their membership fees modest and accessible for current and future members. Furthermore – on the topic of membership fees – those members helping to raise funds they also engaged in self-policing the paying of membership fees (mentioned in the previous chapter).

The external contacts and relationships the community groups nurtures, activates latent potentials of shed member's to provide goods and services (in this example at the Christmas market). Contacts were utilised to return financial profit for the shed; to benefit its members.

Trading skills and producing tradeable goods

The goods for sale at the Christmas Market were produced by Market Town shed members. Several members have specialist skills in engineering and electrics or electronics, as well as in woodwork, with some particularly interested on woodturning using a lathe. The more experienced in woodturning skills support others as and when it seems appropriate to offer assistance or when they are asked for help. Teachers use their abilities to teach others, who in turn become more capable in these skills. There was also a man dedicated to painting and

applying weather protection substances to wooden items. Some of the products are sold for the financial benefit of the shed. This can be a useful financial outcome for the shed contributing to its economic stability. The shed's overheads are also covered by the fulfilment of commissions; which come from local organisations and community members, who are asked for donations upon completion of tasks.

Some of the Industrial Town Men Shed members also made items to sell. These were placed in their host organisation's shop windows with the profits supporting the host charities activities.

At the point my research began at the smaller City Men Shed, the shed had a community-based commission to build large picnic benches. This commission was found and led by the Chair of the men's shed constituted group. There was a healthy profit margin on this commission and the Chair hoped that the group members would all contribute.

Personal interests and efforts towards shared goals

The lengths of wood and the extra equipment required to cut the picnic bench commission planks down to size took up a large amount of the useable space in the City Men's Shed unit. As stated, the 'context' of space influences the likelihood of what decisions might be made by participants (reasoning) and what behaviours (reactions/responses) might occur in the men's sheds (Dalkin et al., 2015). This temporary context restricted access to workbenches, even when some of the commission was being constructed and assembled outside the building; on a concreted area of the park near to where the men's shed was situated. Only a few workers could engage in working on, and thinking through, the picnic bench task at any one time. As such the project provided limited opportunities to engage the majority of group members during their meeting time.

At least two of the members did support the Chair in the picnic bench construction. At the end of the commission, a few more participants were involved in erecting and positioning the picnic bench at the commissioner's site. However, at the time of making the commission at the men's shed, some participants' inactivity, and grumbling, suggested there were physical restrictions on their abilities to work as they wished. The degree to which this was a '*convenient justification*' for sitting and drinking tea with fellow members at the weekly meeting, or was a genuine reason for very limited woodworking activities, was difficult to establish. There was tension between some men's shed members, with some tension aimed at the Chair of the group. Engagement by the group on tasks was low and there was a lack of social agreement on what tasks should take place in the men's shed and how it should be used. The lack of space caused more problems and feelings of displeasure which needed to be managed; a vicious circle.

At Industrial Town's Men's Shed it was noticeable that all the attending men 'muck-in' and volunteer their time to help move items around and dispose of unwanted wood or unnecessary donated items that were taking up space. It was understood that no personal projects or commissions could take place at this time of re-arranging the shed layout. I found myself quickly wanting to help (my own *reasoning*) as others were doing; and I did 'dive in' to assist efforts to lift and place items into new locations and aid finding items that space was considered suitable for. It was the small and socially inviting nature of some of the five or six attendees that day that encouraged contribution.

At the time of my arrival, a group of men within Industrial Town's Men's Shed looked to one man to lead them in tasks for the benefit of the shed. Whereas at City Men's Shed, the members had little interest in being led by a Chair or in pro-community efforts; volunteering towards the community project.

Availability of physical space and equipment facilitate autonomy

Industrial Town's Men's Shed group members were restricted in what they felt they could do. They did not know what their host organisation would allow or approve, restricting the men's ability: to meet at the men's shed site; to volunteer their time; to share skills and make things. It became clearer as time passed that this uncertainty (not knowing) was causing anxiety amongst the members who greatly valued the community resource and benefitted from regular attendance at one or more of its three open days each week.

As weeks went by, Industrial Town Men's Shed started to extend its formerly reduced operating hours and the site became re-populated with machinery and spaces for activities to take place. That stated, having been setup by its original host organisation, the shed's personnel are not in control of the shed's future and are at the behest of their new host organisation.

In contrast, most of the men arrive at Market Town Men's Shed with clear and purposeful intent of working on pre-determined tasks, such as their own projects or a community based commission. The space and equipment levels facilitated this autonomy. There were, however, times when work was 'slack' and men offered to help other members on their project or idle hands would find other projects by which to amuse themselves.

At City Men's Shed some members arrive with ideas of what they would like to achieve. Others arrive without a specific project in mind. Individual's options are sometimes limited depending on what commissions the shed partakes in. Six or seven weeks after my first arrival, there was a change in dynamic at City Men's Shed when the picnic bench project was over. Most of the older men who had previously been sat drinking tea as a group for the majority of the morning were engaged in projects.

The availability of physical space and the type and quantity of equipment now available – without the picnic table commission – facilitated more of the men's ability to engage in

purposeful tasks. Perhaps the recent lack of opportunity to engage in tasks enhanced the other members motivation to want to reengage with tasks . Within the context of space and equipment being available the men could then look to their own needs and skills levels to decide how they wanted to use their time in the shed. They could also decide to work towards fulfilling other's projects (needs) and/or to share their knowledge and skills with others who required support.

Mutual Benefit

With the change in dynamic at City Men's Shed, I immediately noticed that one of the oldest group members was wearing a pinafore and was helping another member, a widower, replace the damaged wood veneer on the case of his late wife's sewing machine. The project had been agreed the week before and appropriate equipment, tools and wood had been brought into the shed to facilitate the repair. The widower was expressive of how grateful he was and also how much he wished his late wife would have been able to see the damage being repaired. It was interesting to see how the previously inactive men in the domain of the men's shed were stood up and actively moving around, mentally and physically engaged in this meaningful task. These are health and wellbeing outcomes.

This is an example of one man having a need to get something fixed and – through a social contact made through the shed – the other man choosing to use his skills and experience to help the widower. In this example the widower got something fixed, and he expressively felt better about the resolution of his late wife's property being brought back to a suitable standard. The helpful pinafore wearer will have benefited by purposefully using his skills to help his relatively new acquaintance. For added context: the pinafore wearer had been informal referred to the shed two years previously by his daughter-in-law. This woman was concerned about her father-in-law since he, too, had become widowed. In preceding sessions, both men spoke with fondness about their late wives and would bring out pictures to show other men and me.

Discussions during work and break times

When at work or at a break time, some of the men in each of the sheds discuss the news or what is going on in their own lives and that of other shed members or with their own families. These discussions include health issues such as physical, mental or emotional health concerns. There are conversations about how different people handle emotional situations, for example, a partner's illness or grief at losing a partner.

I observed new members join the sheds in the duration of data generation. As the men integrated into the shed and got to know others they seemed to gain confidence and felt accepted by peers in the shed. This seemed to make some of the men comfortable enough to talk about and share health-relevant issues and behaviours; further health and wellbeing related outcomes.

The physical space for the men and their activities facilitated social interactions and sharing of information or information needs. As stated in the previous chapter, the shed's material resources were often the main draw for the men's initial attendance. Having been brought together the men become psychologically accommodated, with interaction and conversations; a subsidiary outcome for those whom first attended for the shed's material resources. For other men, the social side of the men's shed might have been their primary reason for attending.

Summary of empirical findings

The space and equipment available for participants to work impacts the pragmatic activities that can take place. The activities, are for many, the primary reason for their attendance. The space and equipment also influences the health and wellbeing benefits of participants realising creations, asking for help, sharing knowledge and skills, and socialising. The men's sheds are places where men can exchange or merely contribute personal resources to help each other

(directly) or the shed (helping others indirectly). Availability of physical space and equipment facilitate autonomy to be able to help, share and gain with each other.

Social interactions, including a lack of agreement, are an interesting feature of the research sites. At Market Town Men's Shed and Industrial Town Men's Shed, some men were more likely to work towards an agreed goal and/or to conduct a role for the 'team'. However, at City Men's Shed few of the men were interested in contributing to the commissions the leader had brought into their shed or volunteer to run the sessions. Good social skills and useful social contacts enable social interactions and facilitate sharing experiences, knowledge and skills and learning from others' experiences, knowledge and skills.

Refined Programme Theory (rPT3): the role of human-based resources

The themes above support the development of *iPT3* to become a *refined* programme theory (*rPT*). This is presented as the following $C \rightleftharpoons M \Rightarrow O$ configuration in Figure 31:

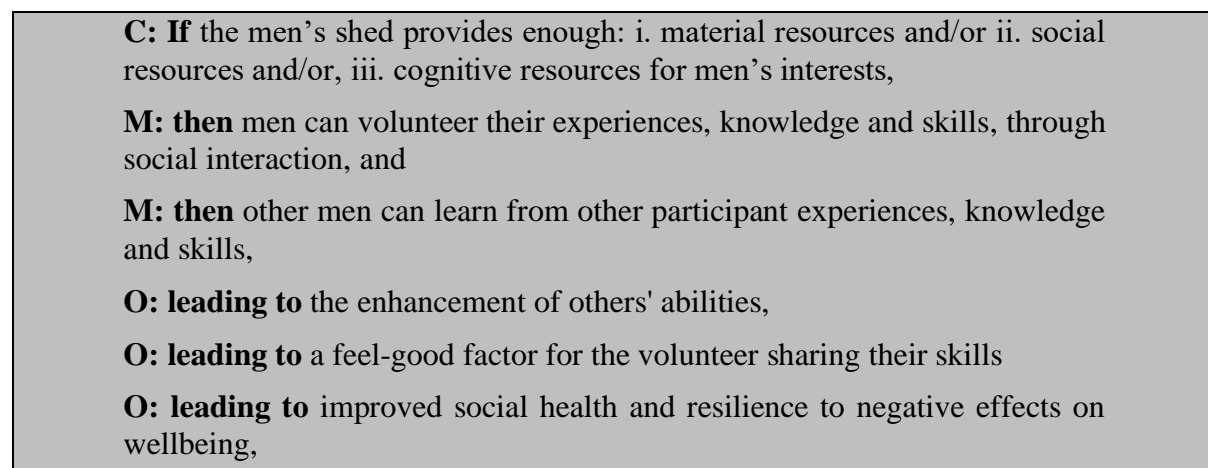


Figure 31: *refined* Programme Theory (*rPT*) 3 on human-based resources

Further refining *rPT3*: *Exploration and Testing* of issues with Realist

Review Data

The above explanation of how ‘human-based resources’ impact participant health and wellbeing has been explored and refined. To further develop understanding, and to *test* these findings, I searched existing literature for topics around social interactions, social skills and social contacts.

Men at the men’s shed were mostly ‘working-class’ and the research sites were influenced by the men’s backgrounds and the men’s social and cultural experiences as well as the economic circumstances of the locality and the men’s economic fortunes. Savage et al.’s ‘new model of social class’ (Savage, 2015, introduced in Chapter 2; Savage et al., 2013) was used, which refers to ‘social capital’: ‘resources’ potentially mobilised by social relationships (Hoffer & Coleman, 1987). On further examination it was found that social capital was a part of Pierre Bourdieu’s ‘capital theory’ (1986).

The next section introduces findings from secondary sources for the terms ‘men’s sheds’ and ‘capital theory’.

Scope of the realist review on capital theory and men’s sheds

This review section aims to find evidence within articles discussing ‘capital theory’ and mentioning ‘men’s sheds’ to *test rPT3*. Details of the search strategy and eligibility criteria can be found in the Methodology and Research Design chapter (Chapter 5).

The search found nine records. Google Scholar gave links to six records with full texts. All nine items are recorded in Table 15 below.

Records Found	9	Included	5	Excluded	4
Bagnall et al. (2017). Systematic scoping review of reviews of the evidence for 'what works to boost social relations' and its relationship to community wellbeing.		<i>Bagnall et al. (2017)</i>			
Cooke, F. L. and Bartram, T. (2015). 'Guest editors' introduction: Human resource management in health care and elderly care: Current challenges and toward a research agenda', Human Resource Management, 54(5), pp. 711-735.		<i>Cooke and Bartram (2015)</i>			
Field, J. and Tuckett, A. (2016) Informal learning in the family and community. London: Foresight Government Office for Science.		<i>Field and Tuckett (2016)</i>			
Field, R., Burke, R. and Cooper, C., (2013). SAGE Handbook of Aging, work and society. London: SAGE Publications Ltd.				False hit: Text book references words 'men's' and 'shed'.	
Formosa, M. (2012). European Union policy on older adult learning: A critical commentary. Journal of aging & social policy, 24(4), pp.384-399.				No full-text available	
Kenny, M. C. (2013). Crime prevention, community safety and Clarendon Vale: local visions for healthy communities. University of Tasmania.		<i>Kenny (2013)</i>			
Merriam, S.B. and Baumgartner, L.M. (2020). Learning in adulthood: A comprehensive guide. John Wiley & Sons.				No full-text available	
Schleiger, M. (2010). Men-only clubs: entitled to discriminate? Australian Journal of Human Rights, 16(1), pp.105-136.				No full-text available	
Watt, J. C. (2017). Ageing and the Continuity of Masculine Identity in a Scottish Men's Shed: An Ethnographic Enquiry. PhD, University of Aberdeen, Aberdeen.		<i>Watt (2017)</i>			

Table 15: A full list of the identified records featuring included articles, excluded articles and reasoning for these decisions

One of the six full-text records found in Google Scholar did not meet the inclusion criteria. The text book by Field et al. (2013), included reference to the words ‘men’s’ and ‘shed’, but not ‘men’s shed/s’, the community spaces for men to engage in purposeful activities. The other five records did meet the inclusion criteria and are featured in the table above as ‘Included’.

The quantity and quality of literature found

Five records met the inclusion criteria. Two of the records were PhD theses. Watt’s (2017) thesis is an ethnographic enquiry in a Scottish men’s shed. Kenny (2013) thesis is about crime and the health of communities in a suburb of Tasmania.

A further two records were reports. Bagnall et al. (2017) is a contemporary systematic ‘review of reviews’ report for an independent collaborative, ‘The What Works Centre for Wellbeing’. It identifies and synthesises evidence from existing reviews about what works to boost ‘social relations’ and its relationship to ‘community wellbeing’. Field and Tuckett (2016) is a report for the UK Government about informal learning in the family and community.

The final record is a journal editorial by Cooke and Bartram (2015) about human resource management and health and elderly care.

The articles are sequenced above according to the likely rigour of the study designs having considered the relevance and rigour and the ‘fitness of purpose’ of the articles to this review (Pawson et al., 2004, p.14). All are reputable including two PhD thesis peer-reviewed by academic examiners (Kenny, 2013; Watt, 2017). The Bagnall et al. (2017) report uses repeatable systematic methods. The Field and Tuckett (2016) report and the journal editorial by Cooke and Bartram (2015) are informed by citations to numerous other academic works.

The realist review findings relating to *rPT3* are brought together and presented as themes with supporting data from my primary case studies. This amalgamation of realist investigation data and realist review forms a realist synthesis.

Findings

The identified literature was situated within the fields of healthier communities and factors influencing health, such as, adult health and social care, social relations and adult education. Data supporting or negating the *refined* programme theory were identified and collated to form thematic patterns with which to *test* the *refined* programme theory. The main concept within the literature was that of Bourdieusian ‘capital theory’ (Bourdieu, 1986; Watt, 2017) and particularly ‘Social capital’ (Bagnall et al., 2017; Cooke & Bartram, 2015; Field & Tuckett, 2016; Kenny, 2013; Watt, 2017). The three themes and 10 sub-themes are: **1) Types of social capital** (featuring the subthemes i. Bonding social capital, and ii. Bridging social capital); **2) What does, and does not, facilitate social capital** (featuring the subthemes iii. Men’s sheds as equalising places, iv. Status, v. The design of spaces, and vi. Attempts to ‘construct’ social capital), and; **3) What social capital leads to** (featuring the subthemes vii. Enablers of self-help, viii. Community capacity building, ix. Social community health care, and x. Empowerment and collective action to address health needs). These themes and subthemes are summarised in Figure 32 below.

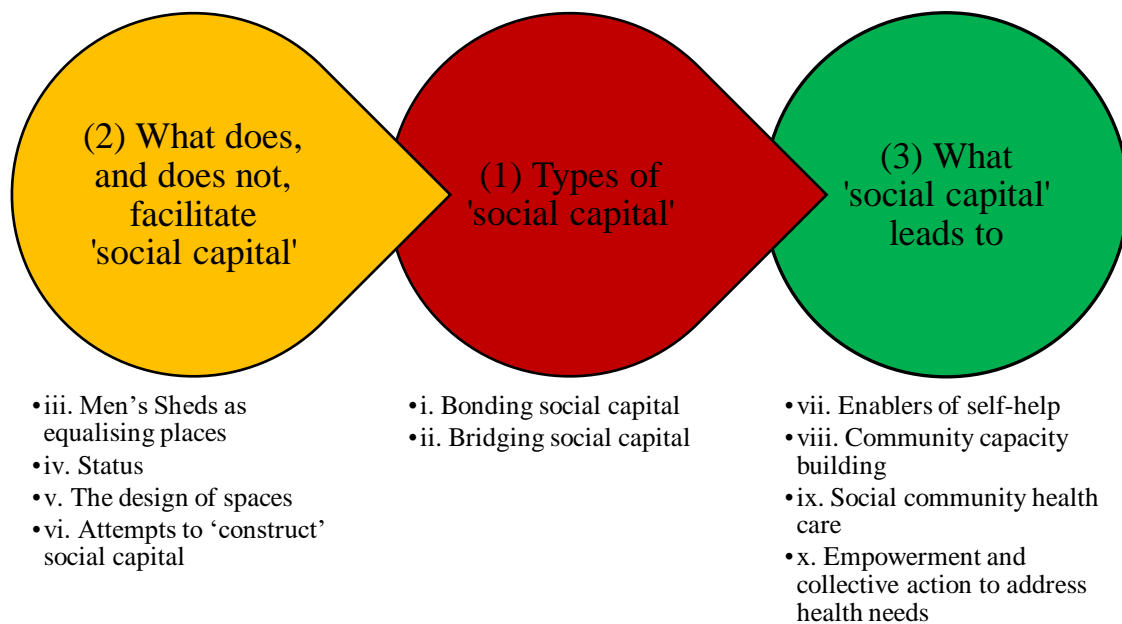


Figure 32: Three themes and 10 sub-themes related to social capital

1) Types of social capital

Capital theory comes from Pierre Bourdieu (1986). Although there were implicit links to ‘economic’ and ‘cultural’ capitals in the identified records, the only explicit form of Bourdieusian capital theory mentioned was ‘social capital’.

i. Bonding social capital

‘*Bonding social capital*’, the strengthening of relationships and trust within the exclusive group, was identified in a Scottish men’s shed (Watt, 2017). In my case studies, I observed that the men’s shed enabled opportunities for internal bonding social capital between the men. Not every individual bonded with each other, but all attendees seemed to get on with at least some other people. Some members also explored other interests with each other outside of their men’s shed. For example, men who had not met before the men’s shed were: meeting at their

own workshops to work on projects; sailing together; engaging in other community groups together; meeting socially at pubs, and; having meals with respective partners present.

ii. Bridging social capital

‘*Bridging social capital*’ was also identified in the men’s shed. This refers to links between external individuals or groups which benefit the men’s shed organisation and/or participants (Watt, 2017). In a systematic review of population impacts of initiatives that aim to engage communities in action to improve the social determinants of health (Milton et al., 2012, cited by Bagnall et al., 2017), it was found that:

‘...community engagement initiatives can have positive impacts on housing, crime, community empowerment, bonding and bridging social capital, and social cohesion. Initiatives that aimed to promote community involvement were associated with gains in social capital, social cohesion and fostering partnership working and empowerment for both the community groups that were the focus of the initiative and the wider community’ (Bagnall et al., 2017, p.18).

2) What does, and does not, facilitate social capital

This theme covers concepts from the literature which *facilitates* both bonding and bridging social capital.

iii. Men’s sheds as equalising places

In a report about informal learning in the family and community, Field & Tuckett make reference to

‘the differing nature of social ties in different communities, as would be consistent with *social capital* theory (Field, 2005)’ (2016, p.6 my italics).

It was found that there is a marked socio-economic dimension for involvement in informal learning, with more participation from those who are already highly educated (Field and Tuckett, 2016 citing ‘BIS’ aka Harding et al., 2014). It was also found that females were more likely to engage in informal learning than males (Field and Tuckett, 2016 citing Sargent, 1991).

Education, and the value given to it, relate to ‘cultural capital’ (Bourdieu, 1986). Education is often expensive whilst also sometimes able to enhance earnings, both of which relate to ‘economic capital’ (Bourdieu, 1986). It seems that men’s sheds, through social capital, are equalising places; a vehicle which encourages men, regardless of economic capital and cultural capital, to engage with adult learning as experiences, knowledge and skills are shared (Field & Tuckett, 2016).

iv. Status based on what men are and know, rather than material acquisition

In Watt’s (2017) men’s shed study, the older men’s similarities aided bonding social capital and these diminished any use of hegemonic masculine characteristics to elevate status. The dominant form of ‘aged masculinity’ was concerned with attitudes and actions.

‘A willingness to utilise and share one’s experience and knowledge sat alongside contributory involvement in the constellation of traits defining a good shedder’ (Watt, 2017, p.65).

One of the social behaviours that encouraged this was explained by a board member in Watt’s (2017) study. This demonstrates the lack of hegemonic masculinity displayed within the group:

‘[When a] guy comes in here, there’s none of that macho bullshit, there’s no ‘I’ve got a big car’ or anything like that, no judging. If they did try to do that, they’d [other men’s shed members would] tell them ‘get in the corner, go and make a cup of tea’. There’s none of that stuff, guys don’t care about that stuff anymore’ (Watt, 2017, p.65).

This resonates with all three research sites in my study, where people’s abilities and skills, rather than possessions, were highly revered. In the following interview extract a founder of Market Town Men’s Shed refers to the members as looking after each other because they have the status of being friends (social capital). It also includes the value given to an individual who possesses a great deal of useful knowledge (cultural capital):

L2: “[T]here is this almost like paternal thing I think, teaching their friends, because they are friends now, how to do things in a way that its beneficial. Like [LO10] he is a fountain of all knowledge, [LO10] he is an amazing man he really is...”

Findings from my empirical work are similar to Watt's (2017) findings in that, men's sheds promote equality between older men, and men were judged on useful characteristics to the betterment of the men's shed, rather than on material success (economic capital).

v. The design of spaces

Osborne et al.'s (2016, cited in Bagnall et al., 2017) systematic review, considering the contribution of urban planning to social capital, concluded that: planning is needed to

‘provide adequate meeting places for social, recreational and educational purposes [to] ...facilitate bonding and bridging social capital’ (Osborne et al., 2016, p.219, referenced by Bagnall, p.13).

In my case studies, at a micro level, each of the men's sheds has an area with facilitates for members to make a drink and sit together. Two of the three men's sheds has a group ritual of starting the session with a cup of tea or coffee. The other men's shed has a lunch break which nearly all of the men took part in together. Interactions between the men during these periods supports bonding social capital. Some of the conversation also involved reference to outside agencies which can also support external bridging social capital on behalf of the men's shed or a men's shed member. The main factor about the men's sheds that supported bonding social capital is the focus of the shed's productivity – the tools and resources which men can use whilst working shoulder to shoulder with other men. Working together, or just being in the company of other men where work could take place, facilitates bonding social capital.

The spaces for recreation (such as woodwork) and socialising (seated areas where drinks are made), had limitations but are ‘adequate’ for use. The size of the workshops has been discussed (above). The spaces for socialising could be larger and they could be better laid out. For example, at City Men's Shed the space is quite small with only a small circular table and a maximum capacity of six seats. At Industrial Town Men's Shed, water for drinks is brought into the room using a 10 litre ‘jerry can’ with a tap to pour the water into a kettle. There are no

washing up facilitates in the building and so this is taken to the host organisation for resolution. However, there is enough space for chairs for all attendees to sit around a coffee table. At Market Town Men's Shed restrictions on socialising at a break time are that the eight or so seats are all against one-straight wall, opposite a length of kitchen facilitates. As such, a view of whoever is speaking is sometimes restricted. There are often people stood with their backs against the kitchen worktop to face those seated. Despite each of these restrictions the social areas are adequate enough.

vi. Attempts to 'construct' social capital

In a study on sports clubs, social capital and social regeneration, Coalter (2007) states:

'there appears to be broad agreement among academics that policy-led attempts to 'construct' social capital will fail, [because] social capital is based on activities, relationships and norms freely engaged in by individuals' (Coalter, 2007, p.553, cited in Bagnall et al., 2017, p.16).

This is an interest point for public health policy and practitioners. In terms of my empirical research, the only shed originally setup by a host organisation was Industrial Town Men's Shed. The men at this shed have been largely left to get on with being a men's shed. There is bonding social capital between the men. However, when there were changes to the host organisation the men's shed seemed in jeopardy. (This scenario is covered in greater detail in Chapter 7: Organisational Arrangements). The men's shed members are starting to increase their bridging social capital and make links with other supportive agencies. These links led to becoming a constituted group as members pull together in new ways (increasing bonding social capital) and make use of external links (bridging social capital) to take the men's shed's destiny into their own hands. Before this time, members did not have to concern themselves about the paying of bills for their premises or funding repairs to equipment. Formerly, there was internal bonding social capital, but far less examples of bridging social capital. This scenario is an

example of bridging social capital, and enhanced bonding social capital, occurring in response to the withdrawal of policy-led support.

3) What social capital leads to

This final theme considers examples of what is generated as a result of the social capital present within community initiatives.

vii. Enablement of self-help

Field and Tuckett (2016) refer to men's sheds as a form of 'self-help' model for adult learning groups (Field & Tuckett, 2016, see pages 5 and 8). The findings in my empirical work support the idea that men's sheds are a vehicle for men of different socioeconomic status to come together to engage in community learning. Men's shed participation enhance member's *bonding* 'social capital' thereby broadening the resources from which they 'help' themselves and each other.

viii. Building community capacity

Men's sheds have been thought of as a form of community capacity building (Kenny, 2013). In relation to crime in a suburb of Tasmania, Kenny (2013) suggests that 'social capital' can enable communities to take on responsibilities for crime prevention.

This was not a matter identified within the three chosen research sites of this study. However, City Men's Shed did take on responsibility for a disused community venue within a public park of a deprived electoral ward. The local council gave use of the building to the men's shed on the understanding that they maintain the building. Further to this, members at each of the men's sheds demonstrated bridging social capital, bringing in commissions, such as, the building of

picnic benches for other community organisations. These services offered to individuals and community groups are a form of enhanced community capacity.

ix. Social community health care

An editorial (Cooke & Bartram, 2015) mentions men's sheds as having the capacity to deliver health services in communities. There was clear evidence at the three research sites that men's sheds contributed to forms of social care. At Industrial Town Men's Shed, a number of those interviewed revealed that they had been signposted to the men's shed by a community mental health team, for example:

S4: "It was recommended to me... it was the mental health team what recommended it.

Interviewer: "If you don't mind me asking, what had been going on in your life before you came to find out about the Men's Shed."

S4: "Just stress. I was stressed and that, yes."

Local mental health services had introduced some male patients suffering with depression and/or anxiety to the men's shed; by meeting them at a nearby location, arriving with them at the men's shed and showing them around the men's shed facility.

At another men's shed a former war veteran who had suffered with post-traumatic stress disorder (PTSD) and had multiple injuries and limitations in movement was a regular, contributing member. There were also examples of elderly men, some widowed, whose social wellbeing was enhanced by attending the sheds and who experienced a form of feeling *cared for*. In this next extract a man shows that he went out of his way to attend the weekly session because he knew the other men cared about him:

Y1: "I came today just to show my face, I have so much work on at home. It's just that...when I missed [a session] once without [me] saying before, [Y3] rang to ask me if I was alright. And I don't want to put anybody to any worry, thinking 'I am alright' y'know, so with me living on my own I suppose..."

Interviewer: "So how did that feel, when [Y3] rang up?"

Y1: "I was quite touched to think that they were interested."

The sheds were also a safe place for men who were under-employed to spend time enhancing their social wellbeing with people who cared about them. There were some formal examples of this at Market Town Men's Shed where a Job Centre Plus representative asked if the shed could allow two younger adults, 18 and 23 years of age, to spend time at the shed to help build their confidence with other people. This was referred to in Chapter 8.

L1: "...she [a Job Centre Plus representative] contacted us and then came to see us and she brought them [the two younger men] to have a look around and [they were saying] 'oh, yes, I like this, I would like to come here'."

This example highlights that the men's shed is a social health resource and also demonstrates the shed's effectiveness regarding bridging social capital, with an outside agency contacting them due to the shed's community reputation.

Unfortunately, despite this last example – where an agency worked productively with Market Town Men's Shed – it is important to highlight that all three research sites struggled with the expectations of social services bringing their service users to men's sheds and leaving them without adequate support. At City Men's Shed, the Chair of the group explained that the men's shed is a club for a particular section of the community. It is not service for specific or complex conditions.

Y5: "[M]y answer is always the same, we are like a bowls club, we are not a service"

They were examples of unsafe practices by such social services; bringing people who could not look after themselves or the safety of other shed users. This was discussed in Chapter 7. In the following extract Market Town Men's Shed co-founder discusses this problem and the participant's reaction to having unsupported individuals with learning disabilities left with them. Some of the members stopped attending on the day of the week that carers would leave these vulnerable adults at the shed. The participants and volunteers at the men's shed were ill-equipped to deal with the complex needs those with learning disabilities came with. This is not

what the volunteers or members attended the shed for and the assumption that the volunteers and participants could manage the vulnerable adults within the dangerous environment of the men's shed devalues the skills involved in carers of those with learning disabilities:

L2: "One of the challenges I have had is men with learning disabilities because for a while what would happen was the local social services, mental health services and other services as well, thought 'oh, [a] men's sheds, let's take them down there!' So they would come down and they [the carer] would say 'here is Steve' or whatever his name is and say 'off you go' and left him. So he is standing there... looking around and thinking 'this is great'. And then the guys [men's shed members] will say 'you alright there mate?'

"And I got a lot of flak from... some of the guys [men's shed members] because they had these men just standing around doing nothing..."

Although men's sheds offer health and social care benefits, the research sites that I visited do not provide specialist health and social care services. Any such 'service' for people with learning disabilities requires an appropriate number of professionally trained staff who are interested in this vocation which needs to be delivered within a safe and appropriate environment.

x. *Becoming empowered and taking collective action to address health needs*

This final theme relates to what social capital can lead to. It describes community engagement approaches bringing about community-delivered interventions and empowered communities identifying their own health needs and leading 'collective action' to address these needs (O'Mara-Eves et al., 2013 cited in Bagnall et al., 2017, p.18).

This was not something that I explicitly identified within the men's shed research sites. However, at Industrial Town Men's Shed the group galvanised in the face of adversity brought about by the changing of host organisation and the implications on reduced opening hours. The men increased their bridging social capital and sought support from outside of their previously limited network. The uncertainty regarding the sheds future and the lack of support and clarity from their new host organisation was causing anxiety in some of the shed members (as referred

to in Chapter 7). To my knowledge, mental health concerns like depression and anxiety conditions were not explicated as the group's 'health need'. Yet, at least four of the eight regular attendees had been referred to the men's shed due to ongoing mental health concerns. There was obviously *mental* and *emotional* 'dis-ease' for all of the men regarding the lack of autonomy they had over the fate of their men's shed.

With the support of other groups and agencies – bridging social capital - participants became more empowered and started to take their shed's future into their own hands. They formed a constituted group, and started the process of becoming a charity to become more attractive to funders. Despite taking on new responsibilities, members said they felt less anxious because they felt more secure about their shed's future. The men became more empowered and independent; finding their own premises external to their indifferent host organisation. Data generation was curtailed by SAR-Cov-2 before it could be identified if anxiety reduction or maintenance had continued.

Tested Programme Theory (tPT) 3: Human-based resources

'Social capital' was the main concept identified in the literature; sought using the terms 'men's sheds' and 'capital theory'. Two types of social capital were found: '*bonding*' social capital and '*bridging*' social capital. Bonding social capital strengthens relationships and trust within community groups. This was found in Watt's (2017) study of a UK men's shed.

The *refined* programme theory (3) stated that social interaction was a conduit through which men could teach, and/or learn from, experience, knowledge and skills. This can enhance resilience against poor wellbeing and can improve health and wellbeing. The *refined* programme theory holds up well against the themes and subthemes regarding what leads to social capital enhancement and what positive effects social capital leads to.

This new evidence has *tested* and further *refined* rPT3. Men bring pre-existing abilities related to social capital. Men's sheds are places where social capital is developed and exercised. Men's sheds ability to support men to learn and share experience, knowledge and skills is facilitated by social capital. Social capital in men's sheds enables self-help and capacity building. Bonding social capital is a useful addition to further develop rPT3 on how men's shed support attendees to maintain and improve their wellbeing. The theory benefits from the specific understanding of bonding social capital, and the 'what social capital leads to' theme including subthemes viii) enablers of self-help, and ix. capacity building.

As with *tested* PT2 on shed-based resources (in Chapter 8) , the final tested programme theories lead on from a context (C_E) where men's sheds provide men with suitable resources, which then encourages men to attend the men's shed (M_v). This leads to the outcomes of men spending time at the men's shed and having somewhere: to '*be*' (a third place) (pO₉), and; to actively '*do*' (engage in therapeutic, meaningful occupation) (pO₁₀). This CMOc starts the following set of causal chains:

C_E: If the men's shed provides enough: i. material resources and/or ii. social resources, and/or iii. cognitive resources for men's interests,

M_v: then men will attend the men's shed,

pO₉: leading to men spending time at the men's shed and having somewhere to '*be*' (a third place), and

pO₁₀: leading to men spending time at the men's shed and having somewhere to actively '*do*' (engage in therapeutic, meaningful occupation)

The following C↔M=>O configurations lead on from **pO₉** which becomes context **C_G** in the section '*Humans being*' and **pO₁₀** which becomes **C_H** in the section '*Humans doing*'.

Humans 'being'

Leading off from the previous theory that men's sheds offer men a third place to be, it is asserted that:

C_G: If men spend time at the men's shed and have somewhere to 'be' (pO₉),

M_{ix}: then men can interact, socialise [bonding social capital] and share their own (and explore other's) experiences, knowledge and skills in the company of other men,

pO₂₀: leading to men having the company of other (human beings) men,

pO₂₁: leading to a sense of being accepted by other men (peers);

pO₂₂: leading to men learning from other participant experiences, knowledge and skills and an enhancement of abilities and status,

pO₂₃: leading to increased health-related conversations and greater likelihood of help-seeking,

dO₁: leading to enhanced health and wellbeing

dO₂: leading to reduced social isolation and loneliness,

dO₃: leading to resilience to negative effects on wellbeing

Humans 'doing'

The final series of $C \rightleftharpoons M \Rightarrow O$ configurations start with a context (**C_H**) deriving from a previous proximal outcome (**pO₁₀**).

C_H: If men spend time at the men's shed and have somewhere to actively 'do' (**pO₁₀**),

M_x: then men gain access to resources that facilitate them taking part in pragmatic projects,

pO₂₄: leading to men engaging in conversation whilst working shoulder-to-shoulder and whilst socialising during break times,

pO₂₅: leading to men gaining new pragmatic knowledge and skills through informal, peer, 'in the moment' activity-led learning,

dO₁: leading to enhanced health and wellbeing

dO₂: leading to reduced social isolation and loneliness,

M_{xi}: then men can interact, socialise [bonding social capital] and share their own (and explore other's) experiences, knowledge and skills in the company of other men,

pO₂₆: leading to feel-good factor for the volunteers sharing their skills,

dO₁: leading to enhanced health and wellbeing

Figure 33: *tested* Programme Theory (*tPT*) 3 on human-based resources

Discussion

Initial programme theory (*iPT*) 3 suggested that through social interaction men can share (teach) – and learn from other’s – experiences, knowledge and skills. This can enhance participant abilities and lead to improved wellbeing and resilience to negative effects on wellbeing.

The themes from the primary data support this theory; with *refined* programme theory (*rPT*) 3 being *refined* to include the requirement of men’s sheds to have enough space and material resources to support men’s shed activities, so as to support men in volunteering their experiences, knowledge and skills during work and break times.

*rPT*3 was then *tested* and further developed against data from a realist review. It was found that men’s sheds are equalising contexts that facilitate the mechanism of ‘social capital’ and engage participants in adult learning. ‘*Bonding* social capital’ naturally develops with participants developing strong and trusting relationships with peers in their men’s shed. More networks were also developed between external individuals or groups, directly or indirectly benefiting participants through ‘*bridging* social capital’.

Enhanced social capital broadens the resources from which men can ‘help’ themselves and each other. Indeed, beyond individual capacity building, community capacity building can be identified in men’s sheds that take on responsibilities of providing services for their local communities; such as, Market Town Men’s Shed agreeing to support two younger men for Job Centre Plus. These outcomes can include the ‘feel-good’ factor that volunteers experience from

sharing their skills and potentially an elevated status within men's sheds for those sharing their skills along with status elevation for those gaining skills. More importantly the processes of social interaction, bonding, bridging and sharing within a community supports participant social health and resilience to negative effects on wellbeing. This means that the processes that occur by being a contributing and active participant of men's sheds enhances the health and wellbeing of participants.

Conclusion

This final findings chapter has explored how men's sheds enable the pooling of human-based resources and how these processes enhance the health and wellbeing of participants. The *initial* programme theory (*iPT*) 3 concerning experiences, knowledge and skills was refined using primary data from the three case studies to produce *refined* programme theory (*rPT*) 3. This recognises that resourceful men's sheds provide the contexts that facilitate the mechanisms of being a part of a community; contribution and learning. *rPT3* was *tested* and further developed with realist review data predominantly pertaining to 'bonding social capital'. Men's sheds are equalising spaces that facilitate social capital. Outcomes found in the literature align to the findings of the primary data; that men's sheds are communities enabling purposeful activities and adult education that support participant social health and resilience to negative effects on wellbeing.

Chapter Summary

This final findings chapter has put forward and proven the proposition that men's sheds are facilities that support participant health and wellbeing through the sharing and strengthening of human-based resources. In the context of this thesis, this represents the final contribution of

primary data and new knowledge about men's sheds and how and why they facilitate health and wellbeing.

The next chapter (Chapter 10) will explore what established mid-range theory (MRT) can enhance and further explain the *tested* programme theories from the last three chapters.

10) Middle-range theory and links to the three *tested* programme theories

This chapter links abstracted middle-range theories to the three programme theories (PTs) explored in Chapters 7, 8, and 9. Middle range theories are not intended to cover every detail (Pawson, 2013), but provide theories applicable to cross-cutting concepts in a wider boundary set of programmes. The PTs and generated data are used to identify middle-range theory that encompass and explain why the PTs are likely to be valid. This is a process of culmination (Pawson & Tilley, 1997); accumulating theories that add to the explanations of what the three PTs have found.

‘Programme theories’ in realist research explain how, for whom, in what circumstances and why a programme works. Initial programme theories about men’s sheds have been generated, explored, refined, tested and further refined in the three finding chapters 7, 8 and 9. These programme-based explanations can be abstracted to link with established theory that is able to explain multiple programme types.

‘Middle-range theories’ (MRT), conceived by Robert King Merton (1968), are explanations able to give reason to a range of instances. In summary and retrospect of ‘sociological theories of the middle range’ Merton states MRT...

‘...consist of limited sets of assumptions from which specific hypotheses are logically derived and confirmed by empirical investigation... These theories do not remain separate but are consolidated into wider networks of theory... [that] ...are sufficiently abstract to deal with differing spheres of social behavior [sic] and social structure, so that they transcend sheer description or empirical generalization [sic]... This type of theory cuts across the distinction between micro-sociological problems... and macro-sociological problems... in the light of available knowledge’ (1968, pp.68-69).

The use of MRT is supported by Ray Pawson who states that social research methodology (in the case of this thesis - ‘realism’) can be cojoined with middle-range social theory using

‘middle-range realism’: a ‘strategy for theory-driven empirical research’ (Pawson, 2000, p.284). This process involves looking for the theories that support the inquiry. As such, I will explain how the identified and selected MRTs demonstrate relevance to the empirical findings of this thesis. I will discuss how MRT can align to, and join, these PTs to help explain *why* men’s sheds participation is beneficial to health and wellbeing.

MRT₁ ‘Value congruence’ theory: linking to tPT1 on organisational arrangements

‘Value congruence’ refers to the likeness of important beliefs or interests held by two or more people (Kristof, 1996). The value congruence theory suggests that people whose values align with others’, such as the participants and leaders of men’s shed organisations, is important because ‘values are “fundamental and relatively enduring”’ (Kristof, 1996, p.5 citing Chatman, 1991, p.459). The term ‘value congruence’ was identified in the article by Southcombe et al. (2015b) who found evidence suggesting that when men’s shed leader and participant values align, it facilitates participant involvement and commitment.

It is suggested that values are integrated into organisational culture and that values guide employees’ behaviours (Kristof, 1996, p.5 citing Schein, 1992). Although men’s shed participants are not ‘employed’ to ‘work’, men regularly attend and participate in work-like activities in men’s sheds; which like workplaces are organisations. It could be suggested that with the lack of financial incentives, emphasis on participant values aligning with the men’s shed organisation is likely to be even more important to men’s decisions to participate and use their labour in men’s sheds.

Of the three case studies in this thesis, the values of participants and leaders at Market Town Men’s Shed were most congruent. This is evident in there being more willingness, or at least

less reluctance, within the membership to regularly dedicate their time to fulfil required roles – such as being a keyholder and/or first aider and committing to be present on set weekdays and at set times. Considering the smaller size and fewer participants at Industrial Town Men’s Shed, the way the men worked for the men’s shed and with each other suggested that they valued their shed, all wanted it to continue, and wanted it to provide more opportunities for more people.

Based on my observations at City Men’s Shed, there was some hostility between participants and leaders, suggesting there was less alignment of values. There was reluctance from participants to commit to fulfilling roles at this men’s shed. This resulted in the shed being open for fewer hours, being less able to facilitate men’s shed activities and was less accommodating to its local community of men than the other two case studies.

Value congruence between men’s shed leaders and their members has been found to contribute to the ‘social connectedness’ of members (Southcombe et al., 2015b). Social connectedness, also referred to as ‘sense of community’, is the next middle range theory (MRT₂) to be discussed.

MRT₂ ‘Sense of community’ theory: linking to tPT1 organisational arrangements

The second aligning middle range theory (MRT₂) is ‘sense of community’. Sense of community is defined as:

‘...a feeling that members have a belonging, a feeling that members matter to one another and to the group, a shared faith that members’ needs will be met through their commitment to be together’ (McMillan, 1976, cited in McMillan and Chavis, 1986, p.9).

This theory was identified in the realist review of organisational arrangements and leadership; referred to by Southcombe et al. (2015b) as ‘social connectedness’. This term was also used in sibling papers by Cavanagh et al. (2018) and Ang et al. (2017) and in other men’s shed literature (Ayres et al., 2018; Wilson et al., 2019).

A ‘sense of community’ or ‘social connectedness’ comprises of: *membership* – emotional safety based on a feeling that one belongs, and is accepted by a group one identifies with and is invested in; *influence* – a sense of volition regarding what one contributes and receives and the purpose of the group balanced with leadership that has influence over the group and its cohesion; *integration and fulfilment of needs* – feeling that one’s needs will be met through the group, and; *shared emotional connection* – sharing interests and time on activities with peers (McMillan & Chavis, 1986).

In relation to men’s sheds, a ‘sense of community’ can be conceptualised as a sense of belonging, where participants feel they matter and there is a sense of caring about one another (Southcombe et al., 2015b). Participants are connected by having mutual needs that require meeting. These needs are interwoven and are explored in the middle range theories below. For example, the needs for: a community-based place (see MRT₄); re-connection with the essence of our (human) species (MRT_{5a}), and; access to health promoting resources (MRT₆, MRT₇ and MRT₈). Participants get their needs met through their commitment to their men’s shed and each other (Southcombe et al., 2015b).

In men’s sheds, a ‘sense of community’ was found to be enhanced when leaders recognised and focus on this in their leadership practice. This benefitted participant health and wellbeing (Cavanagh et al., 2014a). The quality of ‘social connectedness’ was found to be influenced by value congruence (MRT₁) between men’s shed leaders and participants (Southcombe et al., 2015b). It was also found that leadership style was important in supporting men to feel involved

and to enable a conducive environment for shed activities and participation. Leadership and organisational arrangements must fit the needs of men's shed members to limit bureaucracy, facilitate participation and encourage member commitment (Ahl et al., 2017; Southcombe et al., 2015b).

MRT₃ 'Shedagogy' theory: linking to tPT1 on organisational arrangements

The last middle-range theory specifically relating to men's sheds as organisations, and the arrangements in place, relates to the importance of facilitating men's sheds as space for male, adult learning.

Barry Golding (2014a) coined the portmanteau 'Shedagogy' (previously referred in Chapter 7 - Organisational Arrangements), from the words 'Shed' and 'Pedagogy'. 'Shed' refers to community "men's sheds" and Golding borrows from the word 'pedagogy' to mean the theory and practice of learning.

However, 'pedagogy' literally means 'leading children' and a more nuanced description of pedagogy is an education method in which learners are dependent on teachers for guidance and acquisition of knowledge. This is not relevant to my conceptualisation of what 'shedagogy' describes. As the theory refers specifically to adult learning and self-actualisation, learner-led experiences and problem-solving, it seems more appropriate to borrow from 'andragogy' a word deriving from the Greek for 'man' and 'leader of'. Yet, beyond andragogy's 'leading of men', 'shedagogy' describes an environment where learning is not explicitly named but the environment facilitates collaborations and hands-on kinaesthetic processes led by the learner as they desire to discover knowledge and skills (Golding, 2014a). New learnings often occur as and when they are required and draw upon the knowledge and experience in the room at the time of the requirement to learn. This links to the discussion of attendee's education,

knowledge and skills in Chapter 9, and relates to ‘cultural capital’ which is discussed as part of another middle range theory (MRT₇) below.

At City Men’s Sheds my investigations found that the Chair of the group had tried to lead sessions for all attendees and that these attempts had not been well received particularly by the older membership. However, I observed an afternoon session with the ‘younger’ group of older men 55-70 years of age, who all stopped what they were doing to observe the Chair using a ‘jig’ (a tool providing a template) to bind together two pieces of wood using a ‘dovetail joint’.

At Industrial Town Men’s Shed some of the men referred by mental health services did look to the operational men’s shed leader to direct them in tasks and demonstrate how to produce desired results. Other volunteers also supported these individuals when they were involved in separate tasks.

At Market Town Men’s Shed the Chair and two or more volunteers were present and on hand to support people or point them in the direction of a possible source of the required knowledge (another participant). The Chair and others would sometimes politely enquire if support was wanted with a task or would briefly point-out that another piece of equipment or method could achieve a higher quality finish or swifter result. An example of learning and producing together was observed in the process of men with professional backgrounds in woodwork, metalwork, engineering and electronics making a sander, that oscillated around and vertically up and down a spindle (discussed in Chapter 7). The project was yet to be completed at the time that my observations ended but the Chair and the Community Development Worker noted that this was a new development between group members and that this might not have happened until recently.

The men’s sheds provide, to a lesser or greater degree, environments that facilitate participant learning. The adult learning is very informal and occurs ‘in the moment’ as and when it is

required for each individual man. Other than proving that equipment can be used safely, there is no prescribed learning or assessments of knowledge and skills.

Adult learning is important because as noted in Chapter 4 (the systematic review), adult learning is associated with enhanced health and wellbeing. Men's sheds provide a community environment that facilitates adult learning through the concept of 'shedagogy' (Golding, 2014a). The community-based nature of men's sheds is also associated with other factors that are covered in the following middle range theory (MRT₄).

MRT₄ 'Third Place' theory: linking to tPT2 on shed-based resources

Men's sheds have previously been identified as a 'third place' for men in the literature review (Golding, 2011a). Primary and secondary data in Programme Theory 2 (PT2) on 'Shed-based Resources' (see Chapter 8) added further support for the theory that men's sheds are third places for attending men. This section explores what characteristics make a third place and how this MRT can be applied to men's sheds.

Sociologist Ray Oldenburg's theory of 'third place' developed from his 1980's research published in 'The Great Good Place' (1999). The book identifies a problem in American (western) society: there is a lack of informal 'public life and... [a] need to restore it' (Oldenburg, 1999, p.xiii). In the pursuit of living an independent and private life, public life is predominately lived in shopping 'malls' focused only on commercialism; with places to gather and 'community' devastated. By the late 1980's Oldenburg recognised there were few places for '[t]he full spectrum of local humanity... [to be] represented' (1999, p.14) and spaces 'where unrelated people [can] relate' (1999, p.ix).

Oldenburg defines eight characteristics for a third place: i. that it is '*on neutral ground*'; ii. that '*the third place is a leveler*' [sic] where people are equals; iii. that '*conversation is the main*

activity’; iv. that there is ‘*accessibility and accommodation*’ of the target audience; v. that there are ‘*the regulars*’; vi. that they keep ‘*a low profile*’; vii. that ‘*the mood is playful*’; viii. that such places are ‘*a home away from home*’ (Oldenburg, 1999, see pp.20-42).

Although men’s sheds have criteria for participation – they tend to be for adult men (not children or women), whom feel comfortable in workshop environments – they do offer a place for men, who might be socially excluded, to meet with and relate to other men. Indeed, Oldenburg states that:

‘...the most and the best among third places are the haunts of men or women, but not both... [despite both sexes standing to] ...benefit in equal measure from participation in the core settings of informal public life’ (1999, p.230).

To assess the usefulness of the third place theory, I will discuss Oldenburg’s (1999) eight characteristics to establish in what ways men’s sheds might align with the character of third places.

i. On Neutral Ground

Men’s sheds are a community space typically, although not always, for older men. They offer local community men, a space with opportunities to create new and situated social connections (Kimberley et al., 2016). With explicit reference to Oldenburg’s recognition of ‘neutral ground’ underpinning third places, Golding (2008; citing Golding et al., 2007a) and Wicks (2013) support the view that men’s shed offer

‘...a neutral public space where men can participate in regular activities for social well-being and psychological health...’. [This is part of the] ‘...*why and how* the men’s shed phenomenon is becoming so popular’ (Wicks, 2013, p.120, my italicisation).

The community-based nature of men’s sheds means that they are not one person’s property and are for use by community members.

ii. The Third Place Is a Leveller

It has been suggested that men's sheds provide their members with a new identity: being a 'shedder'. This identity is shared by the participants, along with their shed-based interests and time spent in each other's company (Golding, 2014b, cited by Kimberley et al., 2016).

In terms of 'levelling-up', men's sheds have been identified as 'makerspaces' enabling access to the physical resources of tools and equipment and the cognitive resources of craft-based knowledge. In a study excluded from the systematic review (Chapter 4, due to its primary focus extending beyond men's sheds), Taylor and colleagues defined makerspaces as 'public workshops where makers can share tools and knowledge' (2016, p.1). They refer to:

'...utilitarian rooms filled with exciting equipment and brimming with ideas... [and] ...public resources dedicated to creativity, learning and openness... at a time when many communities do not have a community space and where civic life is often seen as being in decline' (Taylor et al., 2016, p.9).

The authors explicitly refer to Oldenburg's (1999) third place theory, noting that these spaces overtly meet four of the eight categories and are perhaps only lacking in 'accessibility' to all. As we have seen in the systematic review (Chapter 4) and the shed-based resources findings chapter (8), men's sheds tend to specifically cater for men; a factor that positively attract and engage this demographic.

With specific reference to men's sheds, Golding has stated that:

'...community sheds promote social equality by levelling the status of participants, encouraging mentoring and supporting individuals and communities' (2008, p.3).

In a final example for this category, sheds have been found to be equalising places for men living with long-term disabilities enabling good integration with able bodied participants (Hansji et al., 2015). This suggests that men's sheds have an equalising nature; levelling-up – if only during time spent in a shed – physical and social inequalities.

iii. Conversation Is the Main Activity

It could be said that ‘work’ is the main activity occurring in men’s sheds. However, it is more accurate to state that: initially, work is the main focus for many of the participants. Conversation might be a subsidiary focus for some participants – including prominent talkers and those that might rarely speak and mostly listen – but it is a common activity in men’s sheds and is key to the social atmosphere of these environments. As evidenced by community men’s shed participants who have their own workshops – some with better equipment than their frequented men’s shed – men still attend their men’s shed due to the social resources. In other words, they attend for the company of other men and conversation.

iv. Accessibility and Accommodation

On the concepts of accessibility and accommodation Oldenburg writes,

‘Third places that render the best and fullest service are those to which one may go alone at almost any time of the day or evening with assurance that acquaintances will be there. To have such a place available whenever the demons of loneliness or boredom strike or when the pressures or frustrations of the day call for relaxation amid good company is a powerful resource’ (1999, p.32).

Men’s sheds are accessible for their surrounding community of men. They also tend to be accommodating to shared interests of the community’s men; most predominantly woodwork, but also, for example, glass work and bicycle maintenance.

However, the case studies for my empirical investigation had a maximum of three days opening a week and offered opening times of no longer than 6½ hours a day. It seems that the sheds in my study do not live up to the fullest availability of service and do so only for men. Constraints in opening hours, as previously discussed, is often due to a lack of available staffing – whether paid or voluntary.

v. *The Regulars*

The three case studies provided instances of members who attended both regularly (for example, on a Tuesday afternoon) and often (for example, at least twice a week). Wicks notes that men's sheds are a place where:

‘...people share good company in a relaxed setting on a regular basis’ (citing Oldenburg, 1999; 2013, p.120).

Furthermore, Taylor and colleagues identified that makerspaces are

‘...places where one can find both regulars and friends old and new’ (2016, p.9).

In my investigation, there were core members who tended to be present on each of the specific days I conducted my research. Many of these men attend whenever the shed is open.

vi. *A Low Profile*

There is evidence that men's sheds and their participants keep a low profile. Two of the sheds chosen as case studies for this dissertation, Industrial Town Men's Shed and City Men's Shed, both had low levels of 'bridging social capital' (see Chapter 9), which suggests they were keeping a 'lower profile' than was useful for their development. All three men's sheds provided examples of initial attendees stating that they never knew of their local shed's existence until shortly before their first attendance. Again, this suggests that the venues were not overly publicised and that they were perhaps an under recognised community resource. This does not seem to be making the most of the potential of men's sheds, but in terms of Oldenburg's (1999) 'low profile' the sheds in my investigation did fit this third place characteristic.

vii. *The Mood is Playful*

Milligan and colleagues found that 'banter, humour and conversation were important' in their research across three UK men's sheds (2015, p.135). This is part of the appeal of men's sheds and helps manifest camaraderie and an enjoyable atmosphere that supports social inclusion and wellbeing (Milligan et al., 2015). Across another three men's sheds in Australia '...humour

and banter...’ were found to be part of the process of working together (Culph et al., 2015, p.311). Nick Taylor and colleagues cite this playful mood concept of Oldenburg’s (1999) as applying to makerspaces, including men’s sheds, stating that they ‘never bec[o]me overly serious’ (2016, p.9). This evidence, along with my own accounts of humour in men’s sheds (see Chapter 8), demonstrates that men’s sheds have a playful atmosphere.

viii. *A Home Away from Home*

A number of men’s shed articles state that, for members the shed they attend is a ‘home away from home’ (Anstiss et al., 2018, p.221; Cox et al., 2020, p.10; Taylor et al., 2018, p.239). These articles also place this statement within themes of ‘belonging’; suggesting that men’s shed are an important social environment where participants feel accepted. Indeed, Wicks refers to some men being ‘left without a space or place to safely meet’ (citing Hayes & Williamson, 2007; Wicks, 2013, p.120) and there being ‘a push from the home, and a pull to the shed’ (citing Golding, 2008; Wicks, 2013, p.121). The ‘*push*’ being from a partner, family or the man themselves, wanting the man out of the house and/or the ‘*pull*’ being the man wanting to join in with others at a safe, external place to enhance their wellbeing.

Anstiss and colleagues (2018) juxtapose participant experiences of loneliness and isolation at individual’s dwellings with the company of peers at their men’s shed with whom they feel connected. A participant in their study of a New Zealand men’s shed succinctly explained:

“I’m home. To me this is a home” (Anstiss et al., 2018, p.221).

In men’s shed literature, ‘a home away from home’ was the characteristic of Oldenburg’s (1999) third place theory drawn upon most. It describes a place where men are welcome to ‘be’ – are accepted by others – and ‘do’ – are encouraged to participate – in the company of other men (also see ‘Capability Theory’ below).

Section Conclusion

It is clear that men's sheds align well to Oldenburg's theory (1999) of 'third place'. The eight characteristics of a third place can be identified across the men's sheds literature and with examples from the primary research of this thesis. Further to the eight characteristics of third places, Oldenburg suggests that:

'Third place regulars "do for one another," as they would for blood relatives and old friends. They give things they no longer need; they loan items they still want; they do what they can to relieve hardship when it befalls "one of the gang." When someone doesn't "show" for a couple of days, somebody goes around to check on them' (1999, p.xxi).

This spirit of doing something for another men's shed member, donating and loaning, helping to relieve hardship and checking in on a regular who has not attended without prior warning were all behaviours I witnessed across the three case study sites.

Given that most men's shed participants are not in employment, education or training, it is important for their social and mental health...

'...that they have access to a third place... other than work and home as an anchor to their social and community life' (Golding & Foley, 2008; citing Oldenburg, 1999).

One of the foundations of men's sheds is that they are places specifically for their local community's men. Men's sheds are a physical place and a space for men to engage in 'informal public life'. They are a community in which members feel better for being a part. This is enhancing to participant wellbeing.

MRT₅ ‘Occupational therapy’ theory: linking to tPT2 on shed-based resources

This section brings together three theories relating to occupational therapy; the benefits of creating through labour, and; ways that the alienation of labour could disconnect humans from their species being.

The second programme theory (tPT2) puts ‘faith’ in occupational therapy theory. The theory proposes that working on pragmatic tasks brings purpose to men’s lives, that this purpose gives their lives meaning and that this meaning enhances their health and wellbeing. These ideas are supported in my earlier realist review (Chapter 8), quoting Mark Thomson, ‘SHED = PRACTICAL = PURPOSE = MEANING’ (2008, p.193) and Mary Reilly’s theory that,

‘man [sic], through the use of his [sic] hands as they are energized by mind and will, can influence the state of his [sic] own health’ (1962, p.6).

Occupational therapy theory links to other theories, such as those by Marx (1976, in the following subsection) and Antonovsky’s Salutogenesis (1979, in MRT₆).

MRT_{5a} - ‘Karl Marx – Our ‘species-being’ and ‘alienation’ theory

Occupational therapy theory can be seen in the work of Karl Marx. Marx, drawing on Adam Smith (1982) and Ludwig Feuerbach (1986), theorised that there is a species-essence of human beings making them different to other creatures. Jonathan Wolff in ‘Why Read Marx Today?’ asserts that:

‘[For Marx]...the distinctive human activity is labour or...social productive activity...in accordance with their own will and consciousness...’ which is beyond the ability of animals (2003, p.34-35).

With this assumption, a problem arises in capitalist societies where human beings have to use their species defining need to work, against their conscious will, so as to meet ‘the costs of living’ rather than to satisfy their innate human needs. Marx referred to this problem as

‘alienation’, a state or experience of estrangement; in this instance from our work and ourselves.

‘The worker’s life has become subject to alien forces [as t]he demand on which the worker’s life depends is founded on the desires of the wealthy... capitalists’ (Wolff, 2003, p.30).

Alienation is theorised to occur in four ways: alienation from our species-being; alienation from products of work; alienation from productive activity; alienation from other human beings (Wolff, 2003). This section will discuss each of these forms of alienation before discussing how men’s sheds support participants to reconcile their essence to work; outside the drives of capitalism.

‘*Alienation from our species-being*’ is one of four causes of ‘alienated labour’ identified by Marx. Rather than being engaged in social productive activity, for many workers ‘life begins’ when the working day is over (McLellan, 2000). This is described by Wolff:

‘...[T]he plight of the worker under capitalism is an instance of the way in which a person’s essence becomes detached from his or her existence; i.e. that workers live in a way that does not express their essence. Human beings are essentially productive creatures, but, Marx alleges, under capitalism they produce in an inhuman way’ (2003, p.30-31).

The primary case studies used to generate data for this empirical work, and the men’s shed literature, has all come from countries with a capitalist economy system. According to Marx, most of these country’s workers will have experienced alienation.

The second component is *alienation from products of work*. When human beings must work to exist – to meet the costs of living – what they produce is based upon the drives of capitalism. Many workers have little control over what they produce, how it is produced or how it is used in the future. In such instances, individuals are alienated from the products of their labour. Furthermore, collective alienation occurs as technology progresses and people no longer understand how things work. This ‘mystification’ means that many of us have no idea how common products work and are alienated from them (Wolff, 2003).

Interrelated to alienation from our human essence to create as we will – and from the products created – is *alienation from productive activity*. Conversely, as technology progresses there tends to be a deskilling of the workforce. For workers, practices involved during the working day can be...

‘...highly repetitive, mindless tasks... [requiring] ...little understanding of their place in the total process’ (Wolff, 2003, p.34).

If experienced, this circumstance of working is void of meaning.

Finally, there is *alienation from other human beings*. Rather than seeing ourselves as working in cooperation with fellow humans, capitalism drives individualism; earning to support and fulfil the costs of living and perhaps interests of ourselves and/or our family. Using our labour for purposes other than our own human need to engage in social productive activity is alienating for the above reasons. It is suggested that ‘alienated labour is a primary cause of... misery on earth...’ (Wolff, 2003, p.29).

MRT_{5b} - Men’s sheds as the antithesis of ‘alienated labour’ processes

Marx aforementioned theories provide further support for the benefits of men’s shed participation. Participation in men’s sheds is unlikely to involve any practices of ‘alienated labour’. Firstly, work practices in men’s sheds support men to *re-establish connection to the species-essence of human beings*. At men’s sheds, participants engage in work of their own choosing and the nature of these community interventions is to facilitate men in ‘social productive activity’.

Addressing the second point, *alienation from products of work*, individual participants tend to produce products from wood or metal that they have crafted in some way. They might also fix items that have stopped working. As discussed, men in sheds can choose on what to work, how they work and are aware of the product’s likely future use; whether it is for themselves, a fellow

shed member, or a community-based commission. Addressing collective alienation, men's sheds facilitate pragmatic tasks and the sharing of knowledge that supports men learning how things work. This learning supports de-alienation; learning things about their environment and things previously taken for granted.

Furthermore men's sheds focus on productive activity and help men develop new skills and engage in activities mindfully. Participants perform tasks of their choosing and understand their place in the process of what they are producing. Rather than alienating from productive activity and de-skilling, men's sheds help participants gain access to 'means of production' (McLellan, 2000) and support the up-skilling of men.

Finally on anti-alienation, men's sheds build communities of men and facilitate men in processes of cooperation. Although men's sheds as a movement cannot halt, or turn the tide on the individualisation of society, these community organisations do help facilitate men in cooperative working. This is beneficial for individual participants, other attendees and the wider community (when working on community-based commissions). As it states in the makerspace article featuring a men's shed,

'...making is a *hook* that brings people together and places those with different wellbeing needs on a similar footing around a shared activity' (Taylor et al., 2016, p.7, my italisation).

Furthermore, the theme of men's sheds as anathema to 'alienated labour' is supported in the men's shed literature:

'[A]ccording to Marx for work to be a positive creative force it would need to occur under non-capitalist conditions, as a free activity as part of voluntary labour, under the self-control of the person doing the work, where the work had an intrinsic meaning, contributing to the self-identity of the maker, and where the product or outcome of the work was appropriated and owned by the maker/producer. By Marx's own reckoning on alienation and the labour process, when such conditions are met then this is thought to lead to the creation and re-creation of species being' (Brown et al., 2008, p.6).

Men's sheds, rather than causing alienation, support the bringing together of men, with the 'hook' of work-related, creative activities, as part of a community. As such, men's sheds combine innately positive components for the participants experiencing them. This aligns to the next MRT: Salutogenesis.

MRT₆ 'Salutogenesis' theory: linking to tPT2 on shed-based resources and tPT3 on human-based resources

Qualitative factors of work are described as a central resource for health and wellbeing in the theory of salutogenesis (Hlambelo, 2017). Antonovsky's (1979) 'salutogenesis' refers to 'origins of health' and suggests that there are salutary, health-giving factors that can enhance health and wellbeing. The salutogenic approach concentrates on moving people in the direction of health rather than pathogenesis; the 'dis-ease' end of what Antonovsky believed was an 'illness to health and wellbeing' (ease) continuum (1996).

The theory proposes that individuals, groups and societies have, to a greater or lesser degree, a 'sense of coherence' (SOC). SOC combines:

- 'comprehensibility' – awareness of the context of society and living conditions and that these make cognitive sense, are consistent and explainable;
- 'manageability' – the aptitude to identify available resources, feeling that they have enough resources to meet demands and have the agency to use these resources;
- 'meaningfulness' – feeling that life makes sense and having a sense of meaning that motivates towards a health promoting direction (Lindström & Eriksson, 2005).

When people have a good understanding of their circumstances and have the motivation to improve their health, along with a sense of autonomy and volition in this domain, they are more able to cope with health affecting challenges encountered. As such, the way people '...view their life has a positive influence on their health' (Lindström & Eriksson, 2006, p.238), and

goes some way to explaining why some people stay well despite adversity (Foot & Hopkins, 2010).

Further to individual's or group's sense of coherence are 'general resistance resources' (GRR) (Lindström & Eriksson, 2005). These refer to internal and external resources – biological, psychological, theological, sociological and economic – that can support or inhibit people in exerting volition over their lives (Taylor et al., 2014). However, the main emphasis of GRR is about how resources are orientated towards preventive health.

In another PhD about the impact of men's sheds on health and wellbeing, Hlambelo states that:

'It is apparent that having access to workshops equipped with machinery and tools along with expertise to support men to do meaningful male-specific activities that they enjoyed provides opportunities for personal development, skills and a sense of mastery' (2017, p.201).

The salutogenic theory supports the view that individuals, groups and societies can use resources and capacities, such as those found within men's sheds, to positively impact participant health and wellbeing and that of the local community. The theory links to the penultimate MRT₇ and final MRT₈.

MRT₇ 'Capital' and 'Capital Interaction' theories: linking to tPT3 on human-based resources

Tested programme theory 2 refers to material resources which can be shared by men's sheds participants. Some participants would not have access to such resources without membership of their men's shed. *Tested* programme theory 3 includes human-based resources including experiences, knowledge and skills. Again, some of the participants would not have access to such resources without membership of their men's shed. These resources link to Pierre Bourdieu's 'capital theory' (1986).

‘Capital’ is a term originating from the study of economics, which along with land, labour and enterprise contributes to (re-) production. However, in this context, ‘capital’ is not merely referring to matters of economics. Capitals refer to power and influence; culturally (Bourdieu, 1986) and socially (Hoffer & Coleman, 1987), as well as economically (Piketty, 2014).

Economic capital

In economics, capital has been ‘defined as the sum total of nonhuman assets that can be owned and exchanged on some market’ (Piketty, 2014, p.46). As appropriate as this definition is in relation to economics, it does only cover the financial facet of capital, and so this type of trading power shall henceforth be referred to as ‘economic capital’. In capitalist societies, within which the three research sites are situated, economic capital can make a considerable contribution to social advantage and disadvantage (Marmot, 2015b; Marmot et al., 2008; Wilkinson & Marmot, 2003; Wolff, 2003). This was covered in the background chapter (2) and is the reason why research was conducted to consider the Lower layer Super Output Areas (LLSOA) where the sheds are situated.

Cultural capital

Cultural capital refers to symbols of cultural competencies such as education, knowledge and skills used as resources in social action (Bourdieu, 1986). In men’s sheds, cultural capital can manifest in knowledge and expertise in a field such as woodwork. These resources are investible and convertible; just as with economic capital.

Men that contribute and embody men’s sheds also come with what can be termed ‘human capital’ (Becker, 1967). This refers to differences in personal incomes (a form of economic capital) based upon time spent in education and skill levels enhanced by training. Rather than using the term *human capital*, this thesis will use the terms ‘economic capital’, ‘cultural capital’

and ‘social capital’ to better understand the nuances of capital theory that can affect health inequalities.

Social capital

Social capital, as explained in chapter 9, refers to resources mobilised by social relationships (Hoffer & Coleman, 1987). It is seen in the advantages of having strong family connections or being a member of a particular community within a broader society. Rather than the simplicity of the adage, ‘*it’s not what you know, but who you know*’, a more nuanced understanding of social capital is that of advantages or disadvantages of relationships and how other capitals are exercised through one’s connections and contacts (Bourdieu, 1986). In the men’s sheds, individual’s networks and alliances were drawn upon for the benefit of the collective. For example, contacts could supply the physical resources of wood or ‘non-tangible’ resources such as funding information.

Forms of capital interaction

The development and reproduction of social inequalities is explainable using this understanding of economic, cultural and social capital. As such, it is theorised that health and health inequalities are determined by each of these capitals and interaction between them. It is suggested that people require an adequate level of “health relevant capital” to develop and support their health and wellbeing (Abel, 2007, p.67). Capitals interact to determine people’s range of options; influencing their ability to choose within this range.

In terms of capital interaction, economic, social and cultural capitals are *converted*; *accumulated*; and *transmitted* (Bourdieu, 1986). One or more forms of capital are also potentially *conditional* on having another form, or forms, of capital (Abel & Frohlich, 2012). *Conversion of capital* refers to one form of capital, such as funding (economic capital), being used to acquire another form of capital, such as training to use a piece of machinery (enhancing

cultural capital). *Accumulation of capital* describes how a type of capital could grow more of that same type of capital. For example, someone using social interaction (social capital) with a men's shed member to introduced them to other contacts they wish to meet (more social capital). *Transmission of capital* refers to capitals being passed on, such as the skills of a former tradesman (cultural capital) being shared with other men's shed members. *Conditionality of capital* describes the dependence of one form of capital on another form of capital. For example, men at men's sheds need to communicate with other men (social capital) if they are going to share access to material resources (economic capital) or learn new skills (cultural capital).

Examples of capital interaction at men's sheds

Each of these types of capital, and interactions between these capitals, can be identified in the men's shed case studies. For example, in data from City Men's Shed (see Chapter 9), *accumulation of capital* is present in the way the widower's social ability (social capital) to interact and be a likeable individual supported his acceptance into the men's shed fold, enhancing his social capital. *Conversion of capital* was demonstrated by the widower's social ability (capital) to negotiate help and draw upon his colleague's resources of knowledge and labour (cultural and economic capitals). Although there was no explicit increase in the men's economic fortunes, they profited from the availability of workshop space (economic capital). The widower, specially, benefitted from his colleague's volunteering of time and his access to equipment, tools and wooden veneer (economic capital). The shed provided the workshop space and gave the opportunity for the widower to benefit from his colleague's knowledge and skills (cultural capital) to fix the sewing machine lid. *Conditionality of capital* is seen in the widower's dependence on the men's shed, as a social resource, to facilitate access to his colleague and their other capital resources. Finally, a *conversion of capital* is seen where the helpful colleague uses his knowledge, skills and labour (cultural and economic capitals) to help

socially bond with the widower. The widower and the helpful colleague became friends through the resources (space, knowledge and skills, social opportunities) facilitated by the men's shed.

The outcome of the repaired sewing machine lid held meaning to the widower. His use of social capital and ability to mobilise the social relationship he had with his colleague, as facilitated by the men's shed, enhanced his wellbeing. The interactions between the men demonstrated valuing of the widower's feelings about the item, the meaning it held because of the loss of his late wife, and a willingness to harness available capitals for the benefit of the widower. Furthermore, the helpful colleague will also have benefited by being useful and supportive (social and cultural capitals) to his new men's shed colleague (the widower).

Further to the above examples of capital interaction, in social interactions health-relevant knowledge (cultural capital) is discussed between individuals and accumulated through the peer-groups of men's sheds (social capital). With the provision of the men's shed, members are in the social space and socialising with one another, making friends and being a part of social networks (social capital). As a member of the men's shed, they are part of a social collective.

Examples of capital not interacting

Men's sheds and the people associated with them do not always demonstrate the sharing and interaction of capital. Despite there being many examples of capital interaction, there are instances where capitals could have been shared or given and were not. For example, the majority of overheads at Market Town Men's Shed are financed from successful funding applications. The Community Development Worker (CDW), who is a cofounder of the shed, uses his knowledge of funding bodies and skills in writing funding bids, to bring in funding for the community based activities subsequently benefitting the members. However, the CDW did

not share his skills in applying for funding men's shed participants. This could be for many reasons. It could be because he did not want to share these skills, because Market Town Men's Shed participants did not want to learn these skills, or because this is beyond current participant's abilities to learn these skills. Furthermore, perhaps the CDW enjoys the process of writing funding applications and wants to continue to contribute to the men's shed by this avenue. He might feel sharing his knowledge could dilute his input or responsibilities and he wants to remain invested or vital to the shed's continuation.

Capital and capital interaction – along with lack of capital and lack of capital interaction – help to explain some of the process and fortunes of the men's sheds in this primary investigation.

MRT₈ 'Capability' theory: linking to tPT3 on human-based resources

Linked to capital theory is the 'capability' of individuals within structural forces. Capability theory (Nussbaum & Sen, 1993) refers to what individuals (or groups) are effectively able to 'do' and 'be' (see the section on Marx - our species-being to labour, and Oldenburg, 1999, on *A Home Away from Home*). Amartya Sen (1993) argues that a primary human right is the freedom to achieve wellbeing. This can only be understood in terms of people's real opportunities to 'function', do or be, in line with their values (Robeyns, 2011). In this theory...

'[f]unctionings refers to what an individual may value doing or being... and capabilities refers to the ability to achieve feasible functionings' (Ansari et al., 2012, p.819)

As such our health capability is the ability to have alternative combinations of functionings from which we can choose and our ability to achieve valued functionings (Sen, 1993). However, as Ruger points out, this general theory does not pinpoint what capabilities are needed...

'...to preserve health and to develop a set of habits and conditions to prevent, to the extent possible, the onset of morbidity and mortality' (2010, p.44).

That stated, research has revealed that being in control of the work that one does gives a sense of being in control of one's life (Marmot, 2004; Wilkinson & Marmot, 2003). Doing things that one enjoys and values is a salutogenic factor (Macdonald, 2005) and as noted at the end of the third place theory 'to be' and 'to do', in ways men value, is supported at men's sheds.

Structurally transformative health-relevant agency

People's capability interacts with structural influences that constrain what might be possible to be, do or achieve. Rather than people merely being passive to, or repressed by, structural influences, the capability approach acknowledges that empowered people can be active participants in change and can influence structural forces (Sen, 1999). People with more realisable capabilities have more freedom to achieve health and wellbeing than people who are, less capable or perceive themselves to have less capability. The more empowered an individual or group, the more capability they have to exercise agency, to 'do' or 'be', on their terms (Ruger, 2004). This determines their ability to be healthy, be an active community member, gain fulfilling employment, rest and enjoy life (Abel & Frohlich, 2012; Sen, 1999).

The capability approach helps us understand and explain differences in the health and wellbeing of individuals or groups, based on their ability to exercise agency within the context of the social structures they negotiate. This means that people can, through health-relevant agency (public health action), transform structures which influence health and wellbeing. So, when investigating social programmes it is logical to aim for understanding of the 'capability sets' upon which people have the choice to draw (Sen, 1993). This theory could support understanding of why reductions in social inequalities and/or negative consequences on health have occurred (Abel & Frohlich, 2012). This is relevant to men's sheds as social interventions that support men's health and wellbeing.

Bringing capital and capabilities together

The ‘capability approach’ (Sen, 1993) offers a constructive link between ‘capital interaction theory’ (Bourdieu, 1986) and public health related ‘action to reduce social inequalities’. This link is useful because public health action is about positively influencing health and wellbeing and capitals are resources that (re-) produce social inequalities. The capability approach explains why social inequalities can be reduced when individuals have different levels of capitals.

‘...[M]ajor parts of the transformation of social inequality into health inequality can be understood in terms of *capital interactions* that shape people’s *range of options for health-relevant agency*’ (Abel & Frohlich, 2012, p.241, my italicisation).

Men’s sheds, and their membership, implicitly support action to reduce social inequalities and enhance positive assets and resources that enable capacities for health and wellbeing.

The capability approach (Sen, 1993, 1999) is useful for tempering the determinism theory that economic (Marx, 1976), social and cultural capitals (Bourdieu, 1986) are being produced and reproduced with little influence by the agency of human beings. In the face of adverse conditions, the death of a partner (City Men’s Shed), turbulence regarding a community group’s accommodation (Industrial Town Men’s Shed) and noticeable differences in member’s levels of economic capital (Market Town Men’s Shed), participant power and influence over their health and wellbeing was enhanced by being a men’s shed member.

Each of the men’s sheds can be seen as facilitating improvements in people’s capabilities in their individual health gains and for the benefit of their fellow men’s sheds members. As individuals, and as collectives, there are examples of people in structurally disadvantaged positions being supported. It is suggested that...

“...many structural accounts of social transformation tend to introduce change only from outside the system” (Abel & Frohlich, 2012, p.237).

Men's sheds as a movement can be described as being 'outside of the (Public Health) system' and supporting the health and wellbeing of men in non-traditional ways⁸. They are new community structures enabling forms of participation that increase autonomy of personal health and a community of men's health (Abel & Frohlich, 2012; Hays, 1994).

Members, and particularly committee members, at Market Town Men's Shed seem to have a vested interest in their men's shed and are wanting to contribute to make it better for themselves, the other shed members, and what it offers to the wider community. This can be seen at City Men's Shed where community based commissions are benefiting community members and men's shed members are happy to help each other by being socially present and sharing skills. These qualities were also being re-introduced at Industrial Town Men's Shed.

Men's sheds are not magically able to 'level-up' the personal economic status of other men. However, access to material resources can help participants with less financial freedom; as supported by the third place theory and evidence across this empirical work and the men's sheds literature. Moreover, men's sheds do enhance the social and cultural capitals of all members which increases the ranges of options (capabilities) from which people can choose in practising health-relevant agency (Abel & Frohlich, 2012). There are still structural conditions such as the ability to financially fund preventative measures or access better health care practices. However, men's sheds enhance social and cultural capitals and participant capability to maintain and improve social interaction and learning; which support health and wellbeing. As such, it is suggested here that men's sheds, are salutogenic environments, that reduce health inequalities.

⁸ This is not ignoring that Industrial Town Men's Shed and Market Town Men's Shed were supported by a Public Health organisation and charity respectively – but that much of the success of the men's shed movement is attributable to participating men.

Conclusion

This chapter has brought together eight middle-range theories. These MRT have been brought together to help explain why men's sheds work to support health and wellbeing. Table 16 (below) depicted which middle range theories support which *tested* programme theories.

	<i>tPT1</i> : Organisational arrangements	<i>tPT2</i> : Shed-based resources	<i>tPT3</i> : Human-based resources
MRT₁ : 'Value congruence' theory (Kristof, 1996)	✓		
MRT₂ : 'Sense of community' (McMillan, 1976, cited in McMillan and Chavis, 1986)	✓		
MRT₃ : 'Shedagogy' (Golding, 2014a)	✓		
MRT₄ : 'Third Place' theory (Oldenburg, 1999)		✓	
MRT₅ : Occupational therapy (Reilly, 1962) with Marx 'species-being' and 'alienation' theory (McLellan, 2000; Wolff, 2003)		✓	
MRT₆ : 'Salutogenesis' (Antonovsky, 1979, 1996)		✓	✓
MRT₇ : Capital (Bourdieu, 1986) and capital interaction theories (Abel & Frohlich, 2012; Bourdieu, 1986)			✓
MRT₈ : Capability theory (Nussbaum & Sen, 1993; Sen, 1993) and Structurally transformative health-relevant agency (Abel & Frohlich, 2012; Sen, 1999)			✓

Table 16: Eight middle-range theories and the *tested* programme theories to which they align

The middle-range theories of ‘Value congruence’ (Kristof, 1996), ‘Sense of community’ (McMillan, 1976, cited in McMillan and Chavis, 1986), and ‘Shedagogy’ (Golding, 2014a) all support *tested* Programme Theory 1 on ‘Organisational arrangements’

Men’s shed organisations are at their most welcoming to participants when the ethos of the shed and the shed’s leadership aligns with participant’s values (Kristof, 1996). In these circumstances members feel they belong, matter to one another, and can get their needs met through men’s shed participation (McMillan, 1976, cited in McMillan and Chavis, 1986). Furthermore, men’s sheds overt purpose on providing a space for men to engage in pragmatic activities provides a facility that leads to adult learning (what Barry Golding calls ‘Shedagogy’ 2014a).

Linking to this, Karl Marx ‘species-being’ theory explains why individuals ‘do’; human beings have a species defining need to work (Wolff, 2003). Furthermore, Reilly (1962) asserts that working creatively with one’s hands is triggered by our innate will. This can positively influence health. Oldenburg’s (1999) third place theory indicates that people need somewhere away from the home and work where they are welcomed to be and do in the company of others. Thomson (2008) was one of the first to cite men’s sheds as a place for men to be and do (Anstiss et al., 2018; Cox et al., 2020; Taylor et al., 2018). These facilities give participant’s lives purpose (Culph et al., 2015), meaning (Ballinger et al., 2009) and contain salutogenic resources to support health and wellbeing (Kelly et al., 2019; Wicks, 2013).

Men’s sheds support participants to benefit from the therapeutic potential of work (Reilly, 1962) and are in many ways the antithesis of Marx theory of ‘alienation’ (Wolff, 2003). Sheds offer salutary factors, supporting participant health-related capabilities (Nussbaum & Sen, 1993) and increasing capitals (Bourdieu, 1986) and capital exchange (Abel & Frohlich, 2012; Bourdieu, 1986). As such, although men’s sheds exist within capitalist systems across the

world, men's sheds are equalising places where men are able to experience conditions congruent with our species-being (Marx, 1976; McLellan, 2000). Participants might live in financial opulence, extreme poverty or somewhere in between these two extremes. However, as the second and third programme theories asserts, men's sheds provide material, social and cognitive resources along with human-based skills which can be shared to enhance participant health and wellbeing.

The next chapter will bring all the programme theories (PTs) and middle-range theories (MRTs) together and will discuss the implications of these findings along with the limitations and strengths of the methods used and evidence synthesised in the thesis.

11) Discussion

Introduction

This chapter brings together the findings of the primary research and realist reviews (reported in chapters 7, 8 and 9), with the secondary sources of the literature review (Chapter 4), and the middle range theories (Chapter 10). To supplement this, additional literature searches are interrelated to support the legitimacy of proximal outcomes and links to distal outcomes, such as, '*enhanced health and wellbeing*' (dO₁). It is a standard part of realist investigation processes to iteratively search and synthesise and follow up lines of theory development. Most importantly, this chapter states how the findings about men's sheds influence the picture of men's health.

Bringing it all together

This thesis is structured around the Generate, Explore and Test (GET) activities framework (Gough et al., 2012). The three 'generated' initial programme theories about men's sheds and influences on health and wellbeing related to:

- 1) Organisational arrangements;
- 2) Shed-based resources, and;
- 3) Human-based resources

These factors were 'explored' in the literature review. First, a review of the men's shed literature confirmed three potential models of 'organisational arrangements' for men's shed: Public Health organisations setting up and running their own men's shed initiatives; Community-led organisations, and; 'Hybrid' – community-led, yet financially supported – men's sheds organisations.

Secondly, a cumulative body of work brought together under the theme of ‘shed-based resources’ suggests that men’s sheds offer participants resources that support their health and wellbeing. These resources include opportunities to share knowledge and to gain respite from home, work and/or family within an exclusively male environment.

Finally, the accompanying theme of ‘human-based resources’ brought together evidence on participants’ abilities to learn, connect and engage with others, together with their experience that they ‘belong’ at their men’s shed. Men’s sheds are revealed as community spaces that facilitate the activation of human-based resources associated with improved health and wellbeing outcomes.

The research question

The main research question posed by this thesis is: What characteristics of men’s sheds enhance health and wellbeing, for whom, in what circumstances, how and why?

Research objectives

Three objectives were set to support answering the research question. These are:

- 1) to examine the setup and implementation of men’s sheds to determine whether there are health and wellbeing enhancing characteristics relating to: i) Public Health-led men’s sheds; ii) Community-led men’s shed, and; iii) Hybrid – community-led, yet financially supported – men’s sheds;
- 2) to understand how the circumstances of those who attend led to men’s shed participation;
- 3) to establish the characteristics of men’s sheds that are associated with improved or diminished health and wellbeing

To address this inquiry, the three initial programme theories around the themes of 1) Organisational arrangements, 2) Shed-based resources and 3) Human-based resources were further explored using data generated in three men’s sheds as case studies. Case study sites

were chosen to align with each theorised type of men's shed: with Industrial Town Men's Shed representing a Public Health-led initiative; City Men's Shed being a community-led organisation, and; Market Town Men's Shed aligning to the 'hybrid' – community-led, yet financially supported – men's shed organisation.

The following sections explain what was hypothesised to enhance the health and wellbeing of men and how the findings of the primary research, realist reviews and links to middle range theory fit with these initial theories. These sections discuss the programme theories in turn. Table 17 (below) depicts which programme theories contribute to addressing which research objectives.

	<u>PT1</u> Organisational Arrangements	<u>PT2</u> Shed-based resources	<u>PT3</u> Human-based resources
<u>RO1:</u> to examine the setup and implementation of men's sheds to determine whether there are health and wellbeing enhancing characteristics relating to i) Public Health-led men's sheds; ii) Community-led men's shed, and; iii) Hybrid – community-led, yet financially supported – men's sheds	✓		
<u>RO2:</u> to understand how the circumstances of those who attend led to men's shed participation		✓	
<u>RO3:</u> to establish the characteristics of men's sheds that are associated with improved or diminished health and wellbeing	✓	✓	✓

Table 17: This denotes which Research Objectives (RO) are addressed by which programme theories (PT)

There follows a discussion of what these findings mean in relation to men's health and the impacts of participating in men's sheds. A table featuring all the CMOc can be found in Appendix G.

Organisational arrangements

To recap, an initial programme theory was generated using the formula of an ‘*if... then... leading to...*’ statement.

Generation: initial PT1 on Organisational Arrangements

The first part of the initial programme theory about *organisational arrangements* was:

If a men’s shed is led by its community members,
then participants have control over how their men’s shed operates,
leading to a comfortable physical and social environment for supporting the health of members

A sub-theory was added to this main initial programme theory proposing that:

If community-led men’s sheds are financed by external funders,
then they are prone to the influence of funder aims and objectives and pressure to acquiesce to funder demands,
leading to activities that take shed leaders and members away from their original aims and objectives

A rival theory was added for this first iteration about the programme, stating that:

If a men’s shed is led by a public health organisation,
then participants have little control over their men’s shed,
leading to less participant investment and less added value in terms of personal and community health benefits

Figure 34: *initial* Programme Theory (*iPT*) 1 on organisational arrangements

Exploration: refined PT1 on Organisational Arrangements

Findings of primary data generated in chapter 7, were used to ‘refine’ the initial programme theory. In the absence of data to support the initial programme theory that an intervention developed bottom-up by community members would be better for health and wellbeing than an intervention developed top-down by public health professionals, this theory was not further explored. Additionally, without findings to corroborate the proposed theory that financing from

external funders led to deviations from the aims and objectives of the shed's leaders, this line of enquiry was also wound up.

Instead, the refined programme theory, using the heuristic of a Context, Mechanism, Outcome (C↔M=>O) configuration, proposed that:

C: If leaders create and maintain an environment that is: i. physically conducive (the physical shed and materials/equipment support participant interests), and ii. socially conducive (leaders prioritises social interaction),

M: then community members feel they can attend, positively contribute and influence their men's shed,

O: leading to men participating and contributing knowledge, skills and labour.

Figure 35: *refined* Programme Theory (*rPT*) 1 on organisational arrangements

This participation in men's sheds and contribution of knowledge, skills and labour by men was theorised to enhance men's health and wellbeing.

Testation: tested PT1 on Organisational Arrangements

The final process of the 'GET' framework (Gough et al., 2012), to 'test' the refined programme theory was enacted by testing it against literature using the method of realist review. The search within men's sheds literature for primary studies referring to "leadership" and "management" identified five papers: Ahl and colleagues (2017), Ang and colleagues (2017), and three sibling papers by Cavanagh and colleagues (2014), Cavanagh and colleagues (2014) and Southcombe and colleagues (2015b). The findings and theories about how men's shed programmes worked to improve health and wellbeing, along with two further theories about health promotion programmes, Green and colleagues (2015) and Patton (2010), were used to augment the programme theory.

The result of this process is a *tested* programme theory asserting that:

C_A: If leaders create and maintain an environment that is: i. physically conducive (the physical shed and materials/equipment support participant interests), and; ii. socially conducive (leaders prioritises social connectedness); iii. without unnecessary outside interference, but iv. supported with outside influence when required,

M_i: then community members feel they can attend, positively contribute and influence their men's shed,

pO₁: leading to participants sharing similar values to leaders about the men's shed, such as objectives and rules of conduct (do's and don't's)

Figure 36: $C_A \Leftrightarrow M_i \Rightarrow pO_1$

This first proximal outcome (pO₁), above, becomes a context (C_B) for two further C \Leftrightarrow M \Rightarrow O configurations. The first of which is:

C_B: If participants share similar values to leaders about the men's shed, such as objectives and rules of conduct,

M_{ii}: then men attend, participate and contribute knowledge, skills and labour,

pO₂: leading to men feeling socially connected, involved and committed,

dO₁: leading to enhanced health and wellbeing

Figure 37: $C_B \Leftrightarrow M_{ii} \Rightarrow pO_2 \rightarrow dO_1$

Findings from Chapter 8 (Shed-based Resources) and Chapter 9 (Human-based Resources) suggests that the mechanisms of attendance, participation, and making contributions, leads to men feeling socially connected, involved and committed. Feelings of social connectedness (pO₂) reciprocally lead to the mechanism of greater participation (M_{ii}), producing a feedback loop characteristic of complex systems. Social connectedness (pO₂) also leads to the distal outcome of health and wellbeing benefits (dO₁). The mechanisms of attending, participating and contributing knowledge, skills and labour are supported in the men's shed literature (Culph et al., 2015; Milligan et al., 2015; Southcombe et al., 2015b).

Furthermore, these programme theories (in Figure 36 and Figure 37) align to two middle-range theories (MRT). The first of these, 'value congruence' (MRT₁) referred to by Southcombe et

al. (2015b), proposes that ‘transformational’ leaders emphasise the values shared by leaders and contributing men’s shed members. This provides support for the theory that leaders can cause change in environments and individuals, in this example, by creating and maintaining a conducive men’s shed environment for men’s sheds members (C_A), leading to an emphasis on shared values (pO_1).

The second aligning middle range theory (MRT_2) is ‘sense of community’ (aka social connectedness), referred to by Cavanagh et al. (2014), which theorises that people – in this case participants of men’s sheds – can feel socially connected. Feeling socially connected with others (pO_2) is theorised to evoke a sense of wellbeing (dO_1). This is perhaps even more likely with people who share similar values (pO_1).

The next proximal outcome (pO_3), derives from the same context, and the same mechanism of men attending, participating and contributing knowledge, skills and labour,

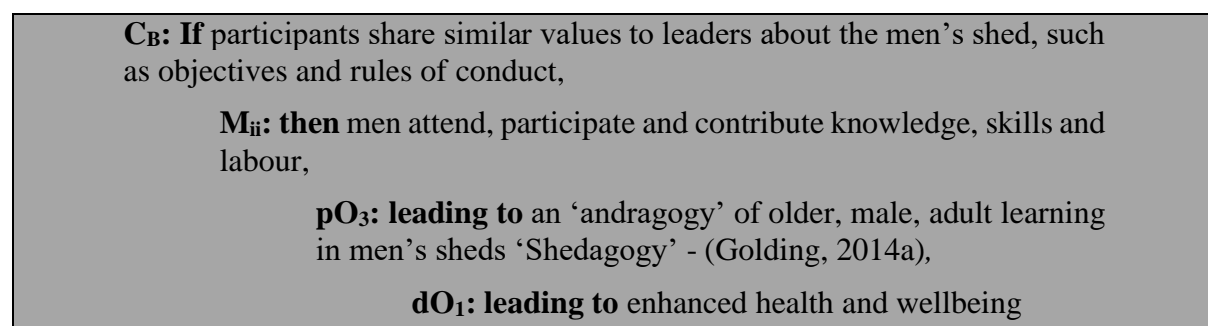


Figure 38: $C_B + M_{ii} \Rightarrow pO_3 \rightarrow dO_1$

An andragogy of older, male, adult learning in men’s sheds (pO_3) is defined in the men’s shed literature, by Golding (2014a), as ‘Shedagogy’. There are consistent examples of men learning in findings from the three case studies featured in Chapter 8 (Shed-based Resources) and Chapter 9 (Human-based Resources). Adult learning consistently figures as a prominent feature of the men’s shed literature (Anstiss et al., 2018; Carragher, 2017; Cavanagh et al., 2013; Cavanagh et al., 2014b; Culph et al., 2015; Reynolds et al., 2015; Taylor et al., 2018). This link

is important because adult education is associated with the distal outcome of enhanced health and wellbeing (dO₁). This is supported by published evidence: that educated ageing adults benefit from lifelong learning and this can contribute to community wellbeing (Merriam & Kee, 2014); that undertaking part-time learning has a positive effect on people's life satisfaction equivalent to an average of £1,584 of income per year (Dolan & Fujiwara, 2012); that learning in later life is associated with higher wellbeing (Jenkins & Mostafa, 2012) and that more informal types of learning are associated with higher wellbeing (Jenkins & Mostafa, 2015). The theory that adult learning in men's sheds benefits participant health and wellbeing aligns not only to the middle range theory of 'Shedagogy' (MRT₃) (Golding, 2014a), but also to mid-range theories of 'occupational therapy' (MRT₅) (Reilly, 1962); Marx 'species-being' and anti-'alienation' (MRT_{5a}) (Wolff, 2003); that men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (MRT₇) (Abel & Frohlich, 2012; Bourdieu, 1986), and; that men's sheds enhance men's 'capability' to enhance their own health and wellbeing (MRT₈) (Nussbaum & Sen, 1993).

Conversely, if the lead personnel at a men's shed lack knowledge, skills and/or interest to create and maintain a conducive and supported environment then participants are less likely to share values with leaders, will hold different objectives, and will not respect the rules of conduct. This will lead to men being less likely to want to attend or contribute their time and skills, or feeling able to influence the shed, or be involved or feel socially connected to other members. This is exhibited by the final C \leftrightarrow M=>O configuration for this theme of Organisational Arrangements below.

Cc: If lead personnel lack knowledge, skills and/or interest to create and maintain an environment that is: i. physically conducive (the physical shed and materials/equipment support participant interests), and; ii. socially conducive (leaders prioritises social connectedness); iii. without unnecessary outside interference, but iv. supported with outside influence when required,

M_{iii}: then participants will share few similar values to leaders, will hold different objectives and are less likely to respect the rules of conduct in the men's shed,

pO₄: leading to men being less likely to want to attend or contribute their time and skills, and/or

pO₅: leading to men feeling less able to influence the shed, and/or

pO₆: leading to men being less likely to be involved or feeling socially connected to other members

Figure 39: $C_c \Leftrightarrow M_{iii} \Rightarrow pO_4, pO_5, pO_6$

How *tested* PT1 addresses research objective 1 and contributes to research objective 3

The above theories, within the theme of organisational arrangements, address the first objective regarding what type of arrangements bring about men's sheds most likely to contribute to health and wellbeing. These findings also contribute to fulfilling the third objective to establish the characteristics of men's sheds that are associated with improved or diminished health and wellbeing.

The initial programme theory hypothesised that a bottom-up approach to the development and implementation of a men's shed would support the most effective processes of enhancing participant health and wellbeing. However, no findings supported this hypothesis. Equally, no evidence was found to unequivocally support the top-down approach. What was found is that men's sheds need to offer an appropriate sized premise and labour (sustained through funding and/or volunteering hours) to enable the intervention to adequately function in the interests of its participants. Of the three sheds investigated, the 'hybrid' community-led, yet financially supported, Market Town Men's Shed offered the greatest amount of physical space per member and was physically conducive to participant activities. It also offered the most materials and equipment to support participant interests. Furthermore, Market Town Men's Shed was the

most socially conducive in that its leaders encouraged social connectedness and the physical layout of the shed enabled members to socialise and work together. The shed did not have any problems with unwanted personnel interfering with either the men's shed activities or the participants. The shed members were supported by a dedicated coordinator and a number of men who volunteered to oversee the sessions with first aid cover and to deal with any enquiries or questions. The leadership could also access support from a community development worker if required. Within this context (C_A) the participants could focus on their woodwork, metalwork and bicycle maintenance interests and knew that they could influence their men's shed to suit their interests. This mechanism (M_i) of community members feeling they can attend, positively contribute and influence their men's shed seemed to contribute to participants sharing similar values to leaders about the men's shed (pO_1).

Participants willingly followed the rules of conduct such as health and safety behaviours and tidying up after themselves. This 'hybrid' – community-led, yet financially supported – men's shed did not have to adhere to onerous monitoring and evaluation criteria. External funding streams, administered by the leaders of the shed and the Community Development Worker, helped to finance the facility beyond income generated from participant fund raising.

Conversely, the Public Health-led Industrial Town Men's Shed received little funding from its Public Health leadership. This meant that the space available for activities and the design of the men's shed layout along with levels of materials and equipment were less conducive to the participant interests and, correspondingly, less likely to support social interaction.

The community-led City Men's Shed had secured an even smaller size of shed with less space for equipment to support the range of activities that its attendees were interested in. The space available for activities was cramped and levels of materials and equipment were stark in comparison to Market Town Men's Shed. The space also offered the least available room for

social interaction. As such, the community-led men's shed was less conducive: for participant interests; for facilitating work (shoulder-to-shoulder), and; for supporting social interaction. The findings of this study suggest that the 'hybrid' – community-led, yet financially supported – men's shed model was best for creating an effective men's shed. Furthermore, it appears that the more effectively men's sheds meet participant interests, the more men's shed participation facilitate proximal outcomes that lead to the distal outcomes of improved health and wellbeing.

Shed-based resources

The next initial programme theory (*iPT2*) focused on 'Shed-based Resources'. 'If... then... leading to...' statements were generated regarding men's first attendance at their men's sheds. This is followed by why men might choose to continue to attend or choose to not take part in men's sheds activities or attend irregularly.

Generation: initial PT2 on Shed-based Resources

The initial programme theory about Shed-based Resources suggested that:

If men value the men's shed resources,
then men will make an initial attendance.

Continuation of attendance at a men's shed was initially theorised to be contingent on the value men placed on the resources they identified. So,

If men continue to value the men's shed resources,
then men will continue to attend,
leading to improved health and wellbeing.

A rival theory was needed to account for men who do not continue to attend or who only attend sporadically, and so the following covers these circumstances:

If men do not (continue to) value the men's shed resources,
then they will not attend regularly or at all,

leading to negligible changes to their health and wellbeing.

Figure 40: *initial* Programme Theory (iPT) 2 on shed-based resources

Exploration: refined PT2 on Shed-based Resources

With the primary data collected from the three research sites (see Chapter 8), the initial, generated programme theory above was explored to produce the following set of ‘refined’ programme theories. These are expressed as $C \rightleftharpoons M \Rightarrow O$ configurations (in Figure 28).

The refined programme theory about shed-based resources suggested that:

C: If men perceive a men’s shed is in an accessible location, that they can benefit from the shed’s resources (material, social or cognitive), and that it could be socially acceptable for them to attend,

M: then men make their first attendance at the men's shed,

O: leading to men choosing to have little to no exposure to the men's shed and its resources, or

O: leading to men choosing to regularly attend

These two potential proximal outcomes – ‘regular attendance’ or ‘little to no attendance’ – became two separate contexts for different groups of men. The first of these was:

C: If the men’s shed does not provide enough of the following or men do not value the following: i. material resources, and/or ii. social resources and/or iii. cognitive resources for men’s interests,

M: then men will not attend regularly or at all,

O: leading to little or no exposure to resources from which men help themselves

However, the alternative positive scenario was that:

C: If the men’s shed provides enough: i. material resources and/or ii. social resources and/or, iii. cognitive resources for men’s interests,

M: then men will attend the men’s shed,

O: leading to men spending time at the men's shed

Again, this proximal outcome became a context within which mechanisms might activate to cause further proximal outcomes. So,

C: If men spend time at the men's shed,

M: then men can interact, socialise and create in the company of other men;

O: leading to enhanced social interaction;

O: leading to i. men getting respite from family, and;

ii. family getting respite from the participant;

iii. extended family are less worried about the participant because they have their men's shed activities and supportive friends;

iv. participants get out of the house and into different surroundings;

v. participants enact a different 'role', for example, they are no longer enacting the role of 'husband' to a wife, or being a 'father' to a child, and/or

O: leading to a broadening of the resources from which men can help themselves

Further to the above mechanism and outcomes, the same context of *men spending time at a men's shed*, then causes other resources to be activated, leading to other outcomes. So,

C: If men spend time at the men's shed,

M: then men gain access to resources that facilitate them taking part in pragmatic projects;

O: leading to men sharing knowledge and skills (informal, peer, 'in the moment teaching'), and/or

O: leading to using their labour to craft items and fix items

Each of these (proximal) outcomes was theorised to enhance men's health and wellbeing.

Figure 41: *refined* Programme Theory (rPT) 2 on shed-based resources

Testation: tested PT2 on Shed-based Resources

To test the refined set of programme theories, men's shed literature was searched for terms relating to 'third place' and 'occupation'. The term 'third place' was identified in the systematic review (Chapter 4), describing a community space for social interaction; beyond the home or a place of work (Golding, 2011a; citing Oldenburg, 1999). 'Meaningful occupation' and 'occupational therapy' were further terms identified during the literature review process suggesting benefits associated with work-type activities undertaken for pleasure. The findings were used to enhance the programme theories. The result is a *tested* programme theory consisting of connected causal chains.

C_D: **If** men perceive a men's shed is in an accessible location, that they can benefit from the shed's resources (material, social or cognitive resources), and that it could be a socially acceptable 'third place' for them,

M_{iv}: **then** men make their first attendance at the men's shed,

pO₇: **leading to** men regularly attending, or

pO₈: **leading to** men having little to no exposure of the men's shed and its resources.

Figure 42: $C_D \Leftrightarrow M_{iv} \Rightarrow pO_7, pO_8$

The next phase of programme theory explains that with regular men's shed attendance, men can have a place to 'be' and a place to 'do'. So, following a first attendance,

C_E: **If** the men's shed provides enough: i. material resources and/or ii. social resources, and/or iii. cognitive resources for men's interests,

M_v: **then** men will attend the men's shed,

pO₉: **leading to** men spending time at the men's shed and having somewhere to '*be*' (a third place), and

pO₁₀: **leading to** men spending time at the men's shed and having somewhere to actively '*do*' (engage in therapeutic, meaningful occupation)

Figure 43: $C_E \Leftrightarrow M_v \Rightarrow pO_9, pO_{10}$

However, as identified in *refined* programme theory 2, above, if a men's shed does not provide the types of resources that men are interested in, then these men will either not attend or will only attend infrequently.

C_F: **If** the men's shed does not provide enough of the following or men do not value the following: i. *material* resources, and/or ii. *social* resources and/or iii. *cognitive* resources for men's interests,

M_{vi}: **then** men will not attend regularly or at all,

pO₁₁: **leading to:** little or no exposure to resources from which men help themselves

Figure 44: $C_F \Leftrightarrow M_{vi} \Rightarrow pO_{11}$

Humans ‘being’

Proximal outcome 9 (pO₉), men spending time at the men's shed and having somewhere to ‘be’, becomes a context (C_G) for four further C \leftrightarrow M \Rightarrow O configuration chains. The first two of these four proximal outcomes are seen in the following configuration:

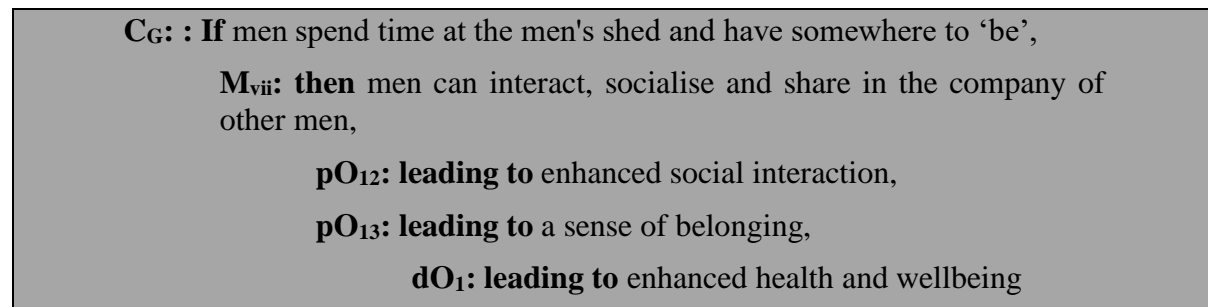


Figure 45: C_G \leftrightarrow M_{vii} \Rightarrow pO₁₂, pO₁₃ \rightarrow dO₁

Both of these proximal outcomes (pO₁₂ and pO₁₃) can lead to the distal outcome of enhanced health and wellbeing (dO₁). For example, the feeling of belonging is beneficial for health and wellbeing as found in the literature review (Ballinger et al., 2009, Foster et al., 2018, Crabtree et al., 2018, McGeechan et al., 2017, Milligan et al., 2016, Cox et al., 2020, Lefkowich and Richardson, 2018, Golding et al., 2006, Golding et al., 2008, both cited in Wilson and Cordier, 2013). This is further supported in Chapter 8 (Shed-based Resources) with references to Maslow’s (1943; 1954) Hierarchy of Needs and Griffin and Tyrrell’s (2013) theory of Human Givens; including the need to belong to a community of people (Hari, 2018). Support is also found from the eighth characteristic of Oldenburg’s (1999) Third Place middle-range theory, where such places are ‘A Home Away from Home’. Men’s shed literature reports that participants felt a sense of belonging to this ‘home away from home’ (Anstiss et al., 2018, p.221; Cox et al., 2020, p.10; Taylor et al., 2018, p.239). Links to other middle-range theory include ‘social capital’ (Abel & Frohlich, 2012; Bourdieu, 1986), as participants experience a sense of ‘bonding’ with other men shed participants (see Chapter 9: Human-based resources).

Furthermore, the same context of men spending time at the men's shed and having somewhere to 'be' (C_G) and the consistent mechanism of men interacting, socialising and sharing in the company of other men (M_{vii}), can lead to a proximal outcome (pO₁₄) affecting the participant and his family:

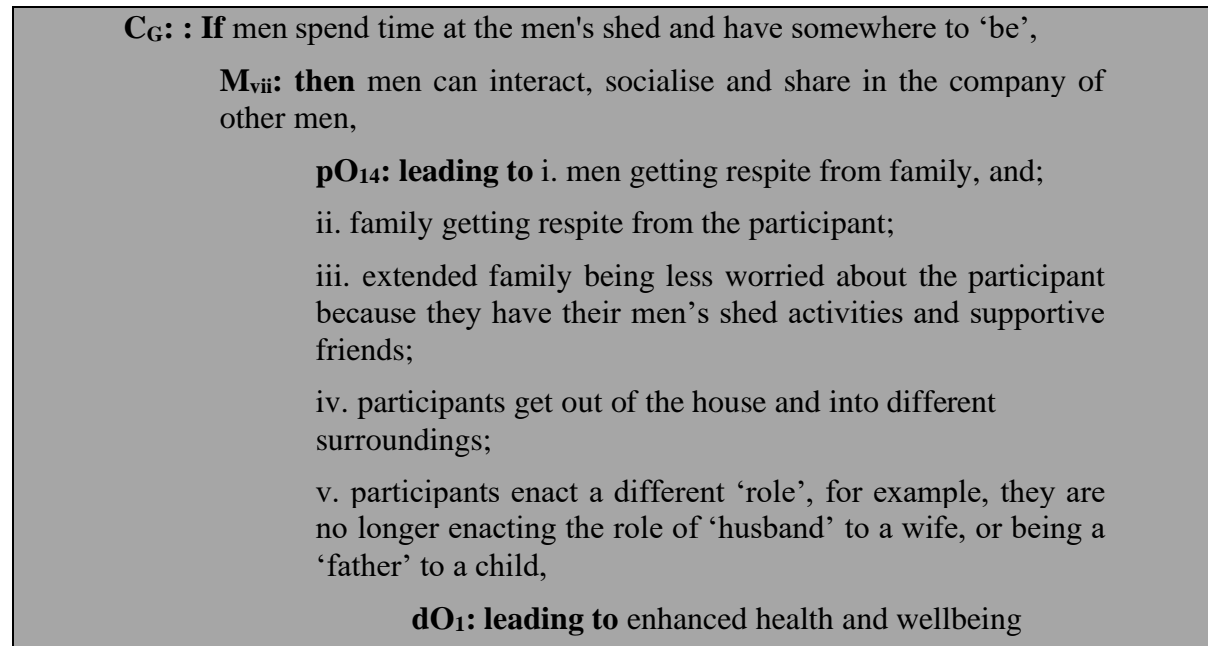


Figure 46: C_G ⇔ M_{vii} => pO₁₄ → dO₁

In general, respite from family, roles and caring responsibilities is good for people (Maayan et al., 2014; McNally et al., 1999). The systematic review (Chapter 4) found that men's attendance at sheds, benefited partners (Hedegaard & Ahl, 2019; Moylan et al., 2011), some of whom had suffered 'retired husband syndrome', where men had been at home and *under their partner's feet* (Golding, 2011a, p.40). In a recently published article on respite and Australian men's sheds, Foley and colleagues (2021) found that partners have more volition over their time and freedom to 'do their own thing'; benefiting their mental health. One respondent stated that with her newly retired husband now at a men's shed "I don't want to kill him any more ..." and there were further reports of improved material relationships from not spending so much time together (Foley et al., 2021, p.13). The 'Men and communication' section of the Shed-based Resources chapter (8) provides evidence supporting the theory that respite for participants and

their partners is beneficial. Furthermore, men's sheds act as a facility that families recognise gives their family member something to do, where they are cared about by other participants (see the 'Social interaction' section of Chapter 8). With the men participating in the men's shed, family members feel less worried about the men's shed participant and that aids their own health and wellbeing because they are not worried about him (Foley et al., 2021). A quote used in the realist review of this same chapter (8) was of a man's female partner stating, "*I married him for better or worse, but not for lunch*" (Gradman, 1994, p.106). This helps highlight the human need for breaks from people lived with. Respite for men's shed participants is further supported by the middle-range theory, Third Place (Oldenburg, 1999); suggesting there is a human need for time spent away from home and work, in a community-based environment. However, literature suggests the positives of men's involvement in men's sheds is not unanimously positive. One partner of an Australian men's shed described herself as "a Shed widow" and stated that the shed caused her stress because for her husband "everything revolves around the Shed" and she had become "his full-time driver" (Foley et al., 2021, p.15). No such similar negative appraisal was observed in the case studies for this thesis, but there was no opportunity to interview spouses and family and so this deserves further investigation. Finally, this context (CG) and mechanism (M_{vii}) can lead participants accessing resources they might otherwise not:

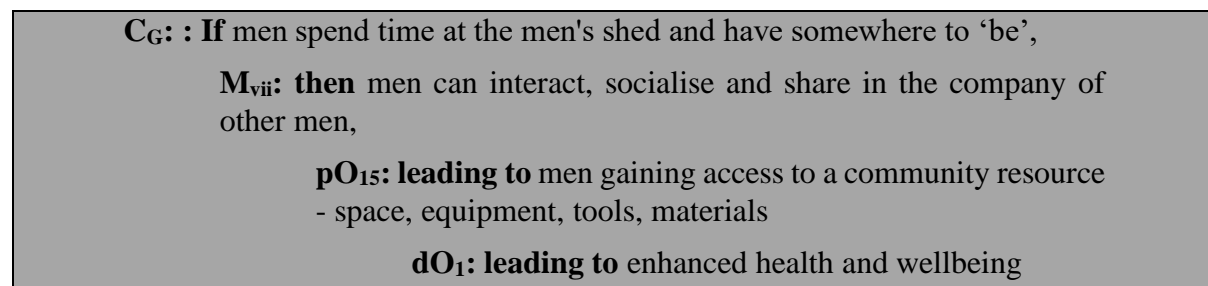


Figure 47: C_G ⇔ M_{vii} => pO₁₅ → dO₁

It is suggested in Figure 47 that having access to community-based resources leads to the distal outcome of enhanced health and wellbeing. This is supported in Chapter 4's literature review

section ‘A community-based resource for men’ (Taylor et al., 2018), in the Shed-based Resources chapter (8) regarding ‘The appeal of machinery’, and in the Human-based Resources chapter (9) regarding the ‘Physical space and equipment for pragmatic activities’. The health benefits of access to these resources is supported by the middle range theories of social, cultural and economic ‘capitals’ (Abel & Frohlich, 2012; Bourdieu, 1986); men gain access to more resources. Access to resources can enhance men’s ‘capability’ to enhance their own health and wellbeing (Nussbaum & Sen, 1993), aligning with the middle range theory of salutogenesis. This theory suggests men use resources (found in men’s sheds) and enhanced capacities (through shed participation) to cope with health affecting challenges encountered. This positively impacts health and wellbeing (Antonovsky, 1979, 1993, 1996). Just being aware that one is able to access the types of community-based resources, of those found at men’s sheds, can be of benefit to one’s wellbeing. However, just as men’s sheds are a sanctuary for their participants as a community-based place ‘to be’, they can also be hives of activity for men ‘to do’.

Humans ‘doing’

As with proximal outcome 9 (pO₉) which became a context (C_G) for the four C \rightleftharpoons M \Rightarrow O configurations above, proximal outcome 10 (pO₁₀) *men spending time at the men's shed and having somewhere to actively ‘do’* also becomes a context (C_H) in the following outcome chains.

C_H: : **If** men spending time at the men's shed and having somewhere to actively ‘do’,

M_{viii}: **then** men gain access to resources that facilitate them taking part in pragmatic projects,

pO₁₆: **leading to** men engaging in purposeful activities,

dO₁: **leading to** enhanced health and wellbeing

Figure 48: C_H \rightleftharpoons M_{viii} \Rightarrow pO₁₆ \rightarrow dO₁

This proximal outcome (pO₁₆) is supported by evidence in the literature review regarding Adult Learning (Milligan et al., 2016, Culph et al., 2015a). Furthermore, support for these claims is found in the ‘Men’s sheds offer therapeutic meaningful occupation’ section of the Shed-based Resources chapter (8) (Carragher, 2017; Hewitt et al., 2010; Jonsson et al., 2000; Thomson, 2008; Wilson et al., 2013, p.417, citing). It is also supported by findings in the Human-based Resources chapter (9).

The same context and mechanisms lead to the three further proximal outcomes (below) and to the distal outcome of enhanced health and wellbeing:

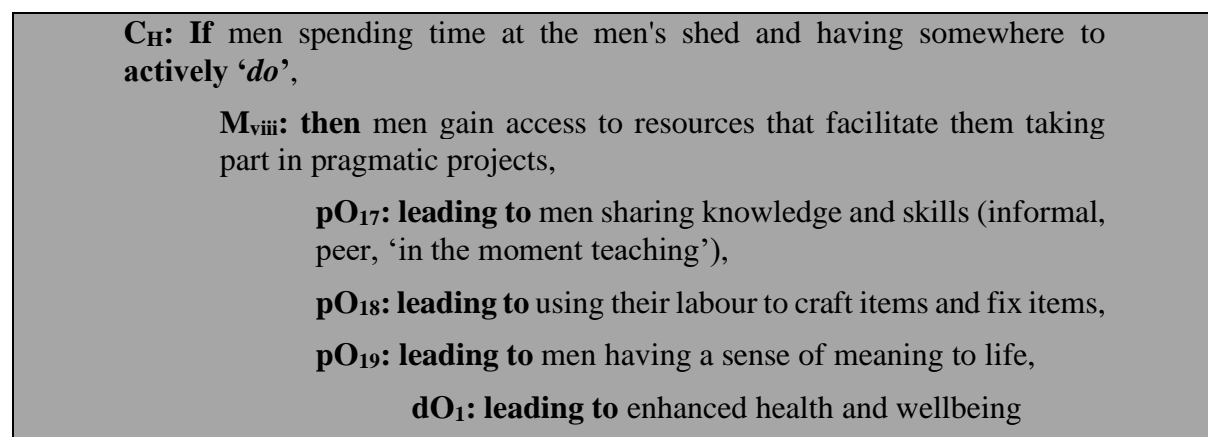


Figure 49: C_H ⇔ M_{viii} => pO₁₇, pO₁₈, pO₁₉ → dO₁

Proximal outcome (pO₁₇), men sharing knowledge and skills benefits the health and wellbeing of both sharer and learner, is supported by published evidence (Dolan & Fujiwara, 2012; Jenkins & Mostafa, 2012, 2015; Merriam & Kee, 2014). This is further supported in the literature review (Carragher, 2017; Cavanagh et al., 2013; Culph et al., 2015; Reynolds et al., 2015; Taylor et al., 2018), in the Shed-based Resources chapter (8), section ‘Wanting to share knowledge and skills’ (Martin et al., 2008), and in the Human-based Resources chapter (9) ‘Physical space and equipment for pragmatic activities’ and ‘Availability of physical space and equipment facilitate autonomy’ sections.

Proximal outcome 18 (pO₁₈), participants using their labour to craft and fix items, is theorised to enhanced health and wellbeing because being autonomous and exerting control over one's life is theorised to be better for health and wellbeing than not (Enoch, 2021; Griffin & Tyrrell, 2013). There is established evidence demonstrating links between '*men being able to choose how to use their labour*' and '*health and wellbeing outcomes*'. For example, Fotiadis et al. (2019) found psychological autonomy affects psychological wellbeing and work-life balance and this can produce a feedback loop where work-life balance positively affects psychological wellbeing. Furthermore, literature in the systematic review (Chapter 4) supports this theory (Ahl et al., 2017; Kelly et al., 2019). The 'Availability of physical space and equipment facilitate autonomy' and 'Becoming empowered and taking collective action to address health needs' sections of the Human-based Resources chapter (9) adds to the evidence supporting this theory.

Proximal outcome 19 (pO₁₉), men having a sense of meaning to life, is found to be important to health and wellbeing (Finn et al., 2007; Savolaine & Granello, 2002). This theory is supported in the literature review (Ahl et al., 2017; Ballinger et al., 2009; Foster et al., 2018; Hansji et al., 2015; Kelly et al., 2019; Martin et al., 2008; Milligan et al., 2015; Moylan et al., 2015). The outcome is further supported with data in the sections 'Social interaction' and 'Men's sheds offer therapeutic meaningful occupation' in Shed-based Resources (chapter 8) and in the 'Mutual Benefit' section of Human-based Resources (chapter 9).

How *tested* PT2 addresses research objective 2 and contributes to research objective 3

The programme theories within the theme of Shed-based Resources address the second objective to understand what led men to make an initial and continued attendance at their men's

shed and some of the circumstances around these decisions. The programme theories also help to establish the characteristics of men's sheds that are associated with improved health and wellbeing: the third objective of this thesis.

The men in this study were all aged 40 years and over, up to 86 years of age. Before attending the men's shed, all the men had '*time on their hands*' and were effectively older "NEETs" – Not in Education, Employment or Training⁹ (Social Exclusion Unit, 1999), – due to retirement, unemployment or underemployment. Not being involved in external activities, post-retirement, has been shown to create 'domestic stress' and is problematic for health and wellbeing (Osborne, 2012). Active engagement can be detrimentally affected by poverty or lack of disposable income to fund activities. Men's sheds are a community resource that can support men in active engagement.

Men's sheds are appealing to men who either like to engage in utilitarian activities or would like to learn about the activities that men's sheds offer, such as, woodwork and metalwork. Well-attended men's sheds offer resources participants value. For example, material resources such as a large enclosed space within which to construct a woodwork project and/or the equipment required to fashion wood quickly and effectively. Other resources include social opportunities (social resources) to interact with peers, and to pick the minds of other participants (cognitive resources) who share knowledge and skills.

By attending a men's shed, men are accessing a 'third place'; a community space for social interaction beyond the home or a place of work (Oldenburg, 1999). As noted in the Middle-Range Theory chapter (10), men's sheds align to the eight characteristics of third places being

⁹ The term "NEETs" was popularised after it was used in a UK Government Social Exclusion Unit report to describe younger people (16+ years) who are 'not in education, employment or training'.

a community-based *neutral ground*; a *leveller* where people are equals. A place where *conversation is the major activity*, that is ‘*accessible and accommodating*’ of men and where there are ‘*the regulars*’. A place that keeps ‘*a low profile*’, where ‘*the mood is playful*’ where men feel it is ‘*a home away from home*’ (Oldenburg, 1999, see pp.20-42). Just ‘being’ in men’s shed environments is good for participants, hence the emphasis on men, as humans, ‘being’.

Furthermore, participation in activities offered at these third places enables ‘meaningful occupation’, the antithesis of what Karl Marx described as ‘alienation’. Environments that support men to re-connect with their ‘species being’ (Wolff, 2003) through ‘occupational therapy’ (Reilly, 1962). Men engaging in men’s shed-based activities is good for their health, hence the emphasis on men, as humans, ‘doing’.

The qualities of such environments are salutogenic (Antonovsky, 1979, 1993, 1996). Men’s sheds enhance men’s ‘general resistance resources’ (GRR), particularly their psychological and social resources, along with access to economically funded resources that help participants exert volition over their lives (Taylor et al., 2014). Men’s sheds support participant’s ‘sense of coherence’ (SOC), particularly ‘manageability’ – the feeling that they have enough resources to meet demands – and, ‘meaningfulness’ – having a sense of meaning that motivates towards a health promoting direction (Lindström & Eriksson, 2005).

Human-based resources

The third and final initial programme theory, generated for this thesis, examined ‘Human-based Resources’.

Generation: initial PT3 on Human-based Resources

The generated initial programme theory suggested that,

If men bring, share and learn from experiences, knowledge and skills through social interaction,
then men can enhance their own and others' abilities,
leading to improved health and wellbeing and resilience to negative effects on wellbeing

Figure 50: *initial* Programme Theory (*iPT*) 3 on human-based resources

Exploration: refined PT3 on Human-based Resources

The initial programme theory was explored using data from the case study site. The presence of previously discussed ‘shed-based resources’, such as enough space and material resources to support men’s shed activities, is a context within which it was theorised men’s human-based resources could interact, leading to outcomes associated with improvements in health and wellbeing. This was presented as the following $C \rightleftharpoons M \Rightarrow O$ configuration:

C: **If** the men’s shed provides enough: i. material resources and/or ii. social resources and/or, iii. cognitive resources for men’s interests,
M: **then** men can volunteer their experiences, knowledge and skills, through social interaction, and
M: **then** other men can learn from other participant experiences, knowledge and skills,
O: **leading to** the enhancement of others' abilities,
O: **leading to** a feel-good factor for the volunteer sharing their skills,
O: **leading to** improved social health and resilience to negative effects on wellbeing

Figure 51: *refined* Programme Theory (*rPT*) 3 on human-based resources

Testation: tested PT3 on Human-based Resources

To test the refined programme theory, a search for secondary sources referring to ‘capital theory’ and ‘men’s sheds’ was undertaken.

As with tested PT2 on Shed-based Resources, the following tested programme theories lead on from a context (C_E) where men’s sheds provide men with suitable resources, which encourages men to attend men’s sheds (M_V). This leads to the outcomes of men spending time at the men's

shed and having somewhere: to **'be'** (a third place) (pO₉), and; to actively **'do'** (engage in therapeutic, meaningful occupation) (pO₁₀).

The following $C \leftrightarrow M \Rightarrow O$ configurations in sections 'Humans *being*' and 'Humans *doing*' (below) lead on from: pO₉ which becomes context **C_G** – **If** men spend time at the men's shed and have somewhere to 'be' – and; pO₁₀ which becomes **C_H** – **If** men spend time at the men's shed and have somewhere to 'do' (be active).

Humans 'being'

Leading off from the previous theory that men's sheds offer men a third place to 'be', it was asserted that:

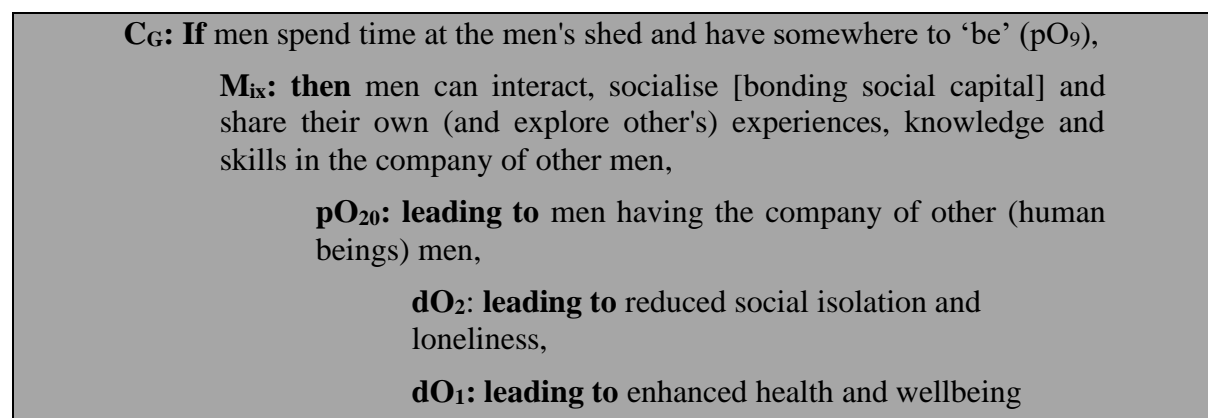


Figure 52: $C_G \leftrightarrow M_{ix} \Rightarrow pO_{20} \rightarrow dO_2, dO_1$

The proximal outcome of men having the company of other men (pO₂₀), leads to the distal outcomes of reduced social isolation and loneliness (dO₂) and of enhanced health and wellbeing (dO₁). There is support for the theory that social isolation and loneliness harm health and wellbeing. For example, cardiovascular harms and worse mental health outcomes (Leigh-Hunt et al., 2017) and poor social relationships, increasing incidence of coronary heart disease and stroke by a third (Valtorta et al., 2016). A lack of social connection has been gauged against other lifestyle factors such as the comparable risk to health of smoking more than 15 cigarettes a day (Holt-Lunstad, 2018; Holt-Lunstad et al., 2010).

Furthermore, there is evidence that reducing social isolation and loneliness enhances health and wellbeing. For example, greater social connectivity has been shown to directly affect individual and population health by increasing social cohesion and reducing loneliness (Townsend et al., 2020). Educational groups (Cattan et al., 2005), participatory interventions (Dickens et al., 2011) and shared-identity social support groups can alleviate social isolation and loneliness among older people (Cattan et al., 2005; Salway et al., 2020). The use of asset-based approaches to prevent loneliness and social isolation are recommended (Leigh-Hunt et al., 2017). This aligns with the approach used by men's shed interventions as demonstrated in the literature review (Ayres et al., 2018; Kelly et al., 2019; McGeechan et al., 2017; Milligan et al., 2015; Morgan, 2010; Nurmi et al., 2018; Reynolds et al., 2015; Wilson et al., 2019). Furthermore, it is an approach supported in the Shed-based Resources chapter (8) sections: 'Who benefits and how' and 'Men's sheds offer therapeutic meaningful occupation' (Fisher et al., 2018).

The context of men spending time at the men's shed and have somewhere to 'be' (C_G), with the mechanism of men interacting, socialising, and sharing their own and other's experiences, knowledge and skills (M_{ix}), can also lead to three further proximal outcomes. The first of these is *leading to* a sense of being accepted by other men:

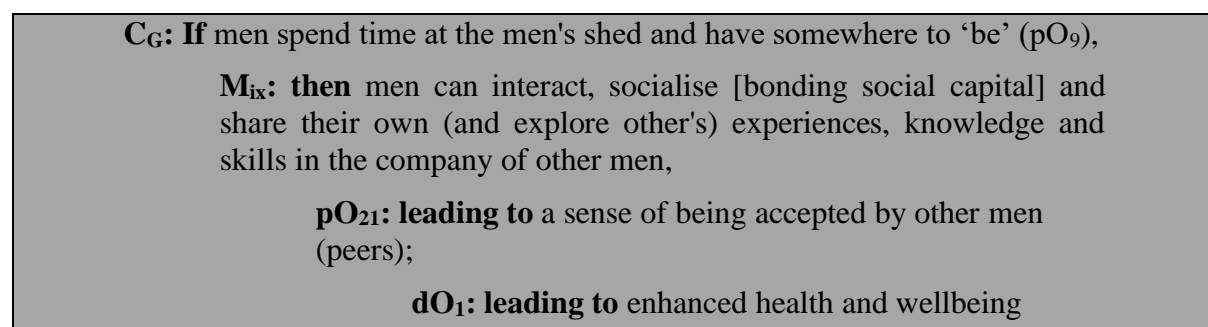


Figure 53: $C_G \Leftrightarrow M_{ix} \Rightarrow pO_{21} \rightarrow dO_1$

Being accepted by others (pO₂₁) is theorised to be beneficial for health and wellbeing (Arslan, 2018; Griffin & Tyrrell, 2013; Keyes, 1998). This theory features within the men's shed literature review (Kelly et al., 2019; McGeechan et al., 2017). Evidence of acceptance by others can be found in the data of the Shed-based Resources chapter (8) in the sections 'Men and communication' and 'Men's sheds offer a 'third place'' (Tsinaslanidou, 2015, citing: Mueller, 1980) and also in the Human-based Resources chapter (9) in the section on 'Discussions during work and break times'. Accessing a community-based space where men feels accepted by others, links to the MRT 'Third Place'; a neutral ground, which is accessible and accommodating with regulars. Time spent in this salutogenic environment (Antonovsky, 1979, 1993, 1996) enhances member's social and cultural 'capitals' and 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986).

The next proximal outcome, men learning from other participant experiences, knowledge and skills and an enhancement of abilities and status (pO₂₂), is shown in Figure 54.

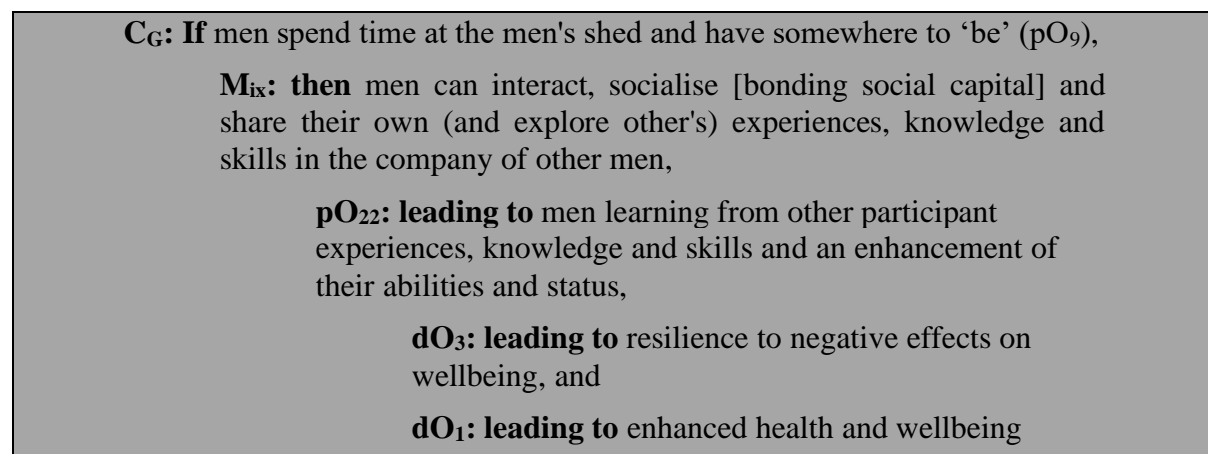


Figure 54: C_G ⇔ M_{ix} => pO₂₂ → dO₃, dO₁

Learning from other participant experiences, knowledge and skills and an enhancement of abilities and status (pO₂₂) links to 'pO₃: the andragogy of older, male, adult learning in men's sheds' and again can lead to enhanced health and wellbeing. As previously stated, there are consistent examples of men learning in the three case studies featured in the Shed-based

Resources (chapter 8) and Human-based Resources (chapter 9) findings chapters and also in the literature review (Anstiss et al., 2018; Carragher, 2017; Cavanagh et al., 2013; Cavanagh et al., 2014b; Culph et al., 2015; Reynolds et al., 2015; Taylor et al., 2018). The link between adult education and enhanced health and wellbeing is supported by literature beyond the topic of men's sheds, such as: lifelong learning contributing to community wellbeing (Merriam & Kee, 2014); positive effects on people's life satisfaction (Dolan & Fujiwara, 2012), and; that informal types of learning in later life learning are associated with higher wellbeing (Jenkins & Mostafa, 2012). These qualities lead to resilience to negative effects on wellbeing (dO₃), supported by the middle range theory of salutogenesis (MRT₆) and the concept of 'general resistance resources' (GRR) (Lindström & Eriksson, 2005) used to exert volition over their lives (Taylor et al., 2014).

As with pO₃, men learning from other participant experiences, knowledge and skills and an enhancement of abilities and status (pO₂₂) is supported by the MRT of 'Shedagogy' (Golding, 2014a), 'occupational therapy' (Reilly, 1962), and; Marx 'species-being' and anti-'alienation' (Wolff, 2003). The enhancement of abilities and status, also links with potential enhancements to member's social, cultural and economic 'capitals' and supports 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986). Furthermore, the outcome of health and wellbeing enhancement is supported by the MRT that men's 'capability' to improve their own health and wellbeing is enhanced (Nussbaum & Sen, 1993).

The proximal outcome of increased health-related conversations and greater likelihood of help-seeking (pO₂₃) has potential benefits to participant health (see Figure 55).

C_G: If men spend time at the men's shed and have somewhere to 'be' (pO₉),

M_{ix}: then men can interact, socialise [bonding social capital] and share their own (and explore other's) experiences, knowledge and skills in the company of other men,

pO₂₃: leading to increased health-related conversations and greater likelihood of help-seeking,
dO₁: leading to enhanced health and wellbeing

Figure 55: $C_G \Leftrightarrow M_{ix} \Rightarrow pO_{23} \rightarrow dO_1$

It is theorised that men are more likely to seek help from ‘ingroups’ where they feel comfortable (Kearns et al., 2015). This theory is supported in the men’s sheds literature review in Chapter 4 (Cordier & Wilson, 2014a; Hedegaard & Ahl, 2019; Misan et al., 2017; Waling & Fildes, 2017). There is also supporting data in the Shed-based Resources (chapter 8) ‘Social interaction’ section and in the Human-based Resources (chapter 9) ‘Enablement of self-help’ section (Field & Tuckett, 2016). This links to the Third Place MRT and that conversation is one of the main activities (Oldenburg, 1999). Furthermore, men learning about things that improve their health and wellbeing links to the andragogy of ‘Shedagogy’ (Golding, 2014a). Again, the men’s shed environment supports health and wellbeing; having salutogenic qualities (Antonovsky, 1979, 1993, 1996) that enhances men’s capital (social and cultural) (Abel & Frohlich, 2012; Bourdieu, 1986) and ‘capability’ to enhance their own health and wellbeing (Nussbaum & Sen, 1993).

Humans doing

The final series of $C \Leftrightarrow M \Rightarrow O$ configurations start with a context (C_H) deriving from a previous proximal outcome (pO_{10}).

C_H: If men spend time at the men's shed and have somewhere to **actively ‘do’** (pO_{10}),

M_x: then men gain access to resources that facilitate them taking part in pragmatic projects,

pO₂₄: leading to men engaging in conversation whilst working shoulder-to-shoulder and whilst socialising during break times,

dO₂: leading to reduced social isolation and loneliness,

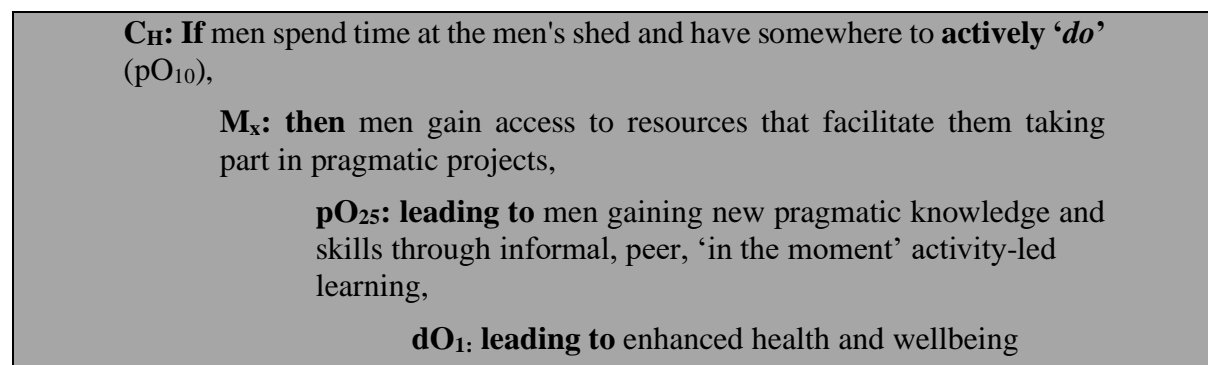
dO₁: leading to enhanced health and wellbeing

Figure 56: $C_H \leftrightarrow M_x \Rightarrow pO_{24} \rightarrow dO_2, dO_1$

Men engaging in conversation whilst working shoulder-to-shoulder – and whilst socialising during break times – can reduce social isolation, and lead to enhanced health and wellbeing.

As stated for pO_{20} , a body of evidence suggests that social isolation and loneliness harm health and wellbeing (Holt-Lunstad, 2018; Holt-Lunstad et al., 2010; Leigh-Hunt et al., 2017; Valtorta et al., 2016). Furthermore, there is substantive evidence that reducing social isolation and loneliness enhances health and wellbeing (Cattan et al., 2005; Dickens et al., 2011; Leigh-Hunt et al., 2017; Salway et al., 2020; Townsend et al., 2020). Men's sheds are environments that reduce loneliness and isolation. This well documented in the men's sheds literature (Ayres et al., 2018; Kelly et al., 2019; McGeechan et al., 2017; Milligan et al., 2015; Morgan, 2010; Nurmi et al., 2018; Reynolds et al., 2015; Wilson et al., 2019). This was also found in the data generated for this thesis in the Shed-based Resources (chapter 8) 'Who benefits and how' section and in the realist review section 'Men's sheds offer therapeutic meaningful occupation' (Fisher et al., 2018).

The same context and mechanism also led to pO_{25} .

Figure 57: $C_H \leftrightarrow M_x \Rightarrow pO_{25} \rightarrow dO_1$

This outcome (pO_{25}) has similar benefits to that found in pO_{17} and the other outcomes involving adult learning (pO_3 and pO_{22}). Adult education enhances personal wellbeing (Jenkins & Mostafa, 2012), life satisfaction (Dolan & Fujiwara, 2012) and community wellbeing (Merriam

& Kee, 2014). This proximal outcome of adult education was found in the literature review of men's sheds (Carragher, 2017; Cavanagh et al., 2013; Culph et al., 2015; Reynolds et al., 2015; Taylor et al., 2018). The Human-based Resources chapter (9) sections 'Physical space and equipment for pragmatic activities' and 'Availability of physical space and equipment facilitate autonomy' demonstrates that men can learn new knowledge and skills. This outcome links to: the andragogy of 'Shedagogy' (Golding, 2014a); Occupational therapy (Reilly, 1962); pragmatic activities congruent with our 'species-being' and anti-'alienation' (Wolff, 2003, citing Karl Marx); men's sheds as salutogenic environments (Antonovsky, 1979, 1993, 1996); capital enhancement (Abel & Frohlich, 2012; Bourdieu, 1986), and; potential to increase one's 'capability' to look after health and wellbeing (Nussbaum & Sen, 1993).

Finally, in the same context of men spending time at the men's shed and having somewhere to actively 'do' (C_H), and with the mechanism of men sharing their skills (M_{xi}), men can experience a feel-good factor from volunteering (pO_{26}), which is likely to enhance their wellbeing (dO_1).

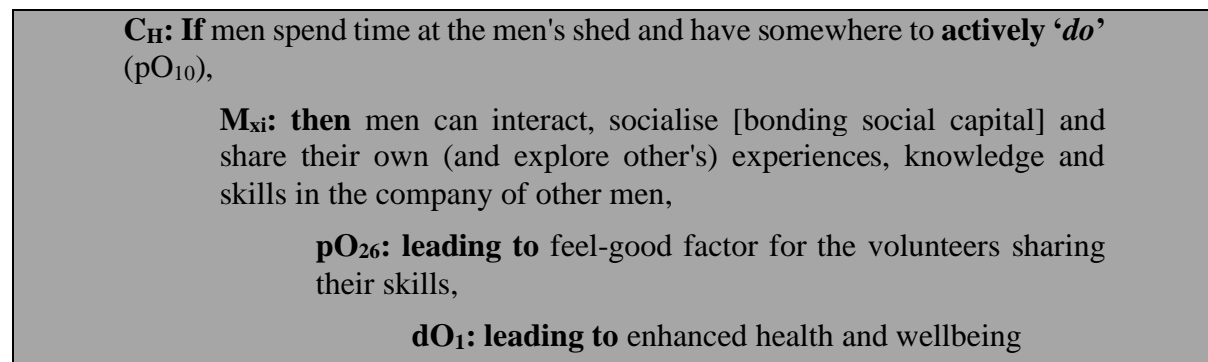


Figure 58: $C_H \rightleftharpoons M_{xi} \Rightarrow pO_{26} \rightarrow dO_1$

This proximal outcome (pO_{26}) was seen in the Shed-based Resources chapter (8), section 'Wanting to share knowledge and skills' (Martin et al., 2008) where participants demonstrated that they proactively wanted to share their knowledge and that seeing other learning evoked feeling of happiness. Associations of this outcome can be seen with the MRT of 'Shedagogy' (Golding, 2014a); men's sheds as salutogenic environments (Antonovsky, 1979, 1993, 1996);

capital enhancements (Abel & Frohlich, 2012; Bourdieu, 1986), and; enhanced ‘capability’ to look after health and wellbeing (Nussbaum & Sen, 1993).

How *tested* PT3 addresses research objective 3

The data and programme theories developed in the final findings chapter (9) add to the understanding of men’s shed characteristics (research objective 3) and how participation in men’s sheds enhances health and wellbeing. As stated, there is cross-over between the findings in chapter 8, shed-based resources and chapter 9, human-based resources. In the shed-based resources chapter (8), it was explained that before attending men’s sheds, some men were socially isolated and lonely. Reduction of social isolation and loneliness enhances wellbeing. The shed-based activities give men reasons to attend a men’s shed. This rational reason for men’s attendance affords men opportunities for social interaction and enhances bonding social capital. As such men’s sheds are social organisations that help socially isolated men to reduce loneliness through activities such as teaching and learning. By attending men’s sheds, participants are learning new skills and are interacting with others. Both of these outcomes support men’s health and wellbeing.

Even for men who like to *keep themselves to themselves* or who are more socially awkward and not natural conversationalists, participating at a men’s shed gives men legitimate reasons for being at the men’s shed and benefiting from the company of other men (human beings). Whilst engaging in meaningful occupation, and working shoulder-to-shoulder, men are more likely to engage in conversation – including health-related conversations – and increase the likelihood of help-seeking.

At men’s sheds, participants share their own and explore other's experiences, knowledge and skills. Men’s sheds are environments that salutogenically support men’s ‘general resistance

resources' (GRR) (Lindström & Eriksson, 2005) to help and support one another. Men's shed attendance enhances social, cultural and economic 'capitals' and supports 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986); the resources from which they can help themselves. Participation enhances men's 'capability' to improve their own health and wellbeing (Nussbaum & Sen, 1993).

How the *tested* programme theories and middle-range theories relate to the expectations of the study

This thesis addresses the research question using the realist inquiry framework: 'what works, for whom, in what circumstances, how and why'? (Wong et al., 2013, p.2). This is the fourth stage of the cycle of realist inquiry; refining programme theory specification (See Chapter 5). The research question is asking what about men's shed interventions *work* to improve health and wellbeing, for what population, under what contextual circumstances, and how do mechanisms of change within the intervention interact with the contextual circumstances to cause improved health and wellbeing and, finally, what explanatory theories can give reasons for why this occurs? To answer all the components of this comprehensive question, the research objectives will be addressed in turn.

RO1: *What is it about men's shed interventions that work to improve health and wellbeing?*

The first research objective was: to examine the setup and implementation of men's sheds to determine whether there are health and wellbeing enhancing characteristics relating to i) Public Health organisation-led men's sheds; ii) community-led men's shed, and; iii) men's sheds that adhere to funder's monitoring and evaluating criteria.

My initial identification of three types of men's shed (public health-led, community-led, and a hybrid – community-led, but financially supported – men's sheds) is a useful heuristic to help understand key contextual factors when researching men's sheds and other community-based interventions. However, the initial programme theory suggesting that the community-led men's shed would be best placed to provide for its members did not play out. The hybrid community-led, but financially supported men's shed, where the interests of men are championed by experts 'on tap', but 'not on top' (Kindervatter, 1979, cited in Green and Tones, 2010, p.429) provides an appealing physical environment for men interested in men's shed activities. The environment facilitates a health promoting social environment; aligning to the middle-range theory 'salutogenesis' (MRT₆). This was exemplified by Market Town Men's Shed.

As the fieldwork and data collection at the public health-led men's shed (Industrial Town Men's Shed) was nearing its end, personnel at this men's shed started to take control by leading the men's shed themselves. Up until this point the facility provided some functionality as a men's shed. However, from my observations and understanding of participants and former Public Health organisation programme leads, the host organisations did not have the financial stability or resources (such as time) to invest in the men's shed after its initial setup. This resulted in it working sub-optimally for the participants. More recently the men's shed seems to be on a trajectory of providing a more suitable facility for its membership. This is associated with participants stepping up to take more responsibility by choosing their own venue for the shed and becoming a constituted group with plans to become a registered charity; so as to raise funding for the day-to-day functioning of the shed. The interests of the men were championed by experts 'on tap', personnel from a local church group, to support volunteering men in acquiring the knowledge and skills to develop an organisation that better served their chosen purposes.

If men's sheds have paid staff, they can be responsible for: attending at specific times; opening up the shed for others; remaining present throughout the shed's open hours; providing first aid cover; staying until the very end of every shift to lock up the premise. However, men's sheds without paid for staff, require transformational leadership to '*transform*' the behaviour of participants to cover one or more of the above roles. Taking on such responsibilities is a considerable commitment, impacting the individual man and potentially his family.

The community-led men's shed had not been able to consistently transform any member's behaviour beyond that of volunteering by the Chair. This means that the facility is only open one day per week to serve two small groups of men: for 3 hours one morning and 3 hours one afternoon.

These findings suggest that men's sheds have roles which require fulfilment by staff or volunteers. Furthermore they require support in terms of funding to setup and maintain their continuation and support in terms of expert help when required. This was provided at Market Town Men's Shed by a Community Development Worker. At Industrial Town Men's Shed, this was starting to be seen with the church group personnel supporting the shed with funding and charitable status. City Men's Shed was less functional with the smallest footprint for activities to take place and with little support from expert help or internal volunteering.

RO2: *For whom do men's sheds work and under what circumstances*

The second research objective was: to understand how the circumstances of those who attend led to men's shed participation.

Men's shed participation appeals to men who are interested in the activities that take place at their local men's shed. These activities are often traditional, working-class, pursuits of creating things with their hands involving materials such as wood and metal. To regularly attend a men's

shed, men must have time on their hands or they must 'make time' by forgoing other opportunities; so as to prioritise pursuits at the men's shed. For this reason participants are often retired or not in employment, education or training for some reason (NEETS, Social Exclusion Unit, 1999); perhaps due to unemployment or because they have a health condition that permits them from being able to find and maintain employment.

Linked to this, men often join a shed at the time of a transition or after transitioning; perhaps from work into retirement or from one geographical location to another. They might be socially isolated and/or engage in few rewarding activities, such as meaningful work or hobbies. Men shed participation gives men a purpose and a sense of identify beyond (former) job titles, for example, being an engineer, and/or beyond family roles, for example, being a widower and/or being a father to adult children.

In the socioeconomically deprived area of Industrial Town Men's Shed, the average age of participants was younger and the men were more likely to be unemployed or not able to work due to a health condition. This is a contextual circumstance which influences the men more likely to attend this men's shed.

RO3: *How* do men's sheds work to improve health and wellbeing and *why* do they work?

The third research objective was: to establish the characteristics of men's sheds that are associated with improved or diminished health and wellbeing.

How men's sheds work

Due to the interwoven and complex nature of interventions placed within complex social systems, it can be challenging to explain and organise explanations of how social programmes

function. For these reasons, I will use the lens offered by the programme theories to discuss the factors (divided into contexts, mechanisms and outcomes) that describe how men's sheds support participants health and wellbeing.

From the perspective of 'organisational arrangements' (tPT1)

When men's shed leaders create and maintain physically and socially conducive environments that appeal to local men (C_A), men attend and take part in activities of interest (M_i) and leaders and participants share values (pO_1). When personnel share similar values (C_B), men attend, participate and contribute knowledge, skills and labour (M_{ii}) leading to men feeling socially connected, involved and committed to their men's shed (pO_2). Men also learn knowledge and skills (pO_3). These proximal outcomes (pO_1 , pO_2 , and pO_3) enhance health and wellbeing (dO_1). When these contexts, mechanisms and proximal outcomes apply men's sheds *work* to support participant health and wellbeing.

From the perspective of 'shed-based resources' (tPT2)

In the context of men not in education, employment or training who feel they might benefit from a local men's shed material, social and/or cognitive resources (C_D) potential participants might make a first attendance (M_{iv}) which can lead to regularly attendance (pO_7). If men's sheds are judged by men to provide enough material, social and/or cognitive resources to retain their interests (C_E), men will attend (M_v), leading to men spending time at the men's shed and having a third place to '*be*' (pO_9) and actively '*do*' (pO_{10}).

When men are *being* at men's sheds (C_G) they can interact, socialise and share in the company of other men (M_{vii}), leading to enhanced social interaction (pO_{12}), a sense of belonging (pO_{13}), men gaining access to community resources - space, equipment, tools, materials (pO_{15}). Added benefits might also include: men experiencing psychological benefits of getting out of the house and into different surroundings; participants enacting a different '*role*' beyond that of

being a ‘husband’ to a wife or a ‘father’ to a child; men getting respite from their family and their family getting respite from them. Furthermore, families might worry less about the participant knowing that they have their men’s shed activities and supportive friends (pO₁₄). These proximal outcomes all enhance health and wellbeing (dO₁).

When men spend time at sheds *actively doing* (C_H), then they gain access to resources that facilitate them taking part in pragmatic projects (M_{viii}). This can lead to them engaging in purposeful activities (pO₁₆), sharing knowledge and skills (pO₁₇), using their labour to craft items and fix items (pO₁₈) and giving them a sense of meaning to life (pO₁₉). Again, these proximal outcomes enhance health and wellbeing (dO₁).

From the perspective of ‘human-based resources’ (tPT3)

Returning to the cross-cutting theme of men having somewhere to ‘be’ at men’s sheds (C_G), men can interact, socialise and share their own (and explore other's) experiences, knowledge and skills in the company of other men (M_{ix}). This can give men the company of other men (pO₂₀) which can reduce social isolation and loneliness (dO₂) and enhanced health and wellbeing (dO₁). Furthermore this context (C_G) and mechanism (M_{ix}) can lead to a sense of being accepted by other male peers (pO₂₁) and to increased health-related conversations and greater likelihood of help-seeking (pO₂₃) which again leads to enhanced health and wellbeing (dO₁). Lastly in this theme, men learn from other participant experiences, knowledge and skills and enhance their abilities and status (pO₂₂). This can lead to enhanced resilience to negative effects on wellbeing (dO₃) which further enhances their health and wellbeing (dO₁).

Finally, we return to the cross-cutting theme of men having somewhere to actively ‘do’ at men’s sheds (C_H) and men interacting, socialising, sharing their experiences, knowledge and skills (M_{xi}). This can lead to a feel-good factors associated with volunteering, leading to enhanced health and wellbeing (dO₁). Furthermore, by having somewhere to actively ‘do’ (C_H),

and men having access to resources that facilitate them taking part in pragmatic projects (M_x), this can lead to men gaining new pragmatic knowledge and skills through informal activity-led learning (pO_{25}) which can again lead to enhanced health and wellbeing (dO_1). This same context (C_H) and mechanism (M_x) can lead to men engaging in conversation whilst working shoulder-to-shoulder and whilst socialising during break times (pO_{24}). Such activities can lead to reduced social isolation and loneliness (dO_2) which enhances health and wellbeing (dO_1).

Why men's sheds work

Theories give reasons for why men's sheds work to improve participant health and wellbeing. When men's sheds are led in a way that emphasise the values that participants share, such as, there being no boss, all participants being equal and all observing the rules of the shed, this is (MRT_1) 'value congruence' (Kristof, 1996) which promotes a conducive social environment for men to get on in each others' company.

Conducive environments for activities men want to take part in, and environments that facilitate social interaction between men, give attendees a 'sense of community' (MRT_2) and men experience 'social connectedness'. When men's sheds are places where participants feel like 'members' and they can 'influence' their men's shed, members are more likely to be flexible and to be influenced by the men's shed leadership. When men feel some of 'their needs are being met' and that they 'share an emotional connection' with others, men's sheds fulfil the criteria theorised by McMillan and Chavis (1986) to evoke a 'sense of community' (MRT_2).

Men's sheds are places of adult learning through an andragogy of what Barry Golding terms 'Shedagogy' (MRT_3); an environment where learning is not explicitly named but the environment facilitates collaborations and hands-on kinaesthetic processes are led by the learner as they desire to discover knowledge and skills (2014a). As described throughout this chapter, adult education is associated with wellbeing benefits.

The human need for a community-based ‘third place’ is theorised by Oldenburg (1999) to enhance health and wellbeing. Men’s sheds align well to the eight criteria of a third place (MRT₄) beyond the home and a place of work.

Furthermore, the occupational activities that take place within men’s sheds are theorised to be therapeutic (MRT₅) (Reilly, 1962) and beneficial for wellbeing. Adding to this, men’s sheds provide a facility supporting what Karl Marx theorised to be our innate ‘species-being’ (MRT_{5a}); the antithesis of causes of alienation (MRT_{5b}).

Men’s sheds, as social interventions, involving groups of human beings are complex. Theories of (MRT₇) ‘capital’ (Bourdieu, 1986), capital interaction (Abel & Frohlich, 2012; Bourdieu, 1986) and enhancement of capability (Sen, 1993, 1999) help to explain that men’s sheds support participants to enhance their economic, cultural and social capital and that men’s sheds support men’s (MRT₈) capabilities (Sen, 1993) to ‘be’ and ‘do’ inline with their values which enhance health-related ‘action to reduce social inequalities’ (Abel & Frohlich, 2012).

From the above theorisations, it is not a conceptual leap to suggest that men’s sheds are (MRT₆) salutogenic environments (Antonovsky, 1979). They support participants to re-create their health and wellbeing. Men’s sheds are places where, as a man, *being in them*, and *doing at them*, in the company of other men, is health promoting.

Segueing from *my qualitative research* to the *quality in my qualitative research*

The above section of this Discussion chapter has covered how the research question and objectives have been addressed by the development of *initial* PTs, *refined* PTs and finally *tested* PTs. The chapter has also demonstrated how middle-range theories integrate with the three

tested PTs. Furthermore, additional evidence from literature has been sought to provide links between proximal outcomes (pO_x) and distal outcomes (dO_x).

Having presented the *tested* programme theories as Context, Mechanism, Outcome configurations and explicated why the findings support the view that men's sheds can enhance the health and wellbeing of participating men, there is one further task to undertake. There needs to be a defence of the quality of this predominantly qualitative research methodology and how the reader can have confidence in the claims that have been made.

The quality of this qualitative research

‘[C]omplexity confronts evaluation [/research] with a never ending challenge that cannot be completed’ (Pawson, 2013, p.112)

This second part of the Discussion chapter discusses the strengths of this work using epistemological markers of qualitative research.

Strengths of this qualitative research

The research design for the data generated with men's shed participants used the qualitative, anthropological strategies of participant observation and interviewing (Maxwell, 2012). Secondary data collected for the systematic literature review, realist reviews and middle-range theory has also predominantly focused on qualitative data. Qualitative research is underpinned by research philosophies, methodologies and methods of data generation and collection that produce ‘...richness, depth, nuance, context, multi-dimensionality and complexity’ (Mason, 2002, p.1). These have been the data needs required to answer the research question and these are qualitative research strengths.

Quality in qualitative research

‘Quality’ in qualitative research is contested and links to ontological debates about the existence of a ‘real’ social world and epistemological disputes on what can be known (Mays & Pope, 2000).

As discussed in the Methodology section (Chapter 5) there is no neutral philosophical position and so when producing knowledge researchers should provide an explanation of their ontological and epistemological positions. These positions or *beliefs* can be drawn upon to help justify research decisions the quality of the research processes. As previous stated, and as will be evident from the research design chosen for this research, I have a realist ontology. I believe there is a ‘reality’ of the social world. With this ontological position, I have a subjectivist epistemology. I believe knowledge is fallible and that knowledge is based upon theories about phenomena (Maxwell, 2012; Pawson & Tilley, 1997). This philosophical position is ‘*scientific realism*’ (Haig & Evers, 2015; Pawson, 2006b, 2013).

Ray Pawson (2006b), a proponent of scientific realism, asserts that the ‘*relevance*’ of a primary study to secondary inference is the first test of quality appraisal, with the ‘*trustworthiness*’ or ‘*rigor*’ of methods by which evidential fragment are conceived being the second and final assessment of quality. Other champions of qualitative methods argue that qualitative research should be assessed on ‘*validity and relevance*’ (Mays & Pope, 2000, p.50). It is important that readers of this work are able to ensure the methods used in this research are appropriate and that they can examine the claims made in the findings (Mays & Pope, 2000). The following sections discuss and justify my research choices and the quality of my research.

Relevance

In terms of relevance, I have added to the understanding of men's sheds by showing how and why men's sheds work to improve health and wellbeing of predominantly older men, who are not in education, employment or training (NEETs). These explanations – supported by newly generated evidence, secondary sources and middle-range theory – increase confidence in the existing breadth of evidence about men's sheds as salutogenic environments for their participants.

Rigor (trustworthiness and reliability)

The term '*rigor*' is sometimes referred to as *the consistency* by which the methods have been employed. The consistent use of methods and analytical procedures, along with their ability to yield at least similar findings, is also referred to as '*reliability*' (Noble and Smith, 2015, citing Long & Johnson, 2000; Pope & Mays, 1995).

Following the systematic review of men's shed literature, the methodology used in this thesis has aligned to scientific realism (Haig & Evers, 2015; Pawson, 2013). As is the nature of realist enquiry, I have consistently employed realist methods which involves building evidence. These fragments of evidence are used for different purposes. As such, to subject all data to a consistent process, such as the use of a 'pre-formulated checklist' (Pawson, 2006b) for qualitative research, would not be congruent with realist methodology. Pawson explains this by stating:

“There is a gradual change in what is sought by way of evidence, and the data have to meet different challenges [and so the] ...alternative primary question for quality appraisal...[is:] *Is it of succinct quality to help in clarifying the particular explanatory challenge that the synthesis has reached?*” (Pawson, 2006b, p.89, my italisation).

There has, therefore, been a commitment to the consistent use of realism which involves changes in what is being asked of data and the methods used to generate and collect data as the needs of the investigation change.

Trustworthiness

Further to this, it is suggested that the use of procedural criteria to ensure ‘*trustworthiness*’ in qualitative research is ‘seriously flawed’ (Maxwell, 2012, p.129). What is more useful is that a ‘decision-trail’ is clear and transparent so that another independent researcher should be able to bring about the same answers if repeating these processes with this data (Noble & Smith, 2015; Pope & Mays, 1995). With realist research there is a need to strike a:

‘...balance between pursuing an ever extending set of questions and... to achieve closure in any particular inquiry’ (Pawson, 2013, p.85).

It is for these reasons that I have clearly reported the decisions made about my research. Clear reporting and reflexivity is encouraged in qualitative research and is an inherent part of realist inquiry because:

‘[g]iven the infinite number of potential influences in programme outcomes and the infinite array of theories to account for them, inquiry proceeds by taking some features on *trust* and by focusing on certain others – a difficult estimate known as the *trust-doubt ratio* (Pawson, 2013, p.86, my italisation).

It is important to be clear about what I, as a researcher, am trusting and what lines of inquiry I have taken. This links to ‘*truth value*’ and the recognition, as mentioned above, that there can be multiple views of reality and that my experiences and viewpoints have informed my choices of methodological approach (Noble and Smith, 2015, citing Lincoln & Guba, 1985). Whilst it is not possible to achieve ‘objectivity’, I have strived to steer clear of ‘rampant subjectivity’ by clearly and accurately presenting participant perspectives (Pawson, 2013, p.107). I have also done what I can to follow Jennifer Mason’s advice to be ‘thorough, careful, honest and accurate’ in the planning, generation and reporting of this research (2002, p.188).

Reliability

Reliability refers to the consistency of what is recorded and presented, along with personal and methodological biases that might have influenced the consistency of analytical procedures and findings (Noble & Smith, 2015). I digitally recorded the audio of all the interviews for this research project. Sometimes interviews were conducted in a noisy space, for example, inside a men's shed or at a nearby community café. Unfortunately, background noise during the recordings of some of the City Men's Shed participants interviews did interfere with the transcription process. I checked with participants when there were sections of the audio recordings that I could not decide for. Then, as requested by the research ethics committee, I deleted the audio recordings keeping only the transcripts. The deletion of these recordings will unfortunately prevent their re-use but the transcripts remain useable to enable the replicability of this study's analysis; should such a feat be required.

My main claim regarding the rigor of this work is that I have not only produced a systematic review of what evidence is published in relation to men's sheds and health and wellbeing impacts. I have conducted new empirical investigations in three men's sheds and I have recorded what happened with authenticity. In response to the coronavirus pandemic, I changed the research design to include realist reviews. These were used to test the claims made. I have synthesised these primary and secondary data sources to form a realist synthesis (Maidment et al., 2020). Finally, I have sought middle-range theories to underpin the logic of the programme theories I developed from the data.

The main claim regarding the reliability of my work is that it has been subject to consistent 'organised scepticism' (Pawson, 2013, p.86); arbitrated by my supervisors who challenged the claims I have made and have encouraged the inclusion of more quantity or quality of evidence depending on the claims being made.

Validities

The ‘validity’ of research is concerned with what is being measured or claimed and the extent to which such claims reflect the phenomenon under scrutiny (Mason, 2017; Noble & Smith, 2015). Certain types of validity are often associated with quantitative research (Noble & Smith, 2015). ‘Irrealists’ (Fryer, 2020) or ‘antirealists’ argue that qualitative and quantitative research are very different and that the validity of qualitative research cannot be judged using the same criteria as for quantitative research (Mays & Pope, 2000). However, as a ‘realist’ I believe it is possible – whilst understanding that there are different aims of qualitative and quantitative research – to judge qualitative research by similar criteria to that of quantitative data validity (Mays & Pope, 2000). With an ontological perspective of there being an ‘underlying reality’, I can attempt to represent this reality; a philosophy that Hammersley’s (1992) calls ‘subtle realism’. This philosophy can be used across both quantitative and qualitative research.

The aim of qualitative research is to develop concepts in order to aid understanding of the social world, with questions such as: What is a men’s shed? and How do men’s sheds vary? This is different to quantitative research which seeks to provide quantified answers, for example: How many men’s sheds improve health? and To what degree is health improved? (Pope & Mays, 1995). The main strength of qualitative research is its potential for validity (Pope & Mays, 1995), of which there are four types: Internal validity; External validity; Ecological validity; Construct validity.

Internal validity

Internal validity refers to the extent to which the method provides evidence of what it claims to investigate. This study has a clear research question and objectives and uses appropriate methods of data generation to make claims about what has been observed in three case study sites and in literature ‘*relevant*’ (see ‘Relevance’ above) to men’s sheds or theories that can be

applied to men's shed programmes. As stated, my analysis of the generated data has been overseen by two PhD supervisors whom have seen interview transcripts and have seen claims I have made based upon interview transcripts.

External validity and 'generalisabilities'

External validity is the extent to which findings are generalisable. Part of the reason for examining three different types of organisational arrangement of men's shed was to demonstrate that men's shed are not all alike. This sampling framework was chosen purposefully to enable in-depth understanding and programme theory development, rather than generalisation (Patton, 2002). Indeed, Pawson and Tilly assert that:

‘...scientific realism casts doubt on the very possibility of the sort of universal statement that the term ‘generalization’ [sic] seems to imply’ (1997, p.86).

Furthermore, I have made it clear that there are differences about the locations of the men's sheds and the corresponding socioeconomic circumstances of the neighbourhoods where men's shed are situated. However, each men's shed, and the sample of men's shed participants, were subjected to the same processes of data generation. Data was analysed with a consistent retroductive approach.

It is suggested that generalisations of qualitative data can be considered in four ways: naturalistic generalisation; transferability; analytical generalizability, and; intersectional generalizability (Smith, 2018).

- *Naturalistic generalisation* occurs when research resonates with reader's experiences or events observed. I cannot pre-judge if my research will evoke memories of similar occurrences for readers and so this is not a measure of qualitative research on which I can defend my work by at the time of writing. However, I have done my best to give the reader

accurate accounts of the participant's experiences, what men's shed participation brings to men's lives and how this impacts their health and wellbeing.

- The *transferability* of research can be assessed by asking 'to what extent are these results transferable to other settings?' (Smith, 2018, pp.140-141). This occurs when research findings overlap with other situations; what Noble and Smith refer to as 'applicability' (2015). To facilitate this I have reported findings that invite transferability having paid attention to the context of each shed and the circumstances of the participants of each venue. These contextual descriptions help readers understand to what degree the findings can be generalised to their groups or topics of interest. The case study settings, their participants, and participant experiences, have been reported in sufficient detail to enable the reader to judge the relevance (see above) of the findings to their setting of interest.
- *Analytical generalisation* refers to generalisations of concepts or theory. The process of refining and testing programme theories and establishing links to abstracted middle-range theories demonstrates that the research produced in this thesis has analytical generalisability. If future research, with different contexts or population groups, is supported by the findings of this thesis, this will also be a form of analytical generalisation.
- Finally, regarding generalisabilities, *intersectional generalisability* can refer to in-depth, longitudinal community-based research of oppressed people and social movements of resistance (Smith, 2018). It has been said that men's sheds are a 'social movement' of men (Golding, 2015b) who are re-creating their health and wellbeing in supportive community-based environments. Only time will tell if this research – as part of a large body of research on men's sheds – inspires readers to apply these findings to other contexts.

Ecological validity

Ecological validity refers to the applicability to people's everyday lives. The accounts recorded and used in this thesis refer to real people, living part of their lives within a social structure: a men's shed. Men's shed members seemed to behave as they would without the presence of a researcher. Participants seemed to accept me, and/or carried on regardless of my presence. I wanted there to be minimal intrusion and to see the men behave as they normally would so that I could understand what behaviours and interaction might be beneficial for their health and wellbeing and how and why this might be so. To the best of my knowledge the behaviours I observed, and answers I was given by interviewees, reflect participant experiences and beliefs. These experiences and descriptions are likely to apply to at least some other men's shed participants and might be applicable to other people, taking part in social interventions.

Construct validity

Construct validity refers to the rationality of theories built. One of the goals of qualitative research is the development of constructs that help explain social phenomena and give emphasis to meanings, experiences, and views of participants (Pope & Mays, 1995). As described in the introduction to my initial programme theories (Chapter 3), I have drawn upon my own experiences working as a Health Promotion Specialist in Public Health departments and the questions of programme leads and men's shed support agencies. My case studies focus on men's shed settings and are used to explore and explain complex interrelated issues (Pope & Mays, 1995) related to the health promoting benefits of men's sheds. I have iteratively – as part of a retroductive process – used men's sheds literature, evidence generated in my case studies, and evidence and theories outside of men's shed literature, to build, refine and test the constructs and programme theories about men's sheds and associated health and wellbeing impacts. All of this work suggests that my constructs and theories are valid.

Checking validity

The ‘triangulation’ of data refers to using of two or more research methods as a means of checking the validity of claims (Pope & Mays, 1995). I have used triangulation by employing a systematic review of men's shed literature, observing activities and interviewing participants at three men's sheds. Moreover, I have used further literature to gather more primary study data to formulate and confirm theory. For the case studies, I observed and interviewed a minimum of five people at each site. Furthermore, I conducted cross-case triangulation – looking at patterns across all three case studies – not merely examining each case in silo. Although the weaknesses of one method cannot be compensated by the strength of another (Mays & Pope, 2000), I believe I have taken a comprehensive approach to generating data and that my use of multiple methods has strengthened this work.

Reflexivity and reflections

Reflexivity is an awareness and assessment of oneself as a researcher and how choices about the research process have shaped the investigation (Mays & Pope, 2000). I started this PhD in my late thirties having being drawn to academia because I have questions about what human beings need in their lives in order to be healthy and how health and wellbeing can be improved. As a boy growing up in the 1980's. My father used to work in sawdust laden workshops as a joiner in an Industrial Town; different, and yet not dissimilar, to the Industrial Town featured in this thesis. I liked the pragmatic nature of making things, fixing things and solving problems with wood and other materials. I was part of a working-class family, with my mother looking after me and the household. In the 1990's however, my father continued to make, fix and problem-solve, but he did it on his own, in his garage – for our household and neighbours – and he was no longer paid. He was on ‘benefits’ and my mum started going out to work.

Bizarrely, as a family, we had less money *because my mum worked* instead of being on benefits too. She worked for self-respect and to earn her own money; and possibly because she intrinsically knew that work would be *good for her* (health and wellbeing). In the early 1990's there was a thing called 'a recession' and not earning and socialising did my father no good. In 1997, one evening my father dropped dead. These circumstances did not seem 'just'.

I became a Health Promotion Specialist in 2004. I wanted my time spent at work to be of social good and not just about earning a living or making financial profits for other people. My interest in men's sheds was initiated in 2007 when a colleague in the same NHS Public Health department was looking at health promotion interventions to support men's health. As a department we never got a men's shed project going, but there was often reference made to the plans to develop one if funding was ever made available.

There can be no doubt that my previous professional career as a Health Promotion Specialist in a Public Health department situated within the National Health Service (NHS) and local authorities (LAs) influenced my questions about the origins of interventions. I had pondered the benefits and detriments of Public Health-led, 'authoritarian-led' (Green et al., 2015) (top-down) initiatives and how they compare with community-led (bottom-up) initiatives. This interest is partially covered in a citation concerning whether 'social capital' (covered in Chapter 9), can be as effectively facilitated through a Public Health-led intervention as that of a community-led intervention:

“...there appears to be broad agreement among academics that **policy-led attempts to 'construct' social capital will fail**, [because] social capital is based on activities, relationships and norms freely engaged in by individuals” (Coalter, 2007, p.553, cited in Bagnall et al., 2017, p.16, my enboldening of text).

One of the most striking differences between the two types of organisational arrangements tends to be superior financial support given to Public Health-led initiatives, compared with a

community-led initiatives that are less likely to have access to funding. I wondered if community intervention leaders, trying to convince funders to support community-led men's sheds, might influence changes to the aims of such organisations and how they might go about meeting funder's requirements. These thoughts were furthered through my interactions with men's shed leaders and groups (as an attendee and panellist at '*Men's Sheds - The Movement in Scotland and the Big Picture Internationally*', University of Glasgow (Markham, 2016b) and whilst running a workshop at the annual Shed Fest UK conference (Markham, 2016c)). I became aware that Public Health organisations and funders had approached some men's sheds offering them funding on conditions of achieving some of their public health targets. For example, reductions in male mental health disorders or providing services for people with learning difficulties. It is for these reasons that I also wanted to examine a community-led men's shed that had received financial and leadership support. Market Town Men's Shed fit the criteria of having leadership support and receiving (not inconsiderable) funding from Public Health organisations and funders.

In 2015, I happened upon 'scientific realism' by chance after enrolling on a Masters in Social Research. It so happened that module leaders were proponents of Ray Pawson and the philosophical position of realism and its accompanying methodological approaches. It was not until I had a Masters dissertation to write and – needing to find meaning in my work – was set upon producing an evaluation for a worthy project in need of such a document, that I started to look at men's sheds again. I did not really understand how working with wood, alongside other men, could be '*health promoting*'. I also had to ask myself: *Are men's sheds sexist?* They are, after-all, excluding women and, again, after growing up in the 1990's, I was aware of inequalities faced by women and I did not like this. Inequalities based upon biological sex did not seem fair to me in the 1990's, and this is a value I have retained. Inequalities and inequities, to me, are not just.

Many men's sheds exclude women as a strategy to make the venues men-friendly and attract men who are less comfortable demonstrating vulnerabilities in the presence of women (Wilson and Cordier, 2013; Golding, 2015b; Ahl et al., 2017). These interventions go with the grain of their target group's socialisation – men of the target age group for men's sheds often worked throughout the daytime in male-only environments just as my dad did. The interventions have – whether consciously by design or whether by subsidiary affect – an approach based on equity. As Oli Williams, in summing up his PhD thesis in four words, states: 'Equity is the answer' (Williams, 2017a; Williams, 2015).

There is a brand of feminism better described as misandry (Glover & Misan, 2012) that has described men's sheds as sexist (Schleiger, 2010). It is possible that sexist comments by men in relation to women occur in men's sheds. I, however, heard no such comments. Indeed what I did see at two of the three sheds were female partners of a potential new member – supportively accompanying *their* man on his first visit to a local men's shed – being welcomed by a men's shed volunteer and being quickly issued with a warm drink and hospitable conversation. Sometimes women who came to a shed with a request to fix an item were visibly tentative about coming into this "men's" domain. However, they were welcomed and soon seemed relaxed. They left with their item fixed or with an assurance that the item would be available to pick up in a few days time. To my observation, women appeared to leave the men's shed feeling better – having had a problem solved – than when they arrived with a broken item or a partner in need of something to do and somewhere to do it. Regarding items fixed, 'the cost' to the owner was 'a donation' to the men's shed, but *only if* they could afford it.

Interestingly, women-only groups seem to be to revered and are far more acceptable in Western society than men-only groups. Milligan and colleagues (2016) have stated gender-based activities and different approaches are needed to address health inequalities. Golding believes

that “[g]ender-blindness’ strategies” are not always appropriate or efficacious (Golding, 2015b, p.374). Denying men affected by health inequalities options to take part in gendered activities is problematic (Golding, 2015b).

I struggled with the conflicting views of the right for equal access for everyone regardless of sex, other constitutional factors, religion or culture and having a gendered intervention exclusively for men. What made me decide that men’s sheds are not sexist was the realisation that the target audience of the men’s sheds are men who have health and social needs, as Chapter 2 shows, that are being ignored. To support the health and wellbeing of some of those worse affected by health inequalities (men), this gendered intervention (men’s sheds) attracts men who are vulnerable and offers a physical and social environment that supports health and wellbeing enhancing practices. Creating, and being social with peers who accept you just as you are, is valuable. This is not to say that the mere presence of any female would defiantly harm the salutogenic properties of men’s sheds. The inquiry framework that I feel is often appropriate in understanding health promotion interventions is: What works, for whom, under what circumstances, how and why? Men’s sheds benefit their participants; a population that often suffer health inequalities. Furthermore, men’s shed participation is often encouraged by females in the participant’s life. Men’s sheds are also beneficial for women and the community. Of course, there will be incidences when men’s sheds will not be viewed as positive interventions, as recently highlighted by Foley and colleagues; where partners of men’s shed leaders felt like ‘a [men’s] shed widow’ and where men’s shed participation has created fiction in relationships (2021, p.15). However, these were not scenarios that I observed during my time at the men’s sheds.

Nearly all the men were older than me and I attended men’s sheds predominantly to learn. I perhaps had some status with the men due to being ‘from a university’ and because I was old

enough not to be viewed as a ‘green’ inexperienced undergraduate. With these factors I, perhaps, have what de Viser and Smith refer to as ‘*masculine credit*’ (2007, p.609). There was a distance between me and participants, even when I was of a similar age – to some of those at Industrial Town Men’s Shed – because I was at the men’s sheds for a different reason to the locally-based participants. However, I felt accepted by the participants of each men’s shed and I was grateful to be accepted.

Ultimately, what I recognise and want to convey is that I am genuine in wanting to find and understand interventions that support health and wellbeing for human beings. Men’s sheds seem to be predominantly positive interventions for their participants and do minimal harm to the population. I am however, keen to know what the working components are about any intervention and to understand any negative implications so that I can learn how interventions can be improved. I often said to the participants that “I want to know about any *downsides* to men’s sheds”. I am not interested in highlighting only the positives about men’s sheds and was keen to avoid the trap of telling only ‘good news stories’ (Pawson & Manzano-Santaella, 2012). A further strategy I have used to mitigate against only seeing the good, is by drawing on literature. I believe that the majority of men (and women, and people who do not identify with these binary classifications) are ‘OK’ and are ‘good people’. I do not view any subgroup of society based on sex or gender or sexuality or race or ethnicity or on country of birth to be any more or less than any other human being. These are my world-views and these factors motivate my investigations. I prioritise the health and wellbeing of human beings above other interests such as financial gain. These are my values and they have undoubtedly influence my choice of research topic, my philosophical paradigm, my methodological choices and the types of questions that I am interested in. These questions tend to be addressed using qualitative methods of data generation.

I have to acknowledge that writing up this PhD ‘in a realist way’ to present this realist account bears only some resemblance to the ways processes occurred and things were actually achieved. Having generated data in men’s sheds in the latter part of 2019, it became impossible to access any social interventions from March 2020 due to national lockdown preventing the spread of SARS-CoV-2. As such, the case studies could have been richer and I was unable to check my theories with the participants as ethical restraints meant that I could not record and keep phone records or email addresses of specific participants. This led to exclusively using secondary sources to validate claims and enhance theories. Even without these extenuating circumstances as Carol Smart (2010, p.5) states, data is like:

‘...a recalcitrant mound of wet clay which defies you to shape it into something recognisable... [which] ...can be deeply upsetting to novice sociologists who often think that their work is effectively completed once they finish the fieldwork.’

I concur with her as she goes on to say,

‘...we find very quickly that the data squeezes itself out of the prescribed shape; other ideas impinge and the original imagined story can only be achieved at risk of doing considerable violence to the data’ (Smart, 2010, p.5).

The process of retrodution, going back and forth between data I generated with participants, and progressing ideas into theories that have gone through various stages of development, has taken time. Learning this process has taken even more time. Furthermore, going from a desire to let the data tell its own story, to making the story about a realist development process supported with fragments of evidence, has been an uncomfortable paradigm shift. I hope that my telling of this ‘story’ reflects at least some of the experiences of the men that I had the honour of working with. It was my intension to develop evidence which could be used by policymakers and people in health promotion-related roles to improve the health and wellbeing of at least some of the population without causing harm to other populations. I have been clear about what I have done, how I have done it and why I have done it, including decisions made along the way. I hope that I have done all I can, to do justice to my aims and to produce research

congruent with my values and with the experiences of the men who kindly took part in this research.

Summary

This chapter has discussed the development of *initial* PTs, *refined* PTs and finally *tested* PTs and how these have addressed the research question and objectives. This is the (realist) synthesis of realist investigation (primary data) and short realist reviews (secondary data). With support from a systematic review of men's sheds literature, middle-range theories and additional evidence sought from literature, proximal outcomes (pO_x) in the tested PTs have been linked to the distal outcomes: enhanced health and wellbeing (dO₁); reduced social isolation and loneliness (dO₂), and; resilience to negative effects on wellbeing (dO₃). These processes give a robust triangulated account of how and why men's sheds enhance participant health and wellbeing. Furthermore, these processes have been justified with the discussion on the epistemological markers of quality in qualitative research. This discussion providing a robust defence of my research design. The succeeding and final chapter of my thesis (Chapter 12) will provide a summary of what has been learnt by conducting this research and the limitations of this original contribution to knowledge.

12) Conclusion

This final chapter considers what this thesis contributes to understanding of health promoting and wellbeing enhancing processes that participation in men's sheds support. Key findings and this work's original contribution to knowledge will be discussed along with limitations of the work. Finally, the chapter will consider how these findings can inform future research.

Research purpose

The purpose of this research was to generate, explore and test (Gough et al., 2012) explanatory theories (Pawson & Tilley, 1997; Weiss, 1995) regarding health and wellbeing impacts of men's shed participation. Having generated *initial* programme theories and explored what was known in men's shed literature, the following research question and objectives were set to guide this new empirical inquiry.

Research question

- What characteristics of men's sheds enhance health and wellbeing, for whom, in what circumstances, how and why?

Research objectives

To fulfil the research purpose and answer the research question, the objectives were:

- 1) to examine the setup and implementation of men's sheds to determine whether there are health and wellbeing enhancing characteristics relating to: i) Public Health-led men's sheds; ii) Community-led men's shed, and; iii) Hybrid – community-led, yet financially supported – men's sheds;
- 2) to understand how the circumstances of those who attend led to men's shed participation;
- 3) to establish the characteristics of men's sheds that are associated with improved or diminished health and wellbeing

Research design and methodology

The exploration of men's shed literature established a substantive body of research suggesting men's shed participation is beneficial for participant health and wellbeing. However, there was a lack of clarity regarding organisational arrangements of men's sheds and if differences in organisational arrangements influence associated health and wellbeing outcomes. Furthermore, questions remained on *for whom* men's sheds were attractive and *what circumstances* might lead to men's shed participation. Finally, it was important to establish *how* men's sheds might improve participant health and wellbeing and to explain *why* this might be so.

The philosophical paradigm of 'scientific realism' (Haig & Evers, 2015; Pawson, 2006b, 2013) was chosen to explicitly state an ontological position of there being a real social world, whilst epistemologically acknowledging that knowledge is subjective, fallible and dependent on theories. As men's sheds are complex interventions, existing within infinitely more complex social systems, I used a realist inquiry framework to guide understanding of "What *works*, for *whom*, in *what circumstances*, *how* and *why*?" (Wong et al., 2013, p.2, my italisation). This type of question emphasises the degree of inquiry required to understand and, indeed, embrace the complexity of social phenomena. The '*working*' elements of *men's sheds*, in relation to this inquiry, refer to characteristics that enhance or diminish health and wellbeing. The '*whom*' signifies the participants of men's sheds. '*Circumstances*' refer to the specific contexts of participants, the men's sheds as organisations, and the wider neighbourhood conditions where men's sheds are situated. '*How*' ascertains the means or mechanisms by which men's shed work. Finally, '*why*' gives reasons for programme outcomes.

Three research sites were chosen to represent the theorised 'types' of men's shed referred to in the first research objective. These archetypal sheds were sequentially explored in Chapter 7 on organisational arrangements. Primarily using qualitative, ethnographic methods, the chosen

sheds became case studies featuring men with whom to generate data to address each of the three research objectives. However, the generation of primary data was impeded from March 2020 by the coronavirus pandemic. This rendered further primary inquiry adhering to the University's research ethic committee's stipulations impossible. In response, the research strategy was changed to supplement primary data with secondary sources. Use of secondary sources contributed: three realist reviews; a number of supporting middle-range theories and, as part of the iterative nature of realist inquiry; links between proximal outcomes and distal outcomes in the discussion chapter (11).

All *exploration* of data helped refine the three '*initial* programme theories' (*iPT*) to become '*refined* programme theories' (*rPT*). These *rPT*s were further *explored* and *tested* with realist reviews culminating with *tested* programme theories (*tPT*). Table 18 (below) shows which programme theories (PT) cover which research objectives (RO):

	<u>RO1:</u> to examine the setup and implementation of men's sheds to determine whether there are health and wellbeing enhancing characteristics relating to: i) <i>Public Health-led</i> men's sheds; ii) <i>Community-led</i> men's shed, and; iii) <i>Hybrid – community-led, yet financially supported</i> – men's sheds	<u>RO2:</u> to understand how the circumstances of those who attend led to men's shed participation	<u>RO3:</u> to establish the characteristics of men's sheds that are associated with improved or diminished health and wellbeing
<u>PT1:</u> Organisational Arrangements	✓		✓
<u>PT2:</u> Shed-based resources		✓	✓
<u>PT3:</u> Human-based resources			✓

Table 18: This denotes which programme theories (PT) address which research objectives (RO)

Key findings and original contributions to knowledge

This section summaries the main findings from the three *tested* Programme Theories (*tPT*) and discusses original contributions to knowledge.

Tested Programme Theory (tPT) 1: Organisational arrangements

The text box (Figure 23) below, succinctly represents *tested* programme theory (*tPT*) 1 as context, mechanism, outcome ($C_X \rightleftharpoons M_X \Rightarrow O_X$) configurations, using ‘*if... then... leading to...*’ statements. My investigation suggests that *there are* men’s sheds that align to the three theorised, archetypal organisational arrangements of:

- i. a Public Health-led men’s shed;
- ii. a Community-led men’s shed, and;
- iii. a Hybrid – community-led, yet financially supported – men’s shed

It was naïve to suggest that *bottom up*, community-led organisations were more likely to enhance the health and wellbeing of men’s shed participants than *top-down*, Public Health-led interventions. Neither ‘top-down’ nor ‘bottom-up’ approaches are always the most appropriate. Rather...

‘...knowledge and interests [need to] collide, intersect, get entangled together...
[and adapt] ...to local context’ (Patton, 2010, p.152).

Evidence from the three cases and supporting realist review demonstrate that the approach to creating, leading and managing a men’s shed needs to be specific to the context of the men and locality of the shed. Communities of men sometimes need support to become organised to create groups that champion the interests and needs of the group.

Men’s sheds need appropriate premises to house the activities that men wish to engage in and for the numbers of men who wish to engage together. To acquire and maintain appropriate premises and resources to enable a functioning men’s shed takes *vision* and *inclination* from the leadership. Funding is often needed to make a furnished premises a reality. It takes groups

of people – ‘a *community*’ – to work together towards a shared and valued vision. Leaders must be dedicated and seen to be serving the needs of the shed, which in-turn serves the participants of the shed.

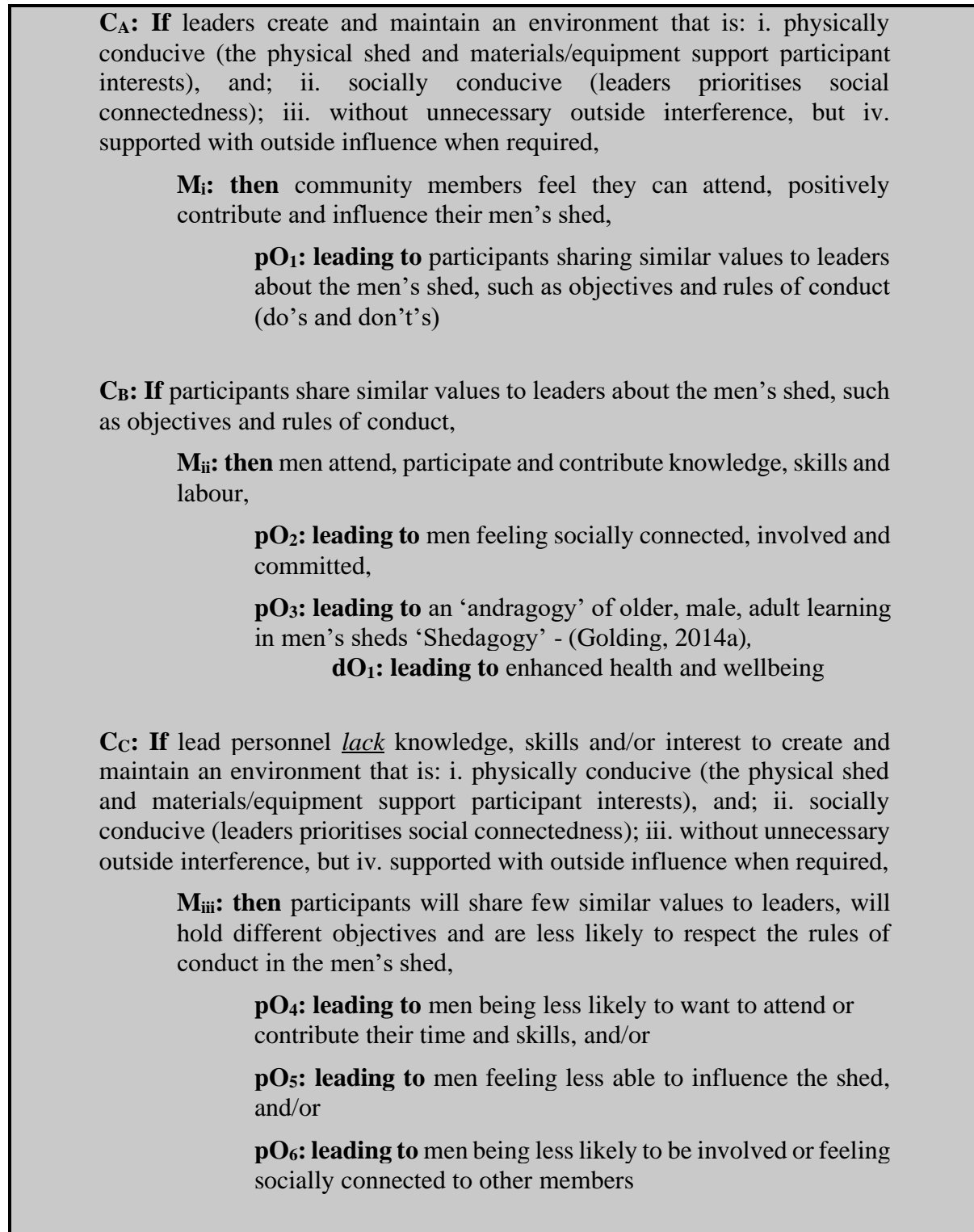


Figure 59: *tested* Programme Theory (tPT) 1 on organisational arrangements

Professional experts ‘*on tap*’ – to support – rather than ‘*on top*’ – to lead (Kindervatter, 1979, cited in Green and Tones, 2010, p.429) – empower community men to make contributions, rather than making them feel like ‘service users’. The main asset is having community-based men involved who want to work together, in each other’s company, adhering to health and safety because they value it, and feeling that they maintain sufficient autonomy within the men’s shed structure. Some participants must be able and willing to take on the roles required to fulfil the tasks of running the men’s shed. When developing a men’s shed, paid workers might be needed to conduct these roles until there, perhaps, becomes a time when suitable volunteers have the required inclination and skills to take on these roles. Leading by example, is one method of recruiting participants to volunteer to help support a men’s shed. When participants value their men’s shed they are more likely to make the time, and give the commitment, required to support the organisation. Dedicating time and commitment ‘*costs*’ volunteers, but it also brings rewards, such as, a *sense of satisfaction* and *the feel good factors* of contributing to a community-based entity men value.

Of the three theorised organisational arrangements in this thesis, the *hybrid – community-led, yet financially supported – men’s shed* provided the best model of men’s shed. This has expert support *on tap* whilst encouraging able and (mostly) willing volunteers to contribute to the running of the men’s shed. The community development worker (CDW), at the hybrid men’s shed, provided the initial drive and inclination to galvanise a group of men together; to start a men’s shed and to expand the shed’s footprint as the membership grew. This CDW continues to provide support with funding applications whilst members have stepped-up to take on responsibilities for the day-to-day running of the men’s shed. The adaptability and resourcefulness of the shed leadership to provide for the various interests of participants seems to add to the ‘salutogenic’ nature (MRT₆ – Antonovsky 1979, 1993, 1996) of the men’s shed environment; to enhance participant health and wellbeing.

Middle-range theories (MRT), such as ‘salutogenesis’ (discussed more below), help to explain some of the circumstances that increase the likelihood of men’s sheds being able to run effectively. When the values of leaders and members of men’s sheds are congruent it facilitates participant involvement and commitment. This is covered by MRT₁ ‘*Value congruence*’ theory by Kristof (1996).

When men’s shed members have a ‘*sense of community*’ (MRT₂ McMillan, 1976, cited in McMillan and Chavis, 1986, p.9) participants feel they matter and there is a sense of caring about one another (Southcombe et al., 2015b). Furthermore, ‘sense of community’ was found to be influenced by value congruence (MRT₁) between men’s shed leaders and participants (Southcombe et al., 2015b).

The final supportive middle-range theory, specifically relating to tPT1, is that men’s sheds are places of adult, men’s learning. Adult learning enhances health and wellbeing. In the domain of men’s sheds, Golding calls this ‘shedagogy’ (2014a). My conceptualisation of ‘shedagogy’ refers to adult male, learner-led experiences and problem-solving in an environment where learning is not explicitly named. Instead, men’s sheds are environments that facilitate collaborations and hands-on kinaesthetic processes led by learners as they desire to discover knowledge and skills (Golding, 2014a). New learnings draw upon the knowledge and experience in the room, at the time of men’s desire to learn. The ‘*bonding* social capital’ facilitated by the men’s shed’s social environment enhances participant ‘cultural capital’. This is discussed in Chapter 9 and links to MRT₇ on ‘capital’ (Bourdieu, 1986), ‘capital interaction’ (Abel & Frohlich, 2012) and ‘health relevant capital’ (Abel, 2007).

Tested Programme Theory (tPT) 2: Shed-based resources

Shed-based resources refer to material, social and cognitive resources that potential participants might find attractive. These resource types are also components that keep men engaged to

continually participate in men's sheds. This programme theory supports understanding of how men who are *not in education, employment or training* (NEETs) come to make an initial attendance at a men's shed and what influences them to regularly participate. Figure 29 (below) represents *tested* programme theory (*tPT*) 2 as $C_X \Leftrightarrow M_X \Rightarrow O_X$ configurations, using 'if... then... leading to...' statements.

The pragmatic '*doing*' nature of men's shed participation appeals to some men who have time on their hands due to retirement, unemployment, under-employment or who cannot work due to health conditions. Engagement in purposeful activities and using labour to craft and/or fix items or sharing knowledge and skills with others, are all factors that give meaning to participant's lives. This links to the therapeutic benefits of meaningful occupation. Engagement with purposeful activities enhances participant health and wellbeing.

Furthermore, men – whilst actively engaged in pragmatic activities or as attendees of these social interventions – can enhance social interaction, can feel that they have a community-based place where they belong, and can gain access to community resources. As a place to 'be', men's sheds are beneficial for their membership.

Having investigated the middle-range theory of 'third place' – beyond *the home* and *a workplace* (MRT₄) – men's sheds fit all eight of Oldenburg's characteristics of community-based spaces '*...where unrelated people [can] relate*' (1999, p.ix, my italisation). Furthermore, theories relating to 'occupational therapy' (MRT₅, Reilly, 1962) and 'socially productive activity', in accordance with our '*will*', innate to human beings (Wolff, 2003, on Karl Marx - MRT_{5a}), give reasons for why men's sheds provide such valuable opportunities for participants.

C_D: If men perceive a men's shed is in an accessible location, that they can benefit from the shed's resources (material, social or cognitive), and that it could be a socially acceptable 'third place' for them,

M_{iv}: then men make their first attendance at the men's shed,

pO₇: leading to men regularly attending, or

pO₈: leading to men having little to no exposure of the men's shed and its resources.

The next phase of programme theory explains that with regular men's shed attendance, men can have a place to 'be' and a place to 'do'. So, following a first attendance,

C_E: If the men's shed provides enough: i. material resources and/or ii. social resources, and/or iii. cognitive resources,

M_v: then men will attend the men's shed,

pO₉: leading to men spending time at the men's shed and having somewhere to '*be*' (a third place), and

pO₁₀: leading to men spending time at the men's shed and having somewhere to actively '*do*' (engage in therapeutic, meaningful occupation)

However, as identified in *refined* programme theory 2, above, if a men's shed does not provide the types of resources that men are interested in then, these men will either not attend or will only attend infrequently.

C_F: If the men's shed does not provide enough of the following or men do not value the following: i. *material* resources, and/or ii. *social* resources and/or iii. *cognitive* resources for men's interests,

M_{vi}: then men will not attend regularly or at all,

pO₁₁: leading to: little or no exposure to resources from which men help themselves

Humans 'being'

Proximal outcome 9 (pO₉), men spending time at the men's shed and having somewhere to 'be', becomes a context (C_G) for four further C \leftrightarrow M=>O configuration chains:

C_G: If men spend time at the men's shed and have somewhere to 'be',

M_{vii}: then men can interact, socialise and share in the company of other men,

pO₁₂: leading to enhanced social interaction,

pO₁₃: leading to a sense of belonging,

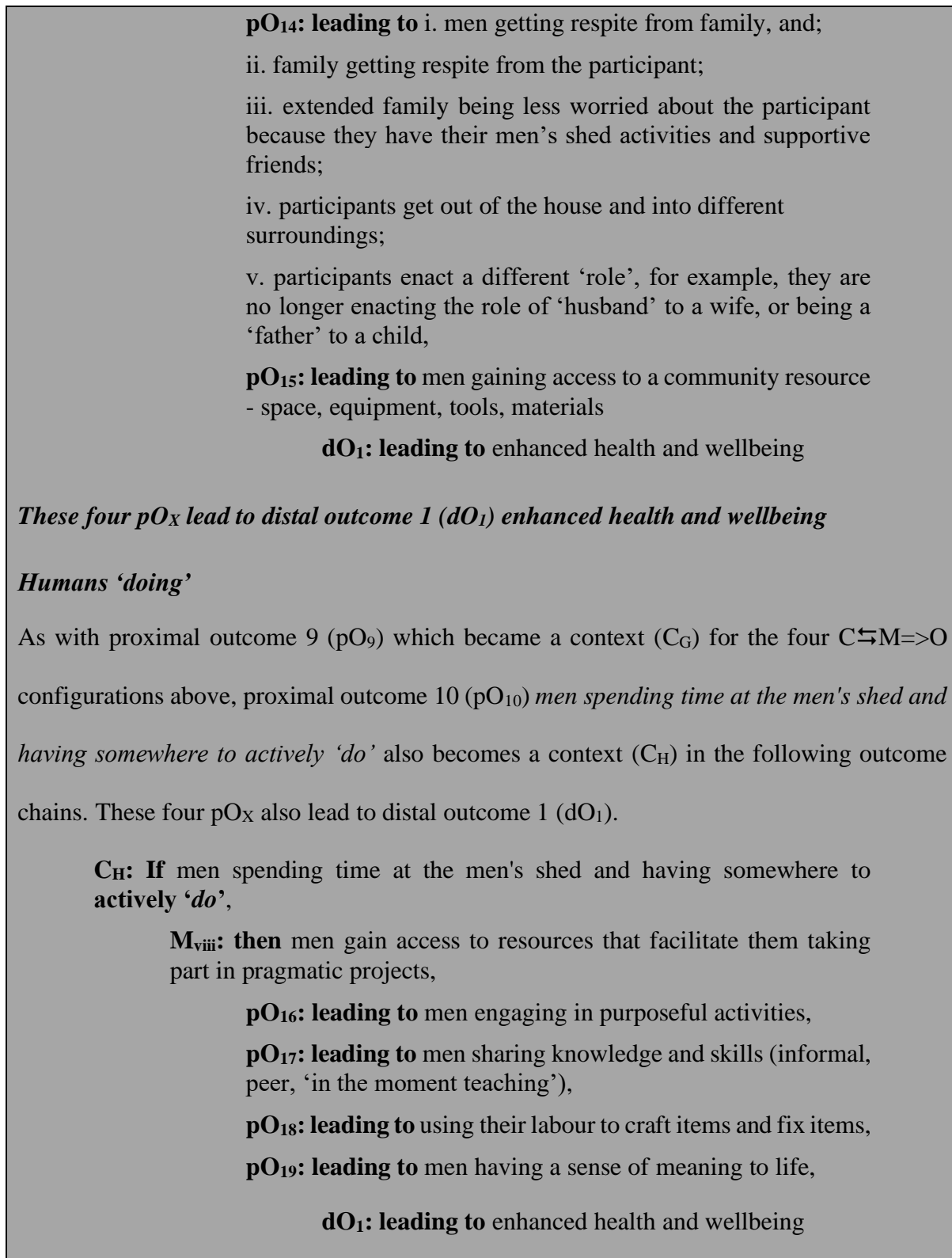


Figure 60: *tested* Programme Theory (tPT) 2 on shed-based resources

Men's sheds are environments providing conditions, and facilitating processes, that lead to the antithesis of Marx 'alienation'; 'engagement' and 'involvement' (MRT_{5b}, Wolff, 2003). Men's

shed participation can: re-establish connection to the species-essence of human beings; support men to learn things about their environment including things previously taken for granted; help participants gain access to ‘means of production’ (McLellan, 2000) and support the up-skilling of men; build communities of men and facilitate men in processes of cooperation anathema to the individualistic and capitalistic drives of western society (Brown et al., 2008).

Using the ‘hook’ of work-related, creative activities, men’s shed interventions bring men together as a community. Men’s sheds combine innately health promoting factors for participants; what Antonovsky called ‘salutogenic’ factors (1979, 1993, 1996 - MRT₆, discussed below).

Tested Programme Theory (tPT) 3: Human-based resources

Human-based resources refer to qualities that attending men bring to men’s shed and that can be shared to enhance other’s resources. *Tested Programme Theory (tPT) 3* uses the same format as *tPT2*, where attendees have a community-based place to ‘be’ and actively ‘do’. In terms of *being* at men’s sheds, attendees: interact, socialise and share experiences; experience the company of other men (human beings); reduce loneliness and social isolation; can experience a sense of acceptance by peers; learn from shared experiences, and; can engage in health-related conversations that increase help-seeking. These qualities can enhance health and wellbeing. Furthermore, whilst working shoulder-to-shoulder, men engage in conversations they might not otherwise have. With access to other men, members can gain new pragmatic knowledge and skills through informal, activity-led learning, and – when sharing skills – can experience the feel-good factor of volunteering. These are, again, qualities that can enhance health and wellbeing. Figure 61 (below) presents the $C_x \leftrightarrow M_x \Rightarrow O_x$ configurations for *tPT3*:

C_E: If the men's shed provides enough: i. material resources and/or ii. social resources, and/or iii. cognitive resources for men's interests,

M_v: then men will attend the men's shed,

pO₉: leading to men spending time at the men's shed and having somewhere to '*be*' (a third place), and

pO₁₀: leading to men spending time at the men's shed and having somewhere to actively '*do*' (engage in therapeutic, meaningful occupation)

The following $C \rightleftharpoons M \Rightarrow O$ configurations lead on from **pO₉**, which becomes context **C_G** in the section '*Humans being*' and **pO₁₀** which becomes **C_H** in the section '*Humans doing*'.

Humans 'being'

Leading off from the previous theory that men's sheds offer men a third place to be, it is asserted that:

C_G: If men spend time at the men's shed and have somewhere to '*be*' (**pO₉**),

M_{ix}: then men can interact, socialise [bonding social capital] and share their own (and explore other's) experiences, knowledge and skills in the company of other men,

pO₂₀: leading to men having the company of other (human beings) men,

pO₂₁: leading to a sense of being accepted by other men (peers);

pO₂₂: leading to men learning from other participant experiences, knowledge and skills and an enhancement of abilities and status,

pO₂₃: leading to increased health-related conversations and greater likelihood of help-seeking,

dO₁: leading to enhanced health and wellbeing

dO₂: leading to reduced social isolation and loneliness,

dO₃: leading to resilience to negative effects on wellbeing

Humans 'doing'

The final series of $C \rightleftharpoons M \Rightarrow O$ configurations start with a context (**C_H**) deriving from a previous proximal outcome (**pO₁₀**).

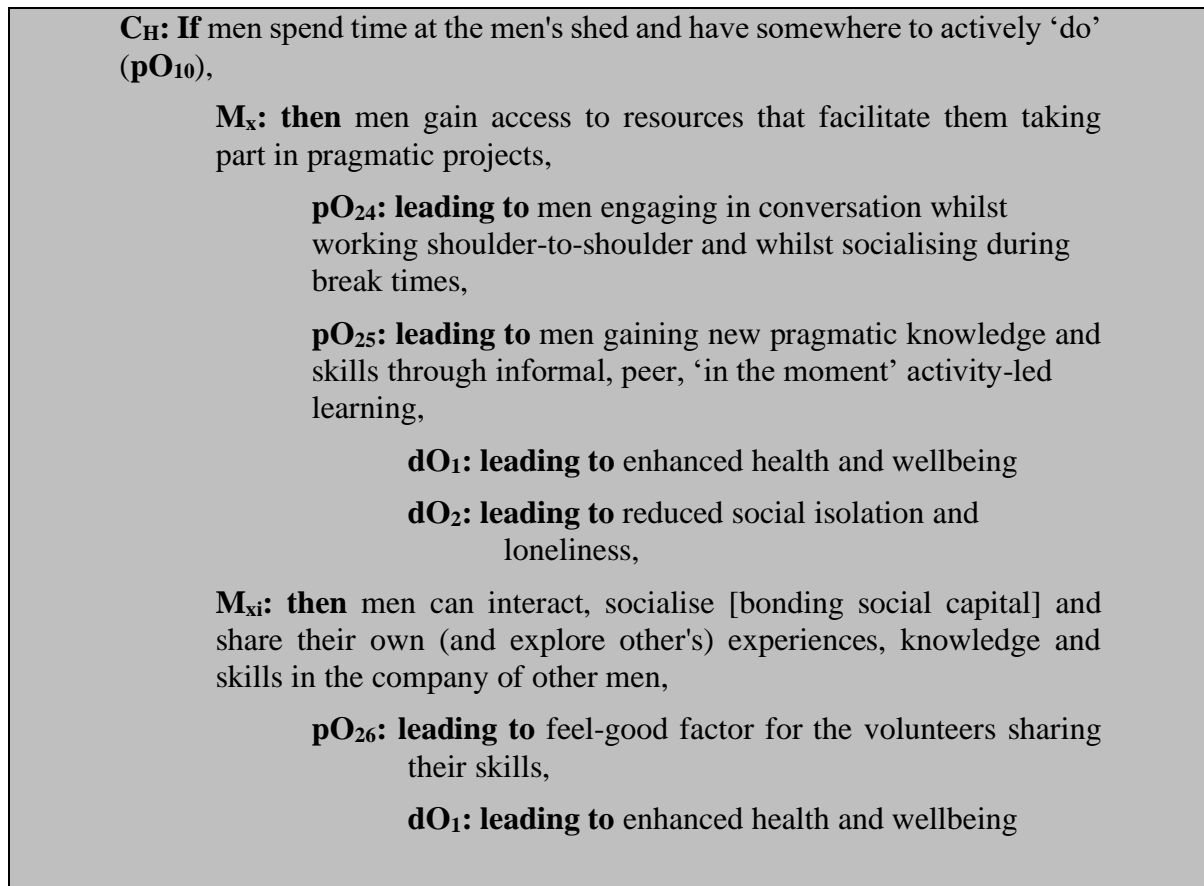


Figure 61: *tested* Programme Theory (*tPT*) 3 on human-based resources

These theorised 'human-based resources' are supported by middle-range theories. Men bring social, cultural and economic related 'capital' (Bourdieu, 1986) to men's sheds. Men's sheds are a forum for 'capital interaction' (MRT₇, Bourdieu, 1986, Abel and Frohlich, 2012). *Bonding* social capital is the main component of capacity-building in men's sheds. *Bridging* social capital is also important for the organisation's ability to trade and be of service to the local community. Men's sheds are a community asset and access to equipment represents a form of economic capital enhancement those attendees who would not otherwise have access to such equipment. Furthermore, the knowledge, skills and experiences shared in men's sheds are types of cultural capital. With 'capabilities' to *function*, facilitated by men's sheds (MRT₈, Nussbaum and Sen, 1993, Sen, 1993), participants are able to learn and pool resources which include the abilities to enhance 'health relevant capital' (Abel, 2007). Indeed, men's sheds are a 'social movement' (Golding, 2015b) and a form of agency that alters social structures; an

example of structurally transformative health-relevant agency (MRT₈, Abel and Frohlich, 2012, Sen, 1999).

Men's sheds move participants in the direction of health and wellbeing through health-giving factors and health-promoting processes (MRT₆, Antonovsky, 1979, 1993, 1996). They have a 'salutogenic' nature (Antonovsky, 1979). Men's sheds are ripe with examples of men pragmatically engaging in tasks and exercising autonomy over how they spend their time. The way they conduct themselves is inspiring and personifies Antonovsky's components of 'sense of coherence': *comprehensibility; manageability; meaningfulness* (Lindström & Eriksson, 2005). Men's sheds are community groups that enhance 'general resistance resources' (Lindström & Eriksson, 2005); internal and external qualities that can support men in exerting volition over their lives and towards preventive health (Taylor et al., 2014). Through salutogenesis (MRT₆), men's sheds support participants to use, share and enhance capital resources (MRT₇) and capabilities (MRT₈) to positively impact their lives, health and wellbeing (Hlambelo, 2017).

At the beginning of this thesis (in Chapter 2), men's sheds were introduced as a social intervention sitting within Dahlgren and Whitehead's conceptualisation of the 'Social and community networks' layer of their *determinants of health* model (1991). In this same chapter (2), it was reported that despite men being less likely to have support networks and family with whom to discuss emotional needs and concerns (Bird & Rieker, 1999), health professionals often believe men are indifferent to psychosocial support for problems (Seymour-Smith et al., 2002). Combined with the social upheaval and uncertainty, associated with neoliberalist economies, these factors mean that men's health and wellbeing is in jeopardy (White & Holmes, 2006). Whilst not a magic bullet that can resolve all threats to *mankind's* health and wellbeing, there is substantive evidence that men's shed participation counters some of the

factors that contribute to the health inequalities experienced by ‘*working-class* men’ (using Savage and colleague’s 2013, definition). Furthermore, this evidence is supported by specific theories on recognised types of men’s shed programme (*tPT1*, *tPT2*, *tPT3*) and by a series of interconnecting middle-range theories.

Men’s sheds rarely, overtly focus on ‘health’ or ‘wellbeing’. However, the processes within men’s sheds interventions align with four of five points in South and colleagues’ conceptualisation of ‘community-centred approaches’ to health promotion. Namely, men’s sheds:

- ‘i. ...mobilize assets within communities, including the skills, knowledge and time of individuals and the resources of community organizations and groups...
- iii. promote equity... by working in partnership with individuals and groups that face barriers to good health
- iv. seek to increase people’s control...
- v. use participatory methods to facilitate the active involvement of community members’ (South et al., 2019, p.359).

Beyond the paradigms of viewing communities as having ‘resources’, being ‘target populations’ or being ‘a setting’ where interventions take place, communities – such as men’s sheds – can be viewed as essential parts of public ‘health systems’ and ‘health ecology’ (South, 2014, pp.83-84).

Implications for practice and policy

Social inequalities affect men’s health. Dahlgren and Whitehead’s (1991) ‘determinants of health’ model, introduced in Chapter 2, uses sequential layers to conceptualise components influencing people’s health and wellbeing. With reference to this model, men’s sheds are a social and community network specifically for men. As community-based social interventions, men’s sheds support men in expanding their social networks. Regular attendance (‘being’) at men’s sheds, contributes to men’s social, emotional and mental health and wellbeing. Engaging

in activities ('doing') at men's sheds, contributes to men's mental and physical health and wellbeing.

Men's shed interventions do not exclusively operate within the layer of 'social and community networks' (Dahlgren & Whitehead, 1991). For example, participation in men's sheds influence facets within Dahlgren and Whitehead's (1991) 'living and working conditions' layer. Participants experience men's sheds as pleasant and facilitating 'work environments'. These 'environments' encourage and provoke active engagement. Men who are not in formal education, employment or training (are officially, or ostensibly, 'unemployed') engage in informal adult teaching and learning ('education'). Moreover, through men's shed activities, men (re-)gain a sense of purpose and benefit from the meaningful and therapeutic aspects of pleasurable occupational engagement. Furthermore, these environments encourage men to talk with peers about their health, reflect on their health and wellbeing, and engage with 'health care services.'

As social interventions, men's sheds do not change – what Dahlgren and Whitehead (1991) term – the macro 'socioeconomic, cultural and environmental' landscape of their local areas. However, there is evidence in this thesis that attendees of some men's sheds experience a physical and social environment, with a supportive subcultural that enhances social, cultural and even economic capitals. Neoliberal imperatives of individualism, target driven processes, and economies of scale have no place in men's shed culture. Instead, men's shed environments, can support men's innate human capacities (Antonovsky, 1996; Reilly, 1962; Wolff, 2003) – and even their innate needs (Griffin & Tyrrell, 2013) – to create and feel benefits from creating at their own pace; for no other reason than the pleasure of doing so.

Finally, in terms of Dahlgren and Whitehead's (1991) model, it is most obvious that men's shed attendance and participation influences men's 'individual lifestyle factors.' These

influences are related to direct changes in men's behaviour by proactively choosing to attend men's sheds, instead of doing – or not doing – other things. Furthermore, 'lifestyles' are interconnected with the above contributions of men's sheds as 'environments' offering 'education', 'conducive working conditions', enhancing men's sense of purpose – whilst 'unemployed', underemployed or retired – and by offering a supportive subculture of which to be a local, connected member. In these ways, men's sheds support men to mitigate some wider, socially determined, health inequalities.

Practice recommendations

Recommendations for practice link to the three interlinked theories tested in this thesis that enable men's sheds as social programmes to influence participant health and wellbeing.

Firstly, to be effective men's sheds require purposeful leadership creating a men's shed for and *with* membership of the local community of men. Men's sheds involve work to set up and work to maintain their existence. When developing a men's shed, paid workers might be needed to conduct these roles until there, perhaps, becomes a time when suitable volunteers have the required inclination and skills to take on these roles. Leading by example, is one method of recruiting participants to volunteer to help support a men's shed. When participants value their men's shed they are more likely to make the time, and give the commitment, required to support the organisation. Dedicating time and commitment '*costs*' volunteers, but it also brings rewards, such as, a *sense of satisfaction* and *the feel good factors* of contributing to a community-based entity men value.

Secondly, successful men's sheds offer appealing material resources to provoke an initial attendance and to encourage regular attendance. Practically, a dedicated space must be big enough to house the material resources required to enable activities in which local men desire to take part. It must also be able to accommodate the numbers of men who want to attend at

the same time together. The space should encourage interaction by, for example, having a dedicated quiet, kitchen space for – morning, lunch and afternoon – breaks away from work; to encourage conversation.

Finally, men's sheds benefit from participants' pragmatic knowledge and social skills. Men's sheds are all different because they are informed by, and respond to, the interests and abilities of their participants. They are asset-based organisations that maintain and enhance participant capabilities. Where there are less assets in terms of existing community cohesion, identified proactive personnel, knowledge and skills to support men's shed activities or appropriate venues, communities will need more support from outside agencies to work with them. This might include having paid employees – 'on tap', but 'not on top' – to champion and support the interests of local men.

Policy recommendations

Recommendations for policy link to the above recommendations for practice. The two main requirements at a policy level are a) the need for appropriate financial resourcing and, b) that resourcing and support is not contingent on meeting targets.

Men's sheds require adequate resourcing – with premises, equipment and materials – to be effective as operational entities. Dedicated premises are required through purchase or continually funded lease. It is important that men's sheds are defined places for local men with equipment (machinery and materials) that support men's shed engagement.

The most effective men's sheds are developed with (and for) their specific local community of men. No men's shed is alike, because they are influenced by their unique attending membership and the (developing) capabilities of these attendees. People are assets; bringing skills, knowledge, resources and contacts that can all support the development and maintenance of a

men's shed. For these reasons, men's sheds should be allowed to develop as their community of members decide. Resources should be made available to maintain the continuation of men's sheds and give men's shed organisations and members a sense of security.

In marginalised and disadvantaged communities there might not be the synergy of resources readily available to hold or exercise the power required to instigate a men's shed. In these circumstances, authoritarian-led interventions might be required – in the short to medium term – to enhance community capacity and build community engagement and empowerment. For other communities with assets that are merely 'untapped', a community development worker might be required to bring local men together and offer leadership based on men's shared interests. In all circumstances, having the connections and funding to call upon required experts – as and when required – will ensure men's shed organisations are able to progress and support their community of men.

The final imperative for policy is that men's sheds are not standardised, nor subject to the meeting of targets. Attempts to standardise these community assets or offering funds contingent on the meeting of targets, is anathema to the ethos of men's sheds. Men's sheds are places for fun and purposeful enjoyment through work-based activities. When they are fun and enjoyable men's sheds have the subsidiary benefit of enhancing participant health and wellbeing. They are not places for men to be *worked*. Nor should men's shed organisations be responsible for fulfilling health, social care or employment agency objectives; enticed to do so with funding. Men's sheds are not 'services' for men. Rather, they are resources men interact with and contribute to. This act, and sense, of 'contribution' gives men an added sense of value.

All recommendations for policy and practice are based upon the ethos of men's sheds being independent entities and not dependent on exchanges to fund their core resources.

Limitations of this work and the findings

All research designs, methodological approaches and methods of data generation have limitations. The philosophical paradigm informing the research design and my methodological choices have been made explicit so that this work can be assessed on its merits and fragilities. As with all research, this work enters into an existing body of knowledge and will be advanced by future research. As a leading proponent of scientific realism states:

‘...[I]nquiry never starts from scratch and suddenly acquires pedigree. [Likewise, t]heories are tested and refined but [are] never closed and completed’ (Pawson, 2010, p.184).

Beyond limitations innate to theory-driven ‘realist’ inquiry, it is the nature of research to be assessed for a doctorate in philosophy that it must be completed by one individual. Research undertaken by only one researcher limits the scope of what can be achieved; as does working within financial constraints and limitations on time.

One of my limitations as a solo researcher affected the systematic review of literature. Although I included quantitative findings of purely quantitative studies (6 items) and mixed method designs (5 items), I did not use a quantitative study assessment tool to assess statistical analysis as I struggled to understand these. When it came to including claims made from quantitative data within men’s shed literature, I drew upon author’s wording and asked a supervisor to check I had not misconstrued the meaning of the few quantitative items that featured in this literature.

The systematic review of men’s sheds literature demonstrates that there is a substantive quantity of observed and self-reported benefits associated with men’s shed participation. However, to date there is a lack of robust evidence correlating men’s shed participation with definite improvements in specific health and wellbeing domains. Furthermore, *causation* regarding *what* (men’s sheds interventions) *works* (prevents illness, improves specific health conditions, and enhances wellbeing domains) is yet to be proven.

I made the conscious decision to only *assess existing evidence* on ‘what works’ – the ability of men’s shed participation to support health and wellbeing – rather than *add to* the literature on *what works*. I did not feel I had the time or resources to conduct a pre- and post-intervention trial using ‘patient’ reported outcome measures (PROMs), or medical assessments, to evaluate correlation of men’s shed participation and markers of health and wellbeing improvement (Greenhalgh, 2021). My work has looked beyond the ‘treatment’ of men’s sheds, and beyond ‘outcomes’ (measures) of health and wellbeing, to consider processes in men’s sheds and participation in these interventions (Pawson, 2006b).

Specific to my primary research, there are limitations associated with *only* including three cases studies. A greater number of cases would provide more opportunity to confirm or refute the similarities and differences about men’s sheds in England. Furthermore, only one case was assigned to represent my arbitrary conceptualisation of men’s sheds that are: Public Health-led; community-led; hybrid – community-led, yet financially supported. Again, a greater number of cases representing these theorised *types* of men’s shed would help confirm or refute this typology of men’s shed inception and leadership.

Linked to this, within each of the chosen case studies, I could have interviewed more men and observed more interaction at each men’s shed. The global coronavirus ‘syndemic pandemic’ – causing national and regional lockdowns in England throughout 2020 and the first part of 2021 – did thwart further primary investigations (Bambra et al., 2020, p.964). To progress the project, literature was used to further explore and test programme theories. I would have preferred to ask the men who had informed the theories what *they* thought to – and felt about – the refined programme theories. However, the use of the additional method of realist reviews did support further triangulation of data.

Realist inquires often start with an abundance of *initial* programme theories or ‘candidate’ theories; listed and prioritised, before making explicit choices on which theories to focus investigations. However, it took me a considerable proportion of the time – between starting and submitting this thesis – to understand what constitutes ‘a programme theory’: what any theory about a social intervention programme needs to include, to give these ‘ideas’ the status of being termed ‘programme theories’ (PT). Indeed, to help resolve my deliberations, I decided upon the ‘monikers’ of *initial* PT, *refined* PT and *tested* PT. Theories, like inquiries, ‘...never starts from scratch...’, nor do they ‘...suddenly acquires pedigree...’ and nor are they ever ‘...closed and completed’ (Pawson, 2010, p.184, my ‘strikethroughs’). Furthermore, it took me more time – than I ever wanted to give – to understand what is ‘a context’ or ‘a mechanism’ or ‘an outcome’. Components of the social world do not lend themselves to being neatly defined as one of these three terms; these terms are conceptual and not definite. Indeed between chapters 8 and 9, some ‘mechanisms’ were re-defined as ‘contexts’. A further reason for deviating from ‘realist’ terms was in relation to the term ‘outcome’. Instead, I used the term ‘*proximal* outcome’ to help make sense of effects that are not directly health or wellbeing impacts, but contribute to the greater outcome of health and wellbeing maintenance or improvement. I termed health and wellbeing enhancers: ‘*distal* outcomes’.

As I have chosen to investigate concepts that I found interesting, based upon my personal and professional background, this work can be criticised – as any research can be criticised – for not investigating other lines of enquiry. Part of studying at doctoral level is acknowledging ontological and epistemological assumptions and their limitations. This includes a recognition of what is possible and realistic; with study designs and research methods. I take comfort in advice from Pawson and Tilley, who encourage academics to realise:

‘...evaluation and social science generally only ever come to temporary resting places, and that ‘findings’ take the form of specifying those ‘regularities’ or

‘outcome patterns’ which the present state of our understandings of ‘mechanisms’ and ‘contexts’ is able to sustain’ (1997, p.86).

My work has produced understanding about men’s shed participation and how and why this contributes to health and wellbeing outcomes. This has furthered understanding on this topic and acts as a grounding for further studies.

Future research

Leading into ideas for future research, a criticism of realist philosophically-driven research is that it rejects randomisation. Critics cite realist research designs as being unable ‘to disentangle events observed from what would have happened anyway’ (Moore et al., 2014, p.42). The attraction of randomised control trials (RCT) to their proponents is that the act of randomisation can be used to attribute causation. Some academics claim there is value in the use of RCTs for social interventions (Cook, 2007; Rosen et al., 2006). However, without theory there is little to explain how and why causation occurs (Chen, 1990). Only theory-driven experimental designs can give explanations of how and why interventions work (Pawson & Tilley, 1997).

Men’s sheds could be mistaken for a standardised format, when, in fact, even men’s sheds setup by the same personnel across a discreet region have distinct differences. Differences are due to the contextual factors of the subareas where the sheds are located (see, for example, the four ‘Men in Sheds’ sites introduced across Cheshire by AgeUK Cheshire, evaluated in Fisher et al., 2018). Furthermore, differences are due to the shed-based resources and specific personnel that attend the sheds at any given time (human-based resources).

Although there are likely to be some consistencies to space used for activities defined by users – most of whom are likely to be men – there is a lack of ‘fidelity’ to what ‘intervention’ is offered by a project called a “men’s shed”. As South and Phillips state:

‘The challenge for evaluation is that only a minority of community engagement programmes... [standardised delivery] ...and can be evaluated as interventions that are standardised at some level’ (2014, p.693, citing Hawe et al., 2009)

For this reason, it is useful for any future study to describe: the contextual features of men’s shed (*shed-based resources*); the locality of sheds; shed’s *organisational arrangements* and purposes, along with; shed member’s capacities and capabilities (*human-based resources*). In terms of this thesis, the recognition of these factors (*organisational arrangements, shed-based resources, and human-based resources*) are some of my original contributions to knowledge; along with the use of a theory-driven methodology to study men’s sheds (‘scientific realism’, Pawson & Tilley, 1997). Better trials can be conducted as a result of my work.

However, through my ontological and epistemological lens, social RCTs are nonsensical. No RCTs can ‘control’ for context; such as the setup and leadership of men’s sheds or the capacities and capabilities (human-based resources) that interact within men’s sheds. Furthermore, it seems unethical to design a social trial using randomisation; when subjects are likely to have preferences about wanting to attend a men’s shed or not. It also seems unrealistic to expect men who are uninterested in men’s sheds to attend them; and for any non-attendance resulting in the ‘intervention’ being *blamed* for ‘not working’ when men are heterogeneous and are not all ‘alike’. It also seems unrealistic for any men who want to attend a men’s shed – but having been assigned to a control group – to be ‘shed-less’ or admonished for breaking their ‘control group’ status if they join a men’s shed.

Ultimately, as South and Phillips assert:

‘[e]valuation should not seek to control complexity because community engagement approaches are complex, dynamic interventions’ (South & Phillips, 2014, p.694, citing Trickett et al., 2011, and Hawe et al., 2009).

As such, for future research I suggest that a form of ‘natural experiment’ (Craig et al., 2012) or ‘non-randomised control trial’ (Rossi et al., 2004) be conducted regarding the efficacy of men’s sheds to support participant health and wellbeing. This could include men who choose

to take part in a men's shed intervention (comprising one group) and men who choose to not take part in a men's shed intervention (as part of a non-participant cluster or 'control' group). Activities and outcomes could be compared between these distinct groups. In such a situation, both groups could be subjected to the same monitoring and assessment criteria including both quantitative monitoring and qualitative exploration (Grant et al., 2013). The examination of health and wellbeing-related affects of men's shed interventions (along with those in any control group) would be best investigated qualitatively during and following the (non-) 'treatment' period. Furthermore quantitative data could be used, pre-intervention and at set time periods during the months of intervention participation, to test the causal processes theorised by this thesis to support participant health and wellbeing (Moore et al., 2014). Any quantitative work needs to examine...

‘...the quality (fidelity) and quantity (dose) of what [i]s implemented in practice’ (Moore et al., 2014, p.21).

Again, it is important to recognise that just like men, each men's shed is individual rather than homogenous, and so the contexts of the men's shed and participants need to be understood. As a result of this research, there is a recognised need to look at leadership and organisational setup. Consideration must be given to how these organisations are funded and if they are funded adequately to have any opportunity to achieve their own men's shed-based objectives – and to have opportunities to impact the community health system within which they have been built. Any trial needs to take into account how men's sheds are led. Men's shed origins, and what they currently are, makes a difference to their development and outcomes – including those pertaining to the health and wellbeing of participants, participant's families and the local community.

As inferred in the '*Limitations of this work and the findings*' section (above), there are lines of inquiry that could have been investigated, but were not covered in this thesis. There was a

hypothesis in Chapter 8 suggesting that men's sheds might mostly appeal, or appeal most, to men who previously worked in predominantly male environments. This is a line of enquiry that could be pursued in future research.

Although there were no negative appraisals of men's shed participation identified in the primary research of this thesis, recent literature has suggested not all partners of men's shed participants view men's sheds positively (Foley et al., 2021). There was, unfortunately, no opportunity to interview spouses or family related to the men in my three case studies. This line of inquiry deserves investigation along with other outcomes for the families of participants and the local communities of men's shed programmes.

Any trial could include measures relating to human geography. A distinct limitation of the current evidence base is the lack of data regarding men's sheds and physical health impacts. It would be interesting to track how physically active men are as an outcome of men's shed participation using methods of tracking movement. It would also be interesting to use tracking devices to observe what social interactions appear to take place between participants of men's sheds. Again, a control group, or pre-men's shed activity measures, could be compared to measures taken during men's shed participation.

Finally, it is suggested that any trial evaluating men's sheds further test the programme theories developed in this thesis. It is also suggested that further 'theories of change' are developed regarding how and why men's sheds as social interventions work (Moore et al., 2014; Skivington et al., 2021).

Summary

This chapter has provided a summary of the findings and programme theories about how and why men shed participation enhances health and wellbeing. The purpose of the research has been fulfilled using an appropriate research design and methodology.

Men's sheds by design or happenstance are social intervention which through social processes can enhance health and wellbeing. Men's sheds facilitate health and wellbeing by providing men with a 'playground' where they can be with other men and actively engage in creating items of their choosing. There are no imposed targets and so men can work at their own pace for pleasure. This environment provides protected time and a space where men can learn and evolve; giving their lives a sense of meaning and enjoyment as they achieve by being involved in purposeful activities.

At men's sheds, participants are given the opportunities to contribute knowledge, skills and labour to their men's shed community and local neighbourhood projects. Men's sheds are a local place that participants feel is 'a home away from home'. These interventions invite men to contribute. Men's sheds are not perceived as services, but are seen as environments where men can contribute their labour; men feel 'useful' rather than being 'a burden' to a service. These circumstances enable men to engage with these health-enhancing interventions.

The findings in this thesis suggest that men's sheds with organisational arrangements (*tPT1*) that provide physical shed-based resources – such as a fit for purpose place for work, with enough space for its personnel, furnished with equipment and materials that support participant's to fabricate and create (*tPT2*) – attract participants. These participants bring their human-based resources (*tPT3*) – such as cognitive and social skills – that through *bonding* 'social capital' enhance participant's cognitive (cultural capital) and social resources. Furthermore, sheds include expensive equipment which might be out of financial reach for

some participants. Sheds offer economic capital resources for community use. Men's sheds are not magically able to 'level-up' the personal economic status of men. However, access to material resources can help participants with less financial freedom; as supported by the third place theory, evidence across this empirical work, and the men's sheds literature.

Men's sheds are an example of non-individualised behaviour change. Men's sheds are physical and social structures where processes encourage the integration of everyday health promoting practices such as socialising, working in the company of others, working together, looking out for one another, sharing and contributing their knowledge, skills, attention, labour and time. This equates to systemic change to local public health systems.

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Appendices

Appendix A: 19 reviews focusing on men's sheds

	Authors	Include / Exclude + reason
1	Antunes, Marcos Henrique and More, Carmen Leontina Ojeda Ocampo	EXCLUDE - Not about "men's sheds"
2	Bigonnesse, Catherine, Mahmood, Atiya, Chaudhury, Habib, Mortenson, W. Ben, Miller, William C. and Martin Ginis, Kathleen A.	EXCLUDE - Not about "men's sheds"
3	Bottorff, Joan L., Seaton, Cherisse L., Johnson, Steve T., Caperchione, Cristina M., Oliffe, John L., More, Kimberly, Jaffer-Hirji, Haleema and Tillotson, Sherri M.	EXCLUDE - Not about "men's sheds"
4	Brown, M., Golding, B. and Foley, A. 2008	EXCLUDE DUE TO BEING A Conference Abstract
5	Buetow, Stephen, Jutel, Annemarie and Hoare, Karen Shrinking	EXCLUDE - Not about "men's sheds"
6	Golding 2015 book	EXCLUDE - DUE TO BEING A book
7	Gough, Brendan and Robertson, Steve	EXCLUDE - Not about "men's sheds"
8	Kelly et al 2019	INCLUDED – A peer-reviewed publications that reviews men's shed literature
9	Keogh, Edmund	EXCLUDE - Not about "men's sheds"
10	Library, Nihr Journals Men in sheds: improving the health and wellbeing of older men through gender-based activity interventions: a systematic review and scoping for an evaluation Book 2015	EXCLUDE - could NOT locate
11	Loon, Mark, Otaye-Ebede, Lilian and Stewart, Jim	EXCLUDE - Not about "men's sheds"
12	Lowry, RG, Burkitt, E, Edmunds, S and Farina, N	EXCLUDE - DUE TO BEING A Conference Abstract
13	Manthorpe, Jill and Moriarty, Jo	EXCLUDE - Not about "men's sheds"
14	Markham, S 2016	EXCLUDE - DUE TO BEING A POSTER
15	Milligan et al 2016	INCLUDED – A peer-reviewed publications that reviews men's shed literature
16	Papageorgiou, Nicole, Marquis, Ruth, Dare, Julie and Batten, Rachel	EXCLUDE - Not about "men's sheds"
17	Seaton, Cherisse L., Bottorff, Joan L., Jones-Bricker, Margaret, Oliffe, John L.,	EXCLUDE - Not about "men's sheds"

	DeLeenheer, Damen and Medhurst, Kerensa	
18	Treacy, K. and Guerin, S. 2019	EXCLUDE - DUE TO BEING A Conference Abstract
19	Wilson and Cordier, 2013	INCLUDED A narrative review, in a peer-reviewed, publication aiming to determine what empirical evidence existed (up until February 2012) to support the claim that Men's Sheds improve men's health and wellbeing. Twenty-two items were identified which predominantly focused on older men in Australian Men's Sheds.

Appendix B: 3 men's shed reviews assessed using 'CASP Checklist: 10 questions to help you make sense of a Systematic Review'

CASP Checklist: 10 questions to help you make sense of a Systematic Review		Wilson and Cordier, 2013	Milligan et al 2016	Kelly et al 2019
1	Did the review address a clearly focused question	Yes	Yes	Yes
2	Did the authors look for the right type of papers?	Yes	Yes	Yes
3	Do you think all the important, relevant studies were included?	Yes	Yes	Can't tell
4	Did the review's authors do enough to assess quality of the included studies?	Yes	Yes	No
5	If the results of the review have been combined, was it reasonable to do so?	Yes	Yes	Yes
6	What are the overall results of the review?	Although the quality of papers were 'assessed', several included papers were of a poor quality. The state of the science regarding 'health and well-being outcomes' needs improving. Findings regarding	There is limited evidence that men's sheds may have impact on the mental health and wellbeing of older men. There is little evidence of the impact on physical health. There was a lack of longitudinal evidence drawing on validated health	Eight findings of 'intermediate health and well-being outcomes' and seven findings of 'long-term health and well-being outcomes' were identified as leading to improved physical health, mental health and social wellbeing. Five studies evidenced physical health is improvement by: Provision of practical/ physical activities, Increased physical movement, Decreased sedentary behaviour, Improved fitness and mobility, Decreased sense of frailty All 16 studies evidenced improved mental health through: Opportunities to give back to the community, Completion of 'work like' activities, Sharing of skills and knowledge, Motivation to leave the house, Structure and

		wellbeing are self-report or anecdotal and small scale. Reported benefits are promising. No reliable standardised health and well-being outcome measures were used to produce results.	and wellbeing measures. Key components of successful interventions included accessibility, range of activities, local support and skilled coordination	routine to life, Increased sense of purpose and meaning to life, Increased self-worth and empowerment, Increased confidence and self-esteem, Increased sense of independence and control over life 14 studies evidenced increased social wellbeing with: Provision of space for socialisation and interaction with others, Increased opportunities to interact with others, Improved social networking skills, Increased social bonds and meaningful relationships, Decreased social isolation and loneliness, Reduction in social avoidance
7	How precise are the results?	n/a	n/a	n/a
8	Can the results be applied to the local population?	Can't tell	Can't tell	Can't tell
9	Were all important outcomes considered?	Can't tell	Yes	Yes
10	Are the benefits worth the harms and costs?	Yes	Yes	Yes

Appendix C: 43 items covered within the three reviews of men's sheds literature

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
1	Ayres, Patrick, and Capetola (2018). Health and environmental impacts of a regional Australian Men's Shed program	Kelly et al 2019	13 men shed participants and 8 staff	1 shed	Semi-structured individual and group interviews found the men's shed fostered human health and environmental sustainability benefits for participants the wider community. Mental and social health benefits included developing a sense of purpose, increased self-confidence, 'mateship' and social connectedness, and informal support. Physical health benefits were less apparent, but included physical activity from manual-type labour, nutritional education from the community garden and cooking classes, and regular health check-ups from the health service's nurses.	Australia. Older men. Utility function men's shed.
2	Ballinger et al. (2009). More than a place to do woodwork: a case study of a community based Men's Shed.	Wilson and Cordier, 2013 Milligan et al 2016	8 participants	1 shed	In-depth interviews analysed thematically found the men's shed supported participants engagement in activities they enjoy and	Australia. Older men. Female researcher

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
		Kelly et al 2019			find meaningful. This, in turn, provides a sense of purpose and identity. The social environment of Men's Sheds leads to the development of positive social relationships with other men and a sense of belonging.	
3	Brown , M., Golding, B. & Foley, M. (2008) 'Out the back: Men's sheds and informal learning', Fine Print 31: 2, pp.12-15, 2008.	Wilson and Cordier, 2013	Unclear	25 sheds	Descriptive survey plus focus group interviews refer to enjoyment of adult learning through doing projects for pleasure in an informal setting without teacher-student hierarchy.	Australia.
4	Bulman and Hayes (2011). Mibbinbah and spirit healing: fostering safe, friendly spaces for Indigenous males in Australia.	Wilson and Cordier, 2013	Unclear	Unclear	Unclear	Australia. Aboriginal and Torres Strait Islander men
5	Cass, Y., Fildes, D. and Marshall, C. 2008. 3 in 1 - Mature men's project evaluation results. Centre for Health Service Development, South-	Milligan et al 2016	9 participants	1 shed	Unclear	Australia. Average age 54. Ethnic minority groups, predominantly The Portuguese community

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
	eastern Sydney Illawarra, Australia.					
6	Cordier and Wilson (2014). Community-based Men's Sheds: promoting male health, well-being and social inclusion in an international context	Kelly et al 2019	324 Australian and 59 international sheds representative s	383 sheds	Men's Sheds, in a community development context, support the social and mental health needs of men and help address the gendered health disparity that males face.	International
7	Crabtree et al. (2017). Men's sheds: the perceived health and well-being benefits	Kelly et al 2019	8 participants	2 urban men's sheds	Qualitative semi-structured interviews found men's sheds improved older men's perceived level of social interaction, men's outlook, led to self-reported improvements in depression, and all perceived themselves to be fitter since joining. Despite the research being conducted in an urban area, it highlighted a lack of prior community engagement.	London, England, UK. men aged 65 and over
8	Culph, Wilson, Cordier, and Stancliffe (2015). Men's Sheds and the experience of depression in older Australian men	Kelly et al 2019	12 participants	3 sheds	The men's shed decreased self-reported symptoms of depression based on semi-structured, in-depth interviews and scores of the Beck Depression Inventory-II instrument indicating that most	Australia. Average age of 67 years. Interviews by a female researcher

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
					<p>participants were currently experiencing minimal depression.</p> <p>The Men's Sheds environment promoted a sense of purpose through relationships and in the sharing of skills, new routines, motivation, and enjoyment for its members. The shed encouraged increased physical activity and use of cognitive skills. Finally, participants reported feelings of pride and achievement which had an impact on their sense of self-worth.</p> <p>Suggests '[m]asculine activities counteract potential vulnerability' of sharing feelings of depression.</p>	
9	Fildes et al. (2010). Shedding light on men: the Building Healthy Men project.	Wilson and Cordier, 2013 Kelly et al 2019	Nine participating men	1 shed	The 2 year long evaluation followed nine participants using pre-, mid- and post- semi-structured interviews, participant journals and a six point Likert scale was used across eight indicators to measure 'community capacity' (adapted	Australia. Retired and/or unemployed men from culturally and linguistically diverse (CALD) backgrounds (5x Portuguese Background; 1x

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
					from Bjärås et al., 1991 and; Labonte & Laverack, 2001). Results suggest that the men experienced an increase in social contacts, developed new skills, and they self-reported improved health and wellbeing.	Greek; 1x Macedonian; 1x Serbian; 1x Anglo-Saxon). Ages ranged from 41 to 62 years (54 year average). Seven lived with a wife and two men lived alone.
10	Ford, Scholz, and Lu (2015). Social shedding: Identification and health of men's sheds users.	Kelly et al 2019	332 responses from multiple Australian sheds (undisclosed)	Unclear	<p>Drawing on social identity theory the study examined the extent to which membership of Men's Sheds influences the quality of life of participants.</p> <p>A 12 item, 5-point Likert scale (adapted from Cameron, 2004), measuring 'social identification' (including ingroup ties) and a 24 item, 5-point Likert scale (by the WHO, 1998) measuring Quality of Life found that social identity (particularly ingroup ties) among Men's Sheds members was a significant predictor of physical health, psychological, social relationships, and environmental domains of quality of life, as well</p>	<p>Australia.</p> <p>Age range 25-86 years (average 67 years).</p> <p>Approx 70% of participants were retired, and 81% lived with a partner. Most members had participated for >1 year attending 2-3 times per week.</p>

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
					as willingness to accept health advice.	
11	Foster, Munoz, and Leslie (2018). The personal and community impact of a Scottish Men's Shed	Kelly et al 2019	31 participants	1 shed	Opportunistic interviewing of a convenience sample of core members along with answers to a bespoke questionnaire featuring a Likert scale and open-ended questions identified personal, social and health benefits from attending the Shed. Attending men were reported to frequently discuss health.	Scotland, UK. Retired men. Average age of 70 years
12	Golding B. & Harvey J. (2006) Final report on a Survey of Men's Sheds Participants in Victoria: Report to Adult, Community and Further Education Board. Adult, Community and Further Education Board of Victoria, Melbourne, FL.	Wilson and Cordier, 2013	154 participants	22 men's sheds	154 descriptive survey respondents reported that they enjoyed the shed, felt better about themselves, gained a sense of 'belonging', and accessed health information	Australian. Report to an Adult Education Board. 49% of the men had very limited formal school education; 68% did not enjoy learning at school; and 32% have either a trade background or no formal education post school. 61% of sheds were sponsored by a

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
						health authority; a health worker referred 37% of survey respondents to the shed; 25% of survey respondents had some form of disability.
13	Golding B. (2006) Shedding light on new spACES for older men in Australia. Quest - Adult Learning Australia 1, 18–20, 26.	Wilson and Cordier, 2013	154 participants	22 men's sheds	Finding from Golding and Harvey (2006) report's survey (above). It is theorised that fore-grounding men's sheds as health promoting would discourage similar participants attending.	Australian. Publication of Golding and Harvey (2006) report findings. Many participants were retired, unable to find recent work, had recently experienced a health crisis, one third had separated from their partner.
14	Golding, B., Brown, M., Foley, A., Harvey, J. and Gleeson, L. (2007a). Men's sheds in Australia. Learning through community	Wilson and Cordier, 2013 Milligan et al 2016	211 participants (surveyed). Also 24 men's sheds (no. of participants	150 men's sheds were surveyed	One third of men were referred to the shed by a health or welfare worker. Many men reported learning new skills. The Men's Shed was a preferred informal learning site for most men. 90%	Australian. Report on Vocational and Educational Research

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
	contexts. National Centre for Vocational Education Research, (NCVER), Adelaide, Australia.		unknown) took part in a focus group interviews		of men felt that the shed was a good place to meet new friends.	
15	Golding B., Foley A. & Brown M. (2007b) The international potential for men's shed-based learning. Ad-Lib: Journal for Continuing Liberal Adult Education 34, 9–13.	Wilson and Cordier, 2013	211 participants (surveyed). Also 24 men's sheds (no. of participants unknown) took part in a focus group interviews	150 men's sheds were surveyed	Suggest more research is conducted on the health and wellbeing benefits of men's sheds.	Australian. Publication of Golding et al. (2007a) report findings. Reported tension between grassroots men's shed organisations and demands of funding bodies.
16	Golding, B., Brown, M. and Foley, A. 2007. Old dogs new shed tricks. An exploration of innovative workshop-based practice for older men in Australia. Australian Vocational Education and Training Research Association (AVETRA) Conference. Melbourne, Australia	Milligan et al 2016	211 participants (surveyed). Also 24 men's sheds (no. of participants unknown) took part in a focus group interviews	24 men's sheds	Men's sheds provide a social and therapeutic function supporting the health and wellbeing of ex-military and older care recipients. The men's shed model can accommodate special groups with varying needs.	Australian. Publication of Golding et al. (2007a) report findings.

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
	(Golding et al., 2007)					
17	Golding B. (2008) Researching Men's Sheds in community contexts in Australia: what does it suggest about adult education for older men? Journal of Adult and Continuing Education 14 (1), 17–33.	Wilson and Cordier, 2013	211 participants (surveyed). Also 24 men's sheds (no. of participants unknown) took part in a focus group interviews	24 men's sheds	Descriptive findings from surveys. Theorises that participation in communities of practice is more conducive to the learning of older men than engagement in formal vocational or adult education courses.	Australian. Publication of Golding et al. (2007a) report findings. Reported tension between grassroots men's shed organisations and demands of funding bodies.
18	Golding B., Kimberley H., Foley A. & Brown M. (2008) Houses and sheds in Australia: an exploration of the genesis and growth of neighbourhood houses and men's sheds in community settings. Australian Journal of Adult Learning 48 (2), 237–262.	Wilson and Cordier, 2013	n/a	n/a	A discussion piece about gendered places in Australian communities suggesting places can cater to the different learning needs of men and women.	

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
19	Golding, B. and Foley, A. 2008. 'How men are worked with': gender roles in men's informal learning. Paper presented to the 38th Annual SCUTREA Conference, 2-4 July, Edinburgh, UK	Milligan et al 2016	No empirical data	About men's sheds generally	Explores gendered roles associated with men's informal learning, in particular the role of women as coordinators and participants in community organisations where men comprise the significant majority of participants.	Australian. Conference presentation relating to Golding et al. (2007a) report findings.
20	Golding, B., Brown, M., Foley, A. and Harvey, J. 2009a. Men's learning and wellbeing through community organisations in Western Australia. Report to Western Australia Department of Education and Training, School of Education, Federation University, Perth, Australia.	Milligan et al 2016	n/a	Not men's shed specific	n/a	Australia. Western Australia Department of Education and Training
21	Golding, B., Foley, A., Brown, M. and Harvey, J. (2009b). Senior Men's Learning and	Wilson and Cordier, 2013	No shed specific population data	3 men's sheds (as part of a larger study)	Men's sheds are important particularly for some vulnerable men but are not for all older men. Men's sheds are a setting for	Australia. Report on productive ageing.

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
	Wellbeing Through Community Participation in Australia. Report to the National Seniors Productive Ageing Centre, School of Education, Federation University, Perth, Australia.	Milligan et al 2016			learning, where older men can be co-participants in shared activities rather than problematising or patronising men as students or clients.	
22	Golding B. (2011a) Older men's wellbeing through community participation in Australia. International Journal of Men's Health 10 (1), 26–44.	Wilson and Cordier, 2013	No shed specific population data	3 men's sheds (as part of a larger study)	Men's shed participation allows men to develop identities independent of paid work. Men found shed activities therapeutic which likely contributed to their subjective experience of wellbeing.	Australian. Publication of Golding et al. (2009b) report findings.
23	Golding B. (2011b). Thinking inside the box: what can we learn from the Men's Shed movement? Adults Learning 22 (8), 24–27.	Wilson and Cordier, 2013	n/a	n/a	A discussion piece suggesting grassroots men's sheds, setup by older men, can be effective learning environments for participants.	Written for an adult learning journal
24	Golding B. (2011c) Social, local, and	Wilson and Cordier, 2013	n/a	n/a	Summarising previous research to suggest informal learning for	Written for an adult education journal

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
	situated: recent findings about the effectiveness of older men's informal learning in community contexts. Adult Education Quarterly 61 (2), 103–120.				older men is possible and is most effective when local, social and situated in a men's shed environment	
25	Golding B. (2011d). Shedding ideas about older men's learning. Lifelong Learning in Europe 2, 119–124.	Wilson and Cordier, 2013	n/a	n/a	Discussion piece suggesting grassroots men's sheds across Australia are a rare example of engaging older men in informal learning beyond work.	Written for a lifelong learning journal
26	Graves, K. 2001. Shedding the Light on Men in Sheds: Final Report 2001. Community Health, Bendigo, Australia.	Milligan et al 2016	No shed specific population data	1 shed	Mixed-methods evaluation using focus groups and questionnaires to assess health education needs in a community setting.	Australia. Men aged 48–70 years.
27	Hansji, Wilson, and Cordier (2015). Men's Sheds: enabling environments for Australian men living with and without long term disabilities	Kelly et al 2019	12 participants of a shed	1 shed	Semi-structured interviews and observations were used to identified that the men's shed is a enabling community space. Four sub-themes include that the shed is: a community and social hub; an equalising space; a safe and	Australia. Age range 23-85 years. Journal article

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
					supportive gender sensitive environment; a place for meaningful male activities. Additionally, men with long-term disabilities found the men's shed to offer an environment of equality, facilitating a collegial and egalitarian culture. Men can partake in enabling activities and enjoy the company of other men enhancing their sense of belonging and social inclusion.	
28	Hayes and Williamson (2007). Men's Sheds: Exploring the evidence base for best practice.	Wilson and Cordier, 2013	30 men took part in a focus group at a Men's Shed conference		The authors developed a typology to conceptualise types of men's sheds.	Australia. An independent report.
29	Healthbox Community Interest Company. 2012. Men in Sheds Programme Health Evaluation. Age UK, Cheshire, UK. (Healthbox CIC, 2012)	Milligan et al 2016	?	4 Age UK men's sheds	Observation and surveys on use of health services	UK. Men's Sheds established by Age UK for inclusion of older men

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
30	Henwood et al. (2017). Men's health and communities of practice in Australia	Kelly et al 2019	5 indigenous leaders/coordinators participated in semi-structured interviews and five focus groups with participants totalling 61 Indigenous men.	5 sheds	Semi-structured interviews and focus groups (yarning circles) were used to explore five case study sites as active communities of practice. Men's sheds effectively develop social relations, operating as a Community of Practice and might contribute to overcoming social and health wellbeing concerns. Indigenous men are engaged and are learning new skills and contributing to social change.	Australia: Aboriginal and Torres Strait Islander men.
31	Lefkowich and Richardson (2018). Men's health in alternative spaces: exploring men's sheds in Ireland	Kelly et al 2019	27 attendees of men's sheds	5 sheds	Semi-structured interviews, focus groups and observations identified that men's shed participation means using and developing new skills, feeling a sense of belonging, supporting and being supported by peers, and contributing to community. These things contribute to men's overall wellbeing. Funding is important to keep men's sheds functioning.	Ireland. Age range early 20s to mid-70s

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
32	Martin et al. (2008). Meaningful occupation at the Berry men's shed	Wilson and Cordier, 2013	2 females ethnographic experience of a men's shed	1 shed	The students' key observation was that mentoring between members and learning by 'doing' were characteristic of the shed environment and of the socialisation process	Photographs and short essay by two female Canadian occupational therapy students of their experience attended an Australian men's shed one day a week for 6-weeks.
33	McGeechan et al. (2017). Exploring men's perceptions of a community-based men's shed programme in England	Kelly et al 2019	32 men	5 sheds	<p>5 focus groups discovered some men's sheds run activities but the main driving factor is the social aspect, with men attending for nothing more than a chat and a cup of tea and experience a social network.</p> <p>Men's shed groups would benefit from more formal links to one another which might increase the range of activities on offer.</p> <p>The sheds are an effective way of reducing social isolation in older men. But further work is needed to understand impacts on physical and mental wellbeing.</p>	England, UK. Male attendees aged 18–69 years

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
34	Milligan, C., Payne, S., Bingley, A. and Cockshott, Z. 2012. Evaluation of the men in sheds pilot programme. Report for Age UK, London.	Milligan et al 2016	Shed Members, and Shed coordinators and managers	3 Age UK men's sheds	Retrospective evaluation using mixed methods (observations, focus groups and interviews) assessing the effectiveness of the Age UK 'Men in Sheds' pilot programme in engaging isolated and lonely older men on low incomes and enhancing their quality of life and wellbeing.	UK. Men's Sheds established by Age UK ('Men in Sheds' pilot programme) for inclusion of older men
35	Milligan, C., Payne, S., Bingley, A. and Cockshott, Z. 2015. Gender, place and health: shedding light on activity interventions for older men. Ageing & Society, 35, 1, 124-149. (Milligan et al., 2015)	*Milligan et al 2016 (This study is mentioned in 'Results' section but not in the review's summary of included studies.) [This makes 44 studies rather than 43 studies!]	24 interviews (eight from each of the three sheds) and 4 focus groups. In total data was gathered from 62 participants	3 Age UK men's sheds	Men's sheds are gendered spaces and therapeutic landscapes, enhancing wellbeing, reducing social isolation and loneliness and provided cognitive stimulation	AgeUK 'Men In Sheds' project, UK. Journal article, linked to above report.
36	Misan et al. (2008). Men's Sheds: A	Wilson and Cordier, 2013	50 men and one woman involved in	8 sheds	Mental and social wellbeing were more important to the men than physical health.	Report to Men's Sheds Australia

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
	strategy to improve men's health.	Milligan et al 2016	individual and focus group interviews			
37	Morgan M., Hayes R., Williamson M. & Ford C. (2007) Men's Sheds: a community approach to promoting mental health and well-being. International Journal of Mental Health Promotion 9 (3), 48–52.	Wilson and Cordier, 2013	n/a	n/a	The piece presents best-practice knowledge for Victorian (Australia) Men's Sheds and presents the Hayes & Williamson typology of men's sheds.	Australia. Linked to the Hayes & Williamson 2007 report.
38	Morgan (2010). A room of their own: Men's Sheds build communities of support and purpose.	Wilson and Cordier, 2013	n/a	n/a	A discussion about the potential role of Men's Sheds to reduce isolation and depression in men.	Australia.
39	Moylan et al. (2015). The Men's Shed: Providing biopsychosocial and spiritual support.	Kelly et al 2019	21 men's shed participants	1 shed studied over 6 months	Semi-structured, in-depth interviews and observations reported increased self-esteem, empowerment and a sense of belonging in the community; provided respite from families, and; facilitated the opportunity to	Australia. Age range 18–91 years

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
					exchange ideas relating to personal, family, communal and public health issues. The community men's shed was thought to encourage intrapersonal and inter-personal reflection and interaction that subsequently results in men meaningfully, purposefully and significantly connecting with the moment, to self, to others.	
40	Munoz, Farmer, Winterton, and Barraket (2015). The social enterprise as a space of well-being: an exploratory case study.	Kelly et al 2019	3 staff and 21 participants (who were mostly men)	1 'Green' Shed which is a social enterprise	A case study was used to explore mechanisms of wellbeing production. Methods included: Observation over five visits, each lasting 1-4 hours and digital mapping of ethnographic observation; Two focus groups involving five volunteers each (lasting 40 minutes); Walking interviews conducted with four volunteers. Thematic analysis, geographic information system (GIS) software to capture and analyse	Victoria, Australia. 13 participants were retired, 6 were unemployed or under-employed

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
					<p>spatial and geographic data and the lens of therapeutic assemblage.</p> <p>The shed was found to produce 'wellbeing' through: integration, capability, security and therapy. The men's shed acts as a therapeutic assemblage, with wellbeing: 'spoken', 'practiced' and 'felt'.</p>	
41	Ormsby et al. (2010). Older men's participation in community-based Men's Sheds programmes.	<p>Wilson and Cordier, 2013</p> <p>Milligan et al 2016</p> <p>Kelly et al 2019</p>	5 participants	2 Sheds	Semi-structured interviews yielded 6 themes: 'company of fellas'; 'everybody's got a story to tell'; 'still got some kick'; 'passing on your experiences'; 'get on your goat' and; 'nobody's boss'. Men's Sheds provided the men with a place to adjust to the losses in retirement and an important place for socialising and mixing with other men.	Australia. Men aged 67-92 years, four married.
42	Reynolds, K. A. 2011. Older male adults' involvement in mens	Milligan et al 2016	12 older men	2 sheds	Mixed methods (interviews, field notes, quantitative questionnaire)	Canada. MA Psychology Dissertation.

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
	sheds. Master of Arts Thesis, University of Manitoba, Winnipeg, Manitoba, Canada.				found men's sheds promote social engagement and healthy, successful aging. Benefits included expanding friendships, improving mental health, and broadening horizons. Most participants noted that they had experienced great benefit from the friendships they had gained as a result of their involvement.	
43	Thomson (2008). Talking about shed culture.	Wilson and Cordier, 2013	n/a	n/a	A photo-essay discussing the historical role of sheds in Australia and how community-based Men's Sheds are starting to fill the void left by the demise of many men's backyard sheds.	Australia
44	Waling and Fildes (2017). 'Don't fix what ain't broke': evaluating the effectiveness of a Men's Shed in inner-regional Australia.	Kelly et al 2019	22 male participants	1 shed	A survey of 22 men and semi-structured interviews with 20 men found the shed aided 1) independence for the older men; 2) supported men's help-seeking and engaging in emotional support; 3) the men as a community space in which to	Australia. Age range 40–75 years. Part of a community needs assessment conducted to help direct future funding initiatives, and provide

	Authors	Included in...	Population	Intervention	Outcome(s)	Context
					meet which supported their overall wellbeing.	recommendations for potential changes and improvements to the programme. Referred to 'social wellbeing' and 'medical wellbeing'

Appendix D: 119 items published 01-01-2013 to 31-01-2020

	Reference	Include + reason [link to Initial Programme Theory] <i>'It's about men's sheds and...</i>	Exclude + reason
1	(Ahl et al., 2017)	health and wellbeing, leadership and organisational arrangements in Scandinavia [IPT1]	
2	(Alessi & Rashbrook, 2016)		Abstract – not about men's sheds
3	(Altamirano et al., 2018)		Title – not relating to men's sheds
4	(Ang et al., 2017)	human resource management (HRM) impact on health and wellbeing [IPT1]	
5	(Anstiss et al., 2018)	re-placement and socialising impacts on health and wellbeing [IPT2 & IPT3]	
6	(Ayres et al., 2018)	health and environmental impacts – 'mateship' and social connectedness [IPT3]	
7	(Bailey et al., 2019)		Abstract – not about men's sheds
8	(Basso et al., 2018)		Title – not relating to men's sheds
9	(Cantelli et al., 2020)		Title – not relating to men's sheds
10	(Carlucci et al., 2017)		Title – not relating to men's sheds
11	(Carragher, 2017)	opportunities for generativity, giving back to the community by sharing of skills and experiences [IPT2]	
12	(Carragher & Golding, 2015a)	adult learning [IPT2 & IPT3]	
13	(Cavanagh et al., 2013)	human resource management in a voluntary organisation. Participates have altruistic motives and benefit from reciprocal	

		relationships [IPT1, IPT2 & IPT3]	
14	(J. Cavanagh et al., 2014)	training and development practices for growth of men's shed and collaborative learning of members to enhance wellbeing relationships [IPT1, IPT2 & IPT3]	
15	(Choi et al., 2020)		Title – not relating to men's sheds
16	(Collins et al., 2013)		Title – not relating to men's sheds
17	(Reinie Cordier & Nathan J. Wilson, 2014)	community-based male health promotion supporting wellbeing, mental health and social inclusion internationally - addressing the gendered health disparity [IPT1 & IPT2]	
18	(R. Cordier & N. J. Wilson, 2014)		Full-text – About 'mentoring in' men's sheds, rather than health and wellbeing benefits of men's shed
19	(Cordier et al., 2016)		Full-text – About 'mentoring in' men's sheds, rather than health and wellbeing benefits of men's shed
20	(Costa et al., 2015)		Title – not relating to men's sheds
21	(Cox et al., 2020)	sheds being a co-created, therapeutic, male-friendly, community environment for older Aboriginal men enabling belonging, hope, mentoring and shared illness experiences where enjoy the company of other men [IPT3]	
22	(Crabtree et al., 2018)	Improvements to older men's perceived level of social interaction, improved outlook and self-reported	

		improvements in depression and feeling fitter [IPT3]	
23	(Culph et al., 2015)	self-reported decrease in symptoms of depression. Promoting a sense of purpose through relationships and sharing skills. Increased physical activity and use of cognitive skills [IPT2 & IPT3]	
24	(Dong et al., 2016)		Title – not relating to men’s sheds
25	(Dubois et al., 2013)		Title – not relating to men’s sheds
26	(Duering & Wahl, 2014)		Title – not relating to men’s sheds
27	(Dunkel Schetter et al., 2013)		Abstract – not about men’s sheds
28	(Eberlein et al., 2015)		Title – not relating to men’s sheds
29	(Fleming et al., 2019)		Title – not relating to men’s sheds
30	(Ford et al., 2015)	social identity, particularly ingroup ties, was found to be a predictor of physical health, psychological, social relationships, and environmental domains of quality of life, as well as willingness to accept health advice [IPT3]	
31	(Foster et al., 2018)	self-reported personal, social and health benefits from attendance + frequent discussions about health [IPT3]	
32	(Fulton et al., 2016)		Abstract – not about men’s sheds, actually about community-based rehabilitation
33	(Galewski & Devictor, 2016)		Title – not relating to men’s sheds
34	(Gao et al., 2015)		Title – not relating to men’s sheds
35	(Geron et al., 2019)		Title – not relating to men’s sheds

36	(Ghosn et al., 2014)		Title – not relating to men's sheds
37	(Gianella et al., 2013)		Title – not relating to men's sheds
38	(Gill et al., 2014)		Title – not relating to men's sheds
39	(Gitler et al., 2017)		Title – not relating to men's sheds
40	(Golding, 2013)		Abstract – about community-based learning in men's sheds
41	(Golding & Carragher, 2015)		Abstract – not a primary study
42	(Golding & Foley, 2017)		Abstract – intergenerational mentoring based in men's sheds
43	(Golding et al., 2020)		Abstract – not about a men's shed for men
44	(Goyal & Howlett, 2020)		Abstract – not about men's sheds
45	(Gulino et al., 2013)		Title – not relating to men's sheds
46	(Gunier et al., 2013)		Title – not relating to men's sheds
47	(Haley et al., 2016)		Title – not relating to men's sheds
48	(Hansji et al., 2015)	that sheds are enabling community spaces; social hubs; equalising spaces; safe and supportive male environments, and; include meaningful 'male' activities [IPT3]	
49	(Hayeur Smith et al., 2018)		Title – not relating to men's sheds
50	(Hedegaard & Ahl, 2019)		Full-text – lack of information about methods and participants
51	(Henwood et al., 2017)	Aboriginal and Torres Strait Islander men's health is added by men's shed which are 'communities of practice' [IPT2]	
52	(Ip et al., 2017)		Title – not relating to men's sheds

53	(Kelly et al., 2019)	[included as a review study]	Abstract – not a primary study
54	(Kimberley et al., 2016)		Full-text – lack of information about methods and participants
55	(Kınıkoğlu & Can, 2020)		Title – not relating to men's sheds
56	(Lechleitner Pangarta, 2018)		Full-text – lack of information about methods and participants
57	(Lee, 2020)		Title – not relating to men's sheds
58	(Lee et al., 2020)		Title – not relating to men's sheds
59	(Lefkowich & Richardson, 2018)	key features are developing new skills, feeling a sense of belonging, supporting and being supported by peers, and contributing to community, which all contribute to men's overall wellbeing. Men's Sheds need funding to provide the shed space and support their membership [IPT1 & IPT3]	
60	(Liddle et al., 2017)		Abstract – about falls risk prevention, that took place in a men's shed
61	(Mackenzie et al., 2017)	the focus on work, independence, and male-focused spaces support dominant masculine values and ideals [IPT1 & IPT2]	
62	(Mahoney et al., 2020)		Full-text – Study is about mentoring rather than any health and wellbeing outcomes for attendees of men's sheds.
63	(Mapes, 2017)		Abstract – not about men's sheds
64	(Marsh, 2016)		Abstract – not about men's sheds
65	(McGeechan et al., 2017)	reducing social isolation in older men. While some sheds run activities, the	

		main driving factor of sheds was the social aspect allowing men to recapture lost social networks from their working days [iPT3]	
66	(McGrath et al., 2020)		Full-text – Study is about a 10-week health and wellbeing programme and the differences between two groups at 6 month follow-up due to the implications of Coronavirus
67	(Mead et al., 2018)		Title – not relating to men’s sheds
68	(Milbourn et al., 2020)		Abstract – about intellectual disability and mentoring, at a men’s shed
69	(Milbrath et al., 2013)		Title – not relating to men’s sheds
70	(Milligan et al., 2016)	[included as a review study]	Abstract – not a primary study
71	(Milligan et al., 2015)	gendered interventions are needed for men and men's sheds to promote and maintain the health and wellbeing of older men and reaffirm their masculinity [iPT1 & iPT2]	
72	(Misan et al., 2017)	a better understanding of what concerns and interests men’s shed members in terms of health, where they go for health advice and their preferred format for receiving health information [iPT3]	
73	(Morgan et al., 2013)		Title – not relating to men’s sheds
74	(Morgan et al., 2014)		Title – not relating to men’s sheds
75	(Moriarty & Manthorpe, 2017)		Abstract – not about men’s sheds
76	(Moylan et al., 2015)	provide ‘biopsychosocial’ support and can deliver ‘spiritual’ support.	

		Community men's sheds can increase self-esteem and empowerment and give respite from families, a sense of belonging in the community and the opportunity to exchange ideas relating to personal, family, communal and public health issues [IPT2]	
77	(Nakamura et al., 2019)		Title – not relating to men's sheds
78	(Nathan, 2018)		Abstract – not about men's sheds
79	(Neufeld et al., 2017)		Title – not relating to men's sheds
80	("Nindee Men's Shed a place to reconnect," 2015)		Abstract – not a primary study
81	(Nurmi et al., 2018)	the need for the need for male-focused community programmes to reduce isolation, facilitate forming friendships and engaging in adult learning. Engagement in male-focused programmes should begin before retirement age and programmes should be mindful of how they are branded and marketed to men [IPT2]	
82	(Odoyo-June et al., 2013)		Title – not relating to men's sheds
83	(Porfirio et al., 2020)		Title – not relating to men's sheds
84	(Prehn & Ezzy, 2020)		Abstract – not a primary study about men's sheds
85	(Pérez, 2017)		Abstract – about a fishing club, not relating to men's sheds
86	(Rahja et al., 2016)		Abstract – about intergenerational mentoring, at a men's sheds
87	(Reynolds et al., 2015)	participant descriptions of characteristics and	

		experiences that <i>preceded</i> their involvement, characteristics of <i>current</i> involvement, and reasons that promote their <i>continued</i> involvement [IPT1]	
88	(Ryan, 2020)		Title – not relating to men’s sheds
89	(Scaggiante et al., 2016)		Title – not relating to men’s sheds
90	(Seaman et al., 2020)		Abstract – about a health promotion stand at an event for men’s shed groups
91	(Amie Southcombe et al., 2015) Capacity building in indigenous men’s groups and sheds across Australia	factors that contribute to successful leadership, participatory and leadership practices in men’s sheds [IPT1]	
92	(A. Southcombe et al., 2015) Retired men and Men’s Sheds in Australia	capacity building results in better health outcomes and, educates and empowers men to improve their social, cultural, emotional and economic wellbeing. It helps men to better connect with family and community [IPT1]	
93	(Steen et al., 2015)		Title – not relating to men’s sheds
94	(Sun et al., 2020)		Title – not relating to men’s sheds
95	(Taylor et al., 2018)	health and wellbeing benefits of Men's Shed included fellowship, sense of belonging, access to equipment, and learning new and sharing their own skills [IPT2]	
96	(Taylor et al., 2016)		Full-text – Includes a men’s shed but findings and outcomes are also about makerspaces and

			this study needs to be excluded.
97	(Thomas et al., 2019)		Title – not relating to men’s sheds
98	(Tobian et al., 2015)		Title – not relating to men’s sheds
99	(Turner et al., 2016)		Title – not relating to men’s sheds
100	(Waling & Fildes, 2017)	key success factors for running a Men's Shed were identified using a community needs assessment of a Men's Shed programme in inner-regional Australia [IPT1]	
101	(Wang et al., 2017)		Title – not relating to men’s sheds
102	(Way, 2016)		Title – not relating to men’s sheds
103	(Wicks, 2013)		Full-text – the book chapter is based on secondary sources and an (auto) ethnographic experience of time spent at Berry Men’s Shed in New South Wales, Australia. (Some data is from the previously published Martin et al 2008 which is referred to 'Malpage 2008'.)
104	(Wilcox et al., 2015)		Title – not relating to men’s sheds
105	(Wilson & Cordier, 2013)	[included as a review study]	Abstract – not a primary study
106	(Wilson et al., 2018)		Abstract – a feasibility study about intergenerational mentoring, at men's sheds

107	(Nathan J. Wilson et al., 2015)		Abstract – not a primary study about men’s sheds
108	(Wilson et al., 2020)		Abstract – about intergenerational mentoring and disability, at a men’s shed
109	(Wilson et al., 2016)		Full-text – the study is focused on men with disabilities and changing men’s sheds to suit specific client needs
110	(Wilson et al., 2019)	of 300 responding Australian men's sheds 37% were 'active' in health promotion and 70% were social inclusive [IPT3]	
111	(Wilson & Cordier, 2013)		Abstract – about older male mentors, at men’s sheds
112	(Wilson et al., 2014)		Abstract – about mentoring teenagers, at a men’s shed
113	(N. J. Wilson et al., 2015)		Full-text – the study is focused on men with disabilities and changing men’s sheds to suit specific client needs
114	(Winterton et al., 2014)		Abstract – not about men’s sheds
115	(Young et al., 2015)		Title – not relating to men’s sheds
116	(Yu et al., 2020)		Title – not relating to men’s sheds
117	(Zhao et al., 2014)		Title – not relating to men’s sheds
118	(Zhou et al., 2020)		Title – not relating to men’s sheds
119	(Zhou et al., 2019)		Title – not relating to men’s sheds

Appendix E: 24 men's shed studies (including 6 mixed methods studies) assessed using 'CASP Checklist: 10 questions to help you make sense of qualitative research'

Items		CASP Checklist: 10 questions to help you make sense of qualitative research										
		1	2	Continue?	3	4	5	6	7	8	9	10 Value & Outcomes
1	(Ahl et al., 2017)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Can't tell	Yes	Yes	Valuable
2	(Anstiss et al., 2018)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable
3	(Ayres et al., 2018)	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Can't tell	Yes	Can't tell	Yes	Valuable
4	(Carragher, 2017)	Yes	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Yes	Yes	Yes	Valuable
5	(Carragher & Golding, 2015a)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable. Mainly about adult learning but does cover a number of health-related issues
6	(Cavanagh et al., 2013)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable. Outcomes link to things that influence the health of the participants
7	(J. Cavanagh et al., 2014)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable. Links to health, health and safety and 'formal' training.
8	(Cox et al., 2020)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable. Further evidence of a men's shed benefiting the participants; in this case in the context of Aboriginal men who whilst aging and experiencing more age-related illness experienced more wellbeing.

Items		CASP Checklist: 10 questions to help you make sense of qualitative research										10 Value & Outcomes	
		1	2	Continue?	3	4	5	6	7	8	9		
9	(Crabtree et al., 2018)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Valuable. It is one of the first UK studies on men's sheds.
10	(Culph et al., 2015)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Valuable. This is an important contribution to the men's sheds literature and the health and particularly mental health benefits of men's sheds
11	(Foster et al., 2018)	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Can't tell	Yes	Yes	Valuable. A thorough study of a Scottish (UK) shed, despite not mentioning university ethics. Improvements section refers to common themes of men's shed members: need for bigger premises, running costs of the Shed, offering more activities, increasing member involvement, widening the membership (e.g. to include workers) and improving parking.
12	(Hansji et al., 2015)	Can't tell	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable: Themes apply to human beings (in this case men) and so the research demonstrates that men's sheds can be good for 'non-disabled' and disabled men.
13	(Henwood et al., 2017)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Valuable: Men's sheds viewed as Communities of Practice
14	(Lefkowich & Richardson, 2018)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Very valuable. Great study.

Items	CASP Checklist: 10 questions to help you make sense of qualitative research											
	1	2	Continue?	3	4	5	6	7	8	9	10 Value & Outcomes	
15	(Mackenzie et al., 2017)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable: Findings and analysis adds relatively rare discussions about masculinities in men's sheds research
16	(McGeechan et al., 2017)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable
17	(Milligan et al., 2015)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable
18	(Moylan et al., 2015)	Can't tell	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Yes	Can't tell	Yes	Valuable
19	(Nurmi et al., 2018)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Valuable
20	(Reynolds et al., 2015)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Should be useful
21	(Amie Southcombe et al., 2015)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Can't tell	Can't tell	Yes	Valuable. Findings relate to health and wellbeing.
22	(A. Southcombe et al., 2015)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Valuable
23	(Taylor et al., 2018)	Yes	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Yes	Can't tell	Yes	Valuable
24	(Waling & Fildes, 2017)	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Yes	Valuable. Study investigates issues through a 'community needs assessment' of a Men's Shed programme in inner-regional Australia. The immediate purpose of this research was to help direct future funding initiatives, and provide recommendations for potential changes and

Items	CASP Checklist: 10 questions to help you make sense of qualitative research										
	1	2	Continue?	3	4	5	6	7	8	9	10 Value & Outcomes
											improvements to the programme.

Appendix F: 29 studies identified for my review

I used PICO or rather PIOC: Population, Intervention, (no 'Comparison' group), Outcome, Context (Booth et al., 2016[, p.86])

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
1	Ahl <i>et al.</i> , 2017		Qualitative: Case study of two Danish men's sheds. Interviews with the central organizer, 2x local organizers and undisclosed number of participants. Ethnographic visits to both research sites and websites	2 sheds	2 sheds	Preliminary data suggests similar positive outcomes of Public Health-led men's sheds to that of grass-roots men's sheds conceived and run without external support.	Denmark. Social engineering approach by Danish Ministry of Health.	iPT1, iPT2

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
2	Ang <i>et al.</i> , 2017		Quantitative: mediation analysis on survey data from 162 Australian men's shed leaders and 419 participants	162 Australian men's shed leaders and 419 participants	162 men's shed	good human resource management practices enhance social connections, participant health and wellbeing and retention of members	Australian	iPT1
3	Anstiss <i>et al.</i> , 2018		Qualitative: Ethnographic research with one men's shed in Auckland, New Zealand. Themes and issues constructed from journal entries were explored in more depth in interviews and a	12 men. 10 interviewed and 9 took part in a semi-structured focus group discussion	1 shed	Retirees 're-place' themselves in a shared space which supports opportunities to engage in 'healthy lives beyond paid employment'. Re-placement and socialising impacts on health and wellbeing [iPT2 & iPT3]	Auckland, New Zealand	iPT2, iPT2, iPT3

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			semi-structured focus group.					
4	Ayres <i>et al.</i> , 2018	Yes ✓	Qualitative: A case study approach was used on a Australian men's shed with 21 participants of semi-structured interviews and focus groups	13 men shed participants and 8 staff	1 shed	The men's shed fostered human health and environmental sustainability benefits for participants the wider community. Mental and social health benefits included developing a sense of purpose, increased self-confidence, 'mateship' and social connectedness, and informal support. Physical health benefits were less apparent, but included physical activity from manual-type labour, nutritional education from the community garden and cooking classes, and regular health check-ups from the health service's nurses.	Australia. Older men. Utility function men's shed.	iPT3
5	Carragher, 2017		Mixed Methods: 297	297 male participants	52 sheds across the	Men's sheds give men opportunities for	Ireland. Older men.	iPT1

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			surveys and 5x focus groups with a total of 40 adults.	surveyed with 40 of these participating in five focus groups	island of Ireland (information from Carragher and Golding, 2015a)	generativity, and to give back to the community by sharing of skills and experiences	Female researcher	
6	Carragher and Golding, 2015a		Mixed Methods: 297 surveys and 5x focus groups with a total of 40 adults.	297 male participants surveyed with 40 of these participating in five focus groups	52 sheds across the island of Ireland	Men's sheds support adult learning Participants wanted to learn and the process and outcome of learning added value to their lives.	Ireland. Older men. Female researcher	iPT3
7	Cavanagh <i>et al.</i> , 2013		Qualitative: Focus groups with 19 men in Queensland and 15 men in Victoria.	34 men	2 sheds (Queensland and Victoria)	The sheds provide participants with a sense of direction in retirement; an opportunity to give back to the community; an avenue for social interaction in retirement; the sheds are well managed. Participates have altruistic motives and benefit from reciprocal relationships	Australian.	iPT1, iPT2, iPT3

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
8	Cavanagh <i>et al.</i> , 2014		Qualitative: Semi-structured interviews were carried out with 5x Men's Shed co-ordinators, and 5x focus groups with 61 participants	61 participants	5 sheds	Training and development practices support the growth of men's sheds. Collaborative learning enhances wellbeing and relationships	Australian	iPT1, iPT2
9	Cordier and Wilson, 2014a	Yes ✓	Quantitative: A total of 383 sheds (324 Australian and 59 international sheds) surveyed	324 Australian and 59 international sheds representative	383 sheds	Men's Sheds, in a community development context, support the social and mental health needs of men and help address the gendered health disparity that males face.	International	iPT1, iPT2, iPT3
10	Cox <i>et al.</i> , 2020		Qualitative: A community-based participatory research approach was developed in consultation	10 men	1 men's shed	Sheds are a co-created, therapeutic, male-friendly, community environment for older Aboriginal men enabling belonging, hope, mentoring and shared illness experiences whilst in the company of other men.	Aboriginal men In one rural Tasmanian community men's shed	iPT2, iPT3

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			with Aboriginal community leaders. Semi-structured interviews with 10 Aboriginal men			Participants reported improved wellbeing despite living with the effects of declining health and ageing		
11	Crabtree <i>et al.</i> , 2018	Yes ✓	Qualitative: semi-structured interviews with 8 participants over 2 men's sheds	8 participants	2 urban men's sheds	Men's sheds improved older men's perceived level of social interaction, men's outlook, led to self-reported improvements in depression, and all perceived themselves to be fitter since joining. Despite the research being conducted in an urban area, it highlighted a lack of prior community engagement.	London, England, UK. men aged 65 and over	iPT3
12	Culph <i>et al.</i> , 2015a	Yes ✓	Mixed methods: semi-structured, in-depth interviews	12 participants interviewed and 11 surveyed	3 sheds	The men's shed decreased self-reported symptoms of depression. Most participants were currently experiencing minimal depression.	Australia. Average age of 67 years. Interviews by a female researcher	iPT2, iPT3

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			with 12 men and 11 respondents to the Beck Depression Inventory-II instrument			The Men's Sheds environment promoted a sense of purpose through relationships and in the sharing of skills, new routines, motivation, and enjoyment for its members. The shed encouraged increased physical activity and use of cognitive skills. Finally, participants reported feelings of pride and achievement which had an impact on their sense of self-worth.		
13	Ford <i>et al.</i> , 2015a	Yes ✓	Quantitative: Two instruments - a 12 item, 5-point Likert scale (adapted from Cameron, 2004), measuring 'social identification'	332 responses from an undisclosed number of Australian sheds	Unclear	<p>Drawing on social identity theory the study examined the extent to which membership of Men's Sheds influences the quality of life of participants.</p> <p>A 12 item, 5-point Likert scale (adapted from Cameron, 2004), measuring 'social identification'</p>	Australia. Age range 25-86 years (average 67 years). Approx 70% of participants were retired, and 81% lived with a partner. Most members had participated	iPT1, iPT3

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			(including ingroup ties) and a 24 item, 5-point Likert scale (by the WHO, 1998) measuring Quality of Life were completed by 332 respondents			(including ingroup ties) and a 24 item, 5-point Likert scale (by the WHO, 1998) measuring Quality of Life found that social identity (particularly ingroup ties) among Men's Sheds members was a significant predictor of physical health, psychological, social relationships, and environmental domains of quality of life, as well as willingness to accept health advice.	for >1 year attending 2-3 times per week.	
14	Foster <i>et al.</i> , (2018)	Yes ✓	Mixed methods: Opportunistic convenience sample of 31 participants took part in individual interviews and completed a survey featuring a	31 participants	1 shed	Attending men reported health improvements and were found to frequently discuss health.	Scotland, UK. Retired men. Average age of 70 years	iPT1, iPT3

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			Likert scale and open-ended questions identified personal, social and health benefits from attending the Shed					
15	Hansji <i>et al.</i> , (2015)	Yes ✓	Qualitative: Observations and 12 semi-structured interviews	12 participants of a shed	1 shed	The men's shed is an enabling community space. Four sub-themes include that the shed is: a community and social hub; an equalising space; a safe and supportive gender sensitive environment; a place for meaningful male activities. Additionally, men with long-term disabilities found the men's shed to offer an environment of equality, facilitating a collegial and egalitarian culture. Men can partake in enabling	Australia. Age range 23-85 years. Journal article	iPT2

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
						activities and enjoy the company of other men enhancing their sense of belonging and social inclusion.		
16	Henwood 2017	Yes ✓	Qualitative: 5 case studies were examined. 5 leaders/coordinators participated in semi-structured interviews and 61 Indigenous participants took part in 5 focus groups	5 indigenous leaders/coordinators participated in semi-structured interviews and five focus groups with participants totalling 61 Indigenous men.	5 sheds	Men's sheds effectively develop social relations, operating as a 'community of practice and might contribute to overcoming social and health wellbeing concerns. Indigenous men are engaged and are learning new skills and contributing to social change.	Australia: Aboriginal and Torres Strait Islander men.	iPT3
17	Lefkovich and Richardson, (2018)	Yes ✓	Qualitative: Semi-structured interviews, focus groups and observations	27 attendees of men's sheds	5 sheds	Men's shed participation means using and developing new skills, feeling a sense of belonging, supporting and being supported by peers, and contributing to	Ireland. Age range early 20s to mid-70s. Interviews by a female researcher	iPT1, iPT3

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
						community. These things contribute to men's overall wellbeing. Funding is important to keep men's sheds functioning.		
18	Mackenzie <i>et al.</i> , 2017		Qualitative: Ethnographic field notes and 2 groups (with 8 and 14 participants), each taking part in 3 focus groups (total 6 focus groups)	22 Canadian shed participants	1 shed	Focus on work, independence, and male-focused spaces support dominant masculine values and ideals	Canadian. Predominantly white, retired men.	iPT1, iPT2
19	McGeecohan <i>et al.</i> , 2017	Yes ✓	Qualitative: 5 focus groups with 32 men	32 men	5 sheds	Some men's sheds run activities but the main driving factor is the social aspect, with men attending for nothing more than a chat and a cup of tea and experience a social network. The social aspect allows men to recapture lost social networks from their working days	England, UK. Male attendees aged 18–69 years	iPT2, iPT3

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
						<p>Men's shed groups would benefit from more formal links to one another which might increase the range of activities on offer.</p> <p>The sheds are an effective way of reducing social isolation in older men. But further work is needed to understand impacts on physical and mental wellbeing.</p>		
20	Milligan <i>et al.</i> , 2015		<p>Qualitative: From 3 sheds, one-to-one interviews with 5 leaders and 24 participants.</p> <p>4 focus with 33 participants</p>	62 men	3 sheds	Gendered interventions are needed for men. Men's sheds promote and maintain the health and wellbeing of older men and reaffirm their masculinity	UK. AgeUK 'Men in Sheds' projects	iPT1, iPT2

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
21	Misan <i>et al.</i> , (2017)		Quantitative: 154 shed members across 11 men's sheds completed a survey with 5 domains: demographics; health history, status, concerns and interests; health knowledge; help-seeking behaviours and health information format preferences	154 shed participants	11 men's sheds	The survey enables a better understanding of what concerns and interests men's shed members, for example, in terms of health, where they go for health advice and their preferred format for receiving health information	Southern Australia.	iPT1, iPT3
22	Moylan <i>et al.</i> , 2015	Yes ✓	Qualitative: Semi-structured, in-depth interviews and observations	21 men's shed participants	1 shed studied over 6 months	The shed provides 'biopsychosocial' support and can deliver 'spiritual' support.	Australia. Age range 18–91 years	iPT2

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
						It increases self-esteem, empowerment and a sense of belonging in the community; provided respite from families, and; facilitated the opportunity to exchange ideas relating to personal, family, communal and public health issues. The community men's shed was thought to encourage intrapersonal and inter-personal reflection and interaction that subsequently results in men meaningfully, purposefully and significantly connecting with the moment, to self, to others.		
23	Nurmi <i>et al.</i> , 2018		Qualitative: 4 rounds of focus groups took place over several months.	22 participants of a men's shed.	1 shed	Men involved in Men's Sheds aim to reduce isolation, and have a preference for activities involving knowledge exchange. The recognise the importance of the	Canadian. Men aged 55 years and older	iPT2

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			<p>Authors state 64 men took part from a snowball sample.</p> <p>3 sets of focus groups with: Men's shed members, split into 2 groups (12 and 8 members), and; Men who had no knowledge of men's sheds, split into 2 groups (both had 9 participants, totally 18 men)</p> <p>A final set of focus groups took place with new participants:</p>			<p>programme as a space to develop friendships.</p> <p>All men, including non-men's shed participants, suggest engagement in male-focused programmes should begin before retirement age and programmes should be mindful of how they are branded and marketed to men.</p>		

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			5 focus group, each with diverse community organisations (20 participants in total)					
24	Reynolds <i>et al.</i> , 2015		Qualitative: Ethnographic observations with fieldnotes and semi-structured interviews with 12 white men aged 61-87 years (from a shed with 40 members)	12 participants (of 40) were interviewed	1 men's shed	<p>Characteristics and experiences that led to participants' initial involvement in Men's Sheds included self-perceived individual characteristics, loneliness and social isolation, and social influence.</p> <p>Social connection and social engagement is a central, overarching theme to their initial, current and continued involvement in Men's Sheds.</p>	Manitoba, Australia. The shed is for men aged 55 years and older	iPT2, iPT3

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
25	(Amie Southcombe et al., 2015)		Qualitative: Ethnographic observations. 15 focus Groups with 45 participants. Semi-structured interviews with leaders and co-ordinators of Men's Groups/Sheds and some men who were willing to talk with us one-on-one (at least 15 men)	45 men	15 groups	Shed leaders who build relationships with outside agencies can better support the health and education outcomes Aborigine and Torres Strait Islander participants. Capacity building results in better health outcomes and, educates and empowers men to improve their social, cultural, emotional and economic wellbeing. It helps men to better connect with family and community	Aboriginal and Torres Strait Islander Men's Groups from urban, rural and remote regions in Australia	iPT1
26	(A. Southcombe et al., 2015)		Qualitative: Ethnographic observations.	305 participants and 60 leaders.	60 men's sheds	Charismatic leaders enhance value congruence between themselves and men's shed participants	Urban and regional areas across all states in Australia	iPT1

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			<p>Semi-structured interviews took place with each of the leaders of the 60 men's sheds.</p> <p>At the 60 men's sheds between 3-20 men participated in focus groups (totalling 305 participants).</p>			through empowering, envisioning and empathy, which also contributes to the social connectedness of members and enhances wellbeing.		
27	Taylor et al., 2018		<p>Mixed methods: 143 participants were surveyed.</p> <p>3 focus groups were conducted at 1</p>	143 participants were surveyed	1 shed	<p>Health and wellbeing benefits of Men's Shed included fellowship, sense of belonging, access to equipment, and learning new and sharing their own skills</p> <p>There was no change in overall retrospectively self-</p>	Queensland, Australia.	iPT2

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			men's shed with 17 people including leaders and participants			assessed health of shedders before and after joining the Men's Shed.		
28	Waling and Fildes, 2017	Yes ✓	<p>Mixed methods: 22 men surveyed and 20 participants took part in semi-structured interviews.</p> <p>A 'community needs assessment' was used to systematically determine and address gaps or needs between current and desired conditions</p>	22 male participants	1 shed	<p>The shed aided 1) independence for the older men; 2) men's help-seeking and engaging in emotional support; 3) the men as a community space in which to meet which supported their overall wellbeing.</p> <p>Key success factors for running a Men's Shed were identified using a community needs assessment of a Men's Shed programme in inner-regional Australia</p>	<p>Australia. Age range 40–75 years. Part of a community needs assessment conducted to help direct future funding initiatives, and provide recommendations for potential changes and improvements to the programme. Referred to 'social wellbeing' and</p>	iPT1

	Authors	Also in Kelly et al 2019	Qualitative, Quantitative or Mixed Methods	Population	Intervention	Outcome(s)	Context	Supports which initial Programme Theory?
			within the particular community				'medical wellbeing'	
29	Wilson <i>et al.</i> , 2019		Quantitative: 300 groups were surveyed about health promotion and social inclusion activities of their men's sheds	-	300 men's sheds	A third of men's sheds (100 approx.) are active in health promotion and two thirds (200 approx.) are actively engage in social inclusive activities.	Australia.	iPT3
Total			Exclusively qual = 18					iPT1 = 16
			Exclusively quant = 5					iPT2 = 15
			Mixed = 6					iPT3 = 16

Appendix G: Three tested programme theories (tPT1, tPT2, tPT3) represented as CMOc using ‘if... then... leading to...’ statements

PT1: Programme theories about the ‘Organisational Arrangements’ of men’s sheds

<u>C</u> ontext	<u>M</u> echanism	<u>P</u> roximal <u>O</u> utcome (pO)	<u>D</u> istal <u>O</u> utcome (dO)	<u>S</u> upporting Middle-Range Theories (MRT)
<p>A. If leaders create and maintain an environment that is:</p> <p>i. <i>physically</i> conducive (the physical shed and materials/equipment support participant interests), and;</p> <p>ii. <i>socially</i> conducive (leaders prioritises social connectedness);</p> <p>iii. without unnecessary outside interference, but</p> <p>iv. supported with outside influence when required...</p>	<p>i. ...then community members [resource] feel they can attend, positively contribute and influence their men’s shed [response]...</p>	<p>1. ...leading to pO₁: participants share similar values to leaders about the men’s shed, such as objectives and rules of conduct (do’s and don’t’s) (see Context B.)</p>	N/A	<p>Links to:</p> <p>➔ MRT₁: ‘value congruence’ (J Cavanagh et al., 2014; A. Southcombe et al., 2015)</p>
<p>B. If participants share similar</p>	<p>ii. ...then men attend,</p>	<p>2. ...leading to</p>	<p>...leading to</p>	<p>Links to: <u>all MRTs</u> (as follows):</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
<p>values to leaders about the men's shed, such as objectives and rules of conduct (pO1)...</p>	<p>participate and contribute knowledge, skills and labour...</p>	<p>pO₂: men feeling socially connected, involved and committed</p>	<p>dO₁: enhanced health and wellbeing</p> <p>→ ...because participating and contributing knowledge, skills and labour at men's sheds enhances health and wellbeing.</p> <p>→ See Literature Review (Culph et al., 2015; Milligan et al., 2015; A. Southcombe et al., 2015)</p> <p>→ Also see Shed-based Resources (chapter 8) and Human-based Resources (chapter 9).</p>	<p>→ MRT₁: 'value congruence' (J Cavanagh et al., 2014; A. Southcombe et al., 2015)</p> <p>→ MRT₂: 'social connectedness', referred to by Cavanagh et al. (2014)</p> <p>→ MRT₃: 'Shedagogy' (Golding, 2014a) and the benefits of informal, peer, 'in the moment teaching' and adult learning</p> <p>→ MRT₄: Men's sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999)</p> <p>→ MRT₅: Occupational therapy (Reilly, 1962) occurs in men's sheds supporting participant health and wellbeing</p> <p>→ MRT_{5a}: Marx 'species-being' and MRT_{5b} anti-'alienation' (Wolff, 2003) describes why men's health and wellbeing is benefitted by partaking in men's sheds activities</p> <p>→ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>→ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
		<p>3. ...leading to pO₃: an ‘andragogy’ of older, male, adult learning in men’s sheds ‘Shedagogy’ - (Golding, 2014a)</p>	<p>...leading to dO₁: enhanced health and wellbeing</p> <p>→ ...because adult education enhances health and wellbeing: supported by published evidence (Dolan & Fujiwara, 2012; Jenkins & Mostafa, 2012, 2015; Merriam & Kee, 2014)</p> <p>→ See literature review (Anstiss et al., 2018; Carragher, 2017; Cavanagh et al., 2013; J. Cavanagh et al., 2014; Culph et al., 2015; Reynolds et al., 2015; Taylor et al., 2018)</p>	<p>→ MRT₈: Men’s sheds enhance men’s ‘capability’ to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p> <p>Links to:</p> <p>→ MRT₃: Enhances cultural capital, Produces ‘Shedagogy’ (Golding, 2014a)</p> <p>→ MRT₅: Occupational therapy (Reilly, 1962) occurs in men’s sheds supporting participant health and wellbeing</p> <p>→ MRT_{5a}: Marx ‘species-being’ and MRT_{5b} anti-‘alienation’ (Wolff, 2003) describes why men’s health and wellbeing is benefitted by partaking in men’s sheds activities</p> <p>→ MRT₇: Men’s sheds enhance member’s social, cultural and economic ‘capitals’ and support ‘capital interaction’ (Abel & Frohlich, 2012; Bourdieu, 1986)</p> <p>→ MRT₈: Men’s sheds enhance men’s ‘capability’ to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			→ Also see Shed-based Resources (chapter 8) and Human-based Resources (chapter 9)	
<p>C. However, if lead personnel <i>lack</i> knowledge, skills and/or interest to create and maintain an environment that is:</p> <p>i. <i>Physically</i> conducive (the physical shed and materials/equipment support participant interests); or</p> <p>ii. <i>socially</i> conducive (leaders prioritises social connectedness); or</p> <p>iii. without unnecessary outside interference, but;</p>	<p>iii. ...then participants will share few similar values to leaders, will hold different objectives and are less likely to respect the rules of conduct in the men's shed ...</p>	4. ...leading to pO ₄ : men being less likely to want to attend or contribute their time and skills, and/or	N/A	N/A
		5. ... leading to pO ₅ : men feeling less able to influence the shed, and/or	N/A	N/A
		6. ... leading to pO ₆ : men being less likely to be involved or feeling socially connected to	N/A	N/A

<u>C</u>ontext	<u>M</u>echanism	<u>P</u>roximal <u>O</u>utcome (pO)	<u>D</u>istal <u>O</u>utcome (dO)	Supporting Middle-Range Theories (MRT)
iv. supported with outside influence when required...		other members		

PT2: Programme theories about the ‘Shed-based Resources’

<u>C</u> ontext	<u>M</u> echanism	<u>P</u> roximal <u>O</u> utcome (pO)	<u>D</u> istal <u>O</u> utcome (dO)	Supporting Middle-Range Theories (MRT)
D. If men perceive [reason] a men’s shed is in an accessible location, that they can benefit [reasoning] from the shed’s resources [material, social or cognitive resources], and that it could be a socially acceptable ‘third place’ for them [reasoning]...	iv. ...then men make their first attendance at the men's shed...	7. ...leading to pO ₇ : men regularly attending, or;	N/A	N/A
		8. ...leading to pO ₈ : men having little to no exposure of the men's shed and its resources	N/A	N/A
E. If the men’s shed provides enough: i. material resources... and/or ii. social resources... and/or	v. ...then men will attend the men’s shed [response]...	9. ...leading to pO ₉ : men spending time at the men's shed and having somewhere to ‘ <i>be</i> ’ (a third place), and...	N/A	Links to: ➔ MRT ₁ : ‘value congruence’ (J Cavanagh et al., 2014; A. Southcombe et al., 2015) ➔ MRT ₄ : Men’s sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999)

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
iii. cognitive resources... ...for men's interests [contexts & resources]...		(see PT2 Context G: 'Humans <i>being</i> ' and PT3 Context I: 'Humans <i>being</i> ')		<ul style="list-style-type: none"> ➔ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996) ➔ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986) ➔ MRT₈: Men's sheds enhance men's 'capability' to enhance their own health and wellbeing (Nussbaum & Sen, 1993)
		10. ...leading to pO ₁₀ : men spending time at the men's shed and having somewhere to actively ' <i>do</i> ' (see PT2 Context H: 'Humans <i>doing</i> ' and PT3 Context J: 'Humans <i>doing</i> ')	N/A	Links to: ➔ all MRT _{s1-8} – (see list 'Context B / proximal Outcome 2' above)
F. However, if the men's shed does not provide	vi. ...then men will not attend	11. ... leading to pO ₁₁ : less or no exposure to	N/A	

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
<p>enough of the following or men do not value the following:</p> <ul style="list-style-type: none"> i. material resources... and/or ii. social resources... and/or iii. cognitive resources... ...for men's interests [contexts & resources]... 	<p>regularly or at all [response]...</p>	<p>resources from which men help themselves</p>		
<p>G. 'Humans being' If men spend time at the men's shed and have somewhere to 'be' (pO9)...</p>	<p>vii. ...then men can interact, socialise and share in the company of other men...</p>	<p>12. ...leading to pO₁₂: enhanced social interaction</p>	<p>...leading to dO₁: enhanced health and wellbeing</p>	<p>Links to:</p> <ul style="list-style-type: none"> ➔ MRT₂: 'social connectedness', referred to by Cavanagh et al. (2014) ➔ MRT₄: Men's sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999) ➔ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996) ➔ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
				<p>interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)</p> <p>➔ MRT₈: Men's sheds enhance men's 'capability' to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p>
		<p>13. ...leading to pO₁₃: a sense of belonging</p>	<p>...leading to dO₁: enhanced health and wellbeing</p> <p>➔ ...because feeling we belong is beneficial for health and wellbeing.</p> <p>➔ See Literature Review (Golding et al., 2006; Golding et al., 2008, both cited in Wilson and Cordier, 2013; Ballinger et al., 2009; C. Milligan et al., 2016; Grant J. McGeechan et al., 2017; Crabtree et al., 2018; E. J. Foster et al., 2018;</p>	<p>Links to:</p> <p>➔ MRT₂: 'social connectedness', referred to by Cavanagh et al. (2014)</p> <p>➔ MRT₄: Men's sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999)</p> <p>➔ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>➔ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			<p>M. Lefkowich and Richardson, 2018; T. Cox et al., 2020).</p> <p>➔ Also see Shed-based Resources (chapter 8).</p>	
		<p>14. ...leading to pO₁₄:</p> <p>i. men getting respite from family, and;</p> <p>ii. family getting respite from the participant;</p> <p>iii. extended family are less worried about the participant because they have their men's shed activities and supportive friends;</p> <p>iv. Participants get out of the house and into different surroundings;</p>	<p>...leading to dO₁: enhanced health and wellbeing</p> <p>➔ Respite from family, roles and caring responsibilities is good for people (Maayan et al., 2014; McNally et al., 1999; Oldenburg & Brissett, 1982)</p> <p>➔ See Literature Review 'Respite from family is good for both parties' (Foley et al., 2021; Golding, 2011a; Hedegaard</p>	<p>Links to:</p> <p>➔ MRT₂: 'social connectedness', referred to by Cavanagh et al. (2014)</p> <p>➔ MRT₄: Men's sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999)</p> <p>➔ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>➔ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)</p> <p>➔ MRT₈: Men's sheds enhance men's 'capability' to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
		<p>v. Participants enact a different ‘role’, for example, they are no longer enacting the role of ‘husband’ to a wife, or being a ‘father’ to a child.</p>	<p>& Ahl, 2019; Moylan et al., 2015)</p> <p>→ Also see Shed-based Resources (chapter 8) ‘Men and communication’</p>	
		<p>15. ...leading to pO₁₅: men gaining access to a community resource - space, equipment, tools, materials</p>	<p>...leading to dO₁: enhanced health and wellbeing</p> <p>→ ...because having access to community-based resources can support health and wellbeing.</p> <p>→ See Literature Review ‘A community-based resource for men’ (Taylor et al., 2018)</p> <p>→ Also see Shed-based Resources</p>	<p>Links to:</p> <p>→ MRT₄: Men’s sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999)</p> <p>→ MRT₅: Occupational therapy (Reilly, 1962) occurs in men’s sheds supporting participant health and wellbeing</p> <p>→ MRT_{5a}: Marx ‘species-being’ and MRT_{5b} anti-‘alienation’ (Wolff, 2003) describes why men’s health and wellbeing is benefitted by partaking in men’s sheds activities</p> <p>→ MRT₆: Men’s sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>→ MRT₇: Men’s sheds enhance member’s social, cultural and economic ‘capitals’ and support ‘capital interaction’ (Abel & Frohlich, 2012; Bourdieu, 1986)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			(chapter 8) ‘The appeal of machinery’ and Human-based Resources (chapter 9) ‘Physical space and equipment for pragmatic activities’	→ MRT ₈ : Men’s sheds enhance men’s ‘capability’ to enhance their own health and wellbeing (Nussbaum & Sen, 1993)
<p>H. <i>‘Humans doing’</i> If men spend time at the men’s shed and have somewhere to ‘do’ (be active) (pO₁₀)...</p>	<p>viii. ...then men gain access to resources that facilitate them taking part in pragmatic projects...</p>	<p>16. ...leading to pO₁₆: men engaging in purposeful activities</p>	<p>...leading to dO₁: enhanced health and wellbeing</p> <p>→ ...because engaging in purposeful activities benefits health and wellbeing</p> <p>→ See Literature Review (Jennifer S. Culph et al., 2015; C. Milligan et al., 2016) Adult Learning</p> <p>→ Also see Shed-based Resources</p>	<p>Links to:</p> <p>→ MRT₅: Occupational therapy (Reilly, 1962) occurs in men’s sheds supporting participant health and wellbeing</p> <p>→ MRT_{5a}: Marx ‘species-being’ and MRT_{5b} anti-‘alienation’ (Wolff, 2003) describes why men’s health and wellbeing is benefitted by partaking in men’s sheds activities</p> <p>→ MRT₆: Men’s sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>→ MRT₇: Men’s sheds enhance member’s social, cultural and economic ‘capitals’ and support ‘capital interaction’ (Abel & Frohlich, 2012; Bourdieu, 1986)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			<p>(chapter 8) ‘Men’s sheds offer therapeutic meaningful occupation’ (Carragher, 2017; Hewitt et al., 2010; Jonsson et al., 2000; Thomson, 2008; Wilson et al., 2013, p.417, citing) and Human-based Resources (chapter 9)</p>	<p>➔ MRT₈: Men’s sheds enhance men’s ‘capability’ to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p>
	<p>viii. ...then men gain access to resources that facilitate them taking part in pragmatic projects...</p>	<p>17. ...leading to pO₁₇: men sharing knowledge and skills (informal, peer, ‘in the moment teaching’)</p>	<p>...leading to dO₁: enhanced health and wellbeing</p> <p>➔ ...because teaching others feels good and benefits the health and wellbeing of both sharer and learner, supported by published evidence (Dolan & Fujiwara, 2012; Jenkins & Mostafa, 2012,</p>	<p>Links to:</p> <p>➔ MRT₃: ‘Shedagogy’ (Golding, 2014a) and the benefits of informal, peer, ‘in the moment teaching’ and adult learning</p> <p>➔ MRT₅: Occupational therapy (Reilly, 1962) occurs in men’s sheds supporting participant health and wellbeing</p> <p>➔ MRT_{5a}: Marx ‘species-being’ and MRT_{5b} anti-‘alienation’ (Wolff, 2003) describes why men’s health and wellbeing is benefitted by partaking in men’s sheds activities</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			<p>2015; Merriam & Kee, 2014)</p> <p>→ See Literature Review (Carragher, 2017; Cavanagh et al., 2013; Culph et al., 2015; Reynolds et al., 2015; Taylor et al., 2018)</p> <p>→ Also see Shed-based Resources (chapter 8) 'Wanting to share knowledge and skills' and (Martin et al., 2008) and Human-based Resources (chapter 9) 'Physical space and equipment for pragmatic activities' and 'Availability of physical space and equipment facilitate autonomy'</p>	<p>→ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>→ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)</p> <p>→ MRT₈: Men's sheds enhance men's 'capability' to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p>
	viii. ...then men gain	18. ...leading to	...leading to	Links to:

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
	<p>access to resources that facilitate them taking part in pragmatic projects...</p>	<p>pO₁₈: using their labour to craft items and fix items</p>	<p>dO₁: enhanced health and wellbeing</p> <p>→ ...because being autonomous and exerting control over one's life is theorised to be better for health and wellbeing than not (Enoch, 2021; Griffin & Tyrrell, 2013), but there is a lack of robust evidence to demonstrate any benefits or adverse effects of choosing how to use one's labour and health and wellbeing outcomes.</p> <p>→ See Literature Review (Ahl et al., 2017; Kelly et al., 2019)</p> <p>→ Also see Human-based Resources</p>	<p>→ MRT₅: Occupational therapy (Reilly, 1962) occurs in men's sheds supporting participant health and wellbeing</p> <p>→ MRT_{5a}: Marx 'species-being' and MRT_{5b} anti-'alienation' (Wolff, 2003) describes why men's health and wellbeing is benefitted by partaking in men's sheds activities</p> <p>→ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>→ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)</p> <p>→ MRT₈: Men's sheds enhance men's 'capability' to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			<p>(chapter 9) ‘Availability of physical space and equipment facilitate autonomy’ and ‘x. Becoming empowered and taking collective action to address health needs’</p>	<p>Links to:</p> <ul style="list-style-type: none"> ➔ MRT₃: ‘Shedagogy’ (Golding, 2014a) and the benefits of informal, peer, ‘in the moment teaching’ and adult learning ➔ MRT₅: Occupational therapy (Reilly, 1962) occurs in men’s sheds supporting participant health and wellbeing ➔ MRT_{5a}: Marx ‘species-being’ and MRT_{5b} anti-‘alienation’ (Wolff, 2003) describes why men’s health and wellbeing is benefitted by partaking in men’s sheds activities ➔ MRT₆: Men’s sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996) ➔ MRT₇: Men’s sheds enhance member’s social, cultural and economic ‘capitals’ and support ‘capital
	<p>viii. ...then men gain access to resources that facilitate them taking part in pragmatic projects...</p>	<p>19. ...leading to pO₁₉: men having a sense of meaning to life</p>	<p>...leading to dO₁: enhanced health and wellbeing</p> <ul style="list-style-type: none"> ➔ ...because having a sense of meaning is important to health and wellbeing (Finn et al., 2007; Savolaine & Granello, 2002) ➔ See Literature Review (Ahl et al., 2017; Ballinger et al., 2009; Foster et al., 2018; Hansji et al., 2015; Kelly et 	

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			<p>al., 2019; Martin et al., 2008; Milligan et al., 2015; Moylan et al., 2015)</p> <p>→ Also see Shed-based Resources (chapter 8) 'Social interaction' and 'Men's sheds offer therapeutic meaningful occupation' and Human-based Resources (chapter 9) 'Mutual Benefit'.</p>	<p>interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)</p> <p>→ MRT₈: Men's sheds enhance men's 'capability' to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p>

PT3: Programme theories about ‘Human-based Resources’

<u>Context</u>	<u>Mechanism</u>	<u>Proximal Outcome (pO)</u>	<u>Distal Outcome (dO)</u>	<u>Supporting Middle-Range Theories (MRT)</u>
<p>G. ‘Humans <i>being</i>’</p> <p>If men spend time at the men's shed and have somewhere to ‘be’ (pO9)...</p>	<p>ix. ...then men can interact, socialise [bonding social capital] and share their own (and explore other's) experiences, knowledge and skills in the company of other men...</p>	<p>20. ...leading to pO₂₀: men having the company of other (human beings) men</p>	<p>...leading to dO₁: enhanced health and wellbeing, and</p> <p>dO₂: reduced social isolation and loneliness</p> <p>→ ...because social isolation and loneliness harm health and wellbeing, and reducing social isolation and loneliness enhances health and wellbeing (Cattan et al., 2005; Dickens et al., 2011; Holt-Lunstad, 2018; Holt-Lunstad et al., 2010; Leigh-Hunt et al., 2017; Salway et al., 2020; Townsend et al., 2020; Valtorta et al., 2016)</p> <p>→ See Literature Review (Ayres et al.,</p>	<p>Links to:</p> <p>→ MRT₄: Men’s sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999)</p> <p>→ MRT₇: Men’s sheds enhance member’s social, cultural and economic ‘capitals’ and support ‘capital interaction’ (Abel & Frohlich, 2012; Bourdieu, 1986)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			<p>2018; Kelly et al., 2019; McGeechan et al., 2017; Milligan et al., 2015; Morgan, 2010; Nurmi et al., 2018; Reynolds et al., 2015; Wilson et al., 2019)</p> <p>→ Also see Shed-based Resources (chapter 8) 'Who benefits and how' and 'Men's sheds offer therapeutic meaningful occupation' (Fisher et al., 2018)</p>	
	<p>ix. ...then men can interact, socialise [bonding social capital] and share their own (and explore other's) experiences, knowledge and skills in the</p>	<p>21. ...leading to pO₂₁: a sense of being accepted by other men (peers)</p>	<p>...leading to dO₁: enhanced health and wellbeing</p> <p>→ Being accepted by others is beneficial for health and wellbeing (Arslan, 2018; Griffin & Tyrrell, 2013; Keyes, 1998)</p>	<p>Links to:</p> <p>→ MRT₄: Men's sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999)</p> <p>→ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>→ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
	company of other men...		<p>→ See Literature Review (Kelly et al., 2019; McGeechan et al., 2017)</p> <p>→ Also see Shed-based Resources (chapter 8) 'Men and communication' and 'Men's sheds offer a 'third place'' (Tsinaslanidou, 2015, citing: Mueller, 1980) and Human-based Resources (chapter 9) 'Discussions during work and break times'</p>	interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)
	ix. ...then men can interact, socialise [bonding social capital] and share their own (and explore other's) experiences, knowledge and skills in the	22. ...leading to pO ₂₂ : men learning from other participant experiences, knowledge and skills and an enhancement of abilities and status	<p>...leading to</p> <p>dO₃: improved social health and</p> <p>dO₄: resilience to negative effects on wellbeing and</p> <p>dO₁: enhanced health and wellbeing</p>	<p>Links to:</p> <p>→ MRT₃: 'Shedagogy' (Golding, 2014a) and the benefits of informal, peer, 'in the moment teaching' and adult learning</p> <p>→ MRT₅: Occupational therapy (Reilly, 1962) occurs in men's sheds supporting participant health and wellbeing</p> <p>→ MRT_{5a}: Marx 'species-being' and MRT_{5b} anti-'alienation' (Wolff, 2003) describes why men's</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
	company of other men...		<p>→ ...because adult education enhances health and wellbeing: supported by published evidence (Dolan & Fujiwara, 2012; Jenkins & Mostafa, 2012, 2015; Merriam & Kee, 2014)</p> <p>→ See literature review (Anstiss et al., 2018; Carragher, 2017; Cavanagh et al., 2013; J. Cavanagh et al., 2014; Culph et al., 2015; Reynolds et al., 2015; Taylor et al., 2018)</p> <p>→ Also see Shed-based Resources (chapter 8) and Human-based Resources (chapter 9)</p>	<p>health and wellbeing is benefitted by partaking in men's sheds activities</p> <p>→ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>→ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)</p> <p>→ MRT₈: Men's sheds enhance men's 'capability' to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p>
	ix. ...then men can interact, socialise [bonding social capital] and share their	23. ...leading to pO ₂₃ : increased health-related conversations and greater	...leading to dO ₁ : enhanced health and wellbeing	<p>Links to:</p> <p>→ MRT₄: Men's sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
	own (and explore other's) experiences, knowledge and skills in the company of other men...	likelihood of help-seeking	<ul style="list-style-type: none"> ➔ ...because men are more likely to seek help in groups where they feel comfortable which benefit their health and wellbeing, but there is a lack of robust evidence to demonstrate this in published literature. ➔ See literature review (Reinie Cordier & Nathan J. Wilson, 2014; Hedegaard & Ahl, 2019; Misan et al., 2017; Waling & Fildes, 2017) ➔ Also see Shed-based Resources (chapter 8) 'Social interaction' and Human-based Resources (chapter 9) 'vii. Enablement of self-help' (Field & Tuckett, 2016) 	<ul style="list-style-type: none"> ➔ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996) ➔ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)
H. 'Humans doing' If men spend time at the men's shed	x. ...then men gain access to resources that facilitate them taking part in	24. ...leading to pO ₂₄ : men engaging in conversation whilst working	...leading to dO ₁ : enhanced health and wellbeing, and	Links to: ➔ MRT ₄ : Men's sheds are Third Places and as such support health and wellbeing (Oldenburg, 1999)

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
<p>and have somewhere to 'do' (be active) (p10)...</p>	<p>pragmatic projects...</p>	<p>shoulder-to-shoulder and whilst socialising during break times – which can reduce social isolation</p>	<p>dO₂: reduced social isolation and loneliness</p> <p>→ ...because social isolation and loneliness harm health and wellbeing, and reducing social isolation and loneliness enhances health and wellbeing (Cattan et al., 2005; Dickens et al., 2011; Holt-Lunstad, 2018; Holt-Lunstad et al., 2010; Leigh-Hunt et al., 2017; Salway et al., 2020; Townsend et al., 2020; Valtorta et al., 2016)</p> <p>→ See Literature Review (Ayres et al., 2018; Kelly et al., 2019; McGeechan et al., 2017; Milligan et al., 2015; Morgan, 2010; Nurmi et al., 2018; Reynolds et al., 2015; Wilson et al., 2019)</p>	<p>→ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital interaction' (Abel & Frohlich, 2012; Bourdieu, 1986)</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			<p>→ Also see Shed-based Resources (chapter 8) 'Who benefits and how' and 'Men's sheds offer therapeutic meaningful occupation' (Fisher et al., 2018)</p>	
	<p>x. ...then men gain access to resources that facilitate them taking part in pragmatic projects...</p>	<p>25. ...leading to pO₂₅: men gaining new pragmatic knowledge and skills through informal, peer, 'in the moment' activity-led learning</p>	<p>...leading to dO₁: enhanced health and wellbeing</p> <p>→ ...because adult education enhances health and wellbeing which is supported by published evidence (Dolan & Fujiwara, 2012; Jenkins & Mostafa, 2012, 2015; Merriam & Kee, 2014)</p> <p>→ See literature review (Anstiss et al., 2018; Carragher, 2017; Cavanagh et al.,</p>	<p>Links to:</p> <p>→ MRT₃: 'Shedagogy' (Golding, 2014a) and the benefits of informal, peer, 'in the moment teaching' and adult learning</p> <p>→ MRT₅: Occupational therapy (Reilly, 1962) occurs in men's sheds supporting participant health and wellbeing</p> <p>→ MRT_{5a}: Marx 'species-being' and MRT_{5b} anti-'alienation' (Wolff, 2003) describes why men's health and wellbeing is benefitted by partaking in men's sheds activities</p> <p>→ MRT₆: Men's sheds are places and communities that support salutogenesis (Antonovsky, 1979, 1993, 1996)</p> <p>→ MRT₇: Men's sheds enhance member's social, cultural and economic 'capitals' and support 'capital</p>

Context	Mechanism	Proximal Outcome (pO)	Distal Outcome (dO)	Supporting Middle-Range Theories (MRT)
			<p>2013; J. Cavanagh et al., 2014; Culph et al., 2015; Reynolds et al., 2015; Taylor et al., 2018)</p> <p>→ Also see Shed-based Resources (chapter 8).</p>	<p>interaction’ (Abel & Frohlich, 2012; Bourdieu, 1986)</p> <p>→ MRT₈: Men’s sheds enhance men’s ‘capability’ to enhance their own health and wellbeing (Nussbaum & Sen, 1993)</p> <hr/> <p>Links to:</p> <p>→ all MRT_{S1-8} – (see list ‘Context B / proximal Outcome 2’ above)</p>
	<p>xi. ...then men can interact, socialise [bonding social capital] and share their own (and explore other's) experiences, knowledge and skills in the company of other men...</p>	<p>26. ...leading to pO₂₆: feel-good factor for the volunteers sharing their skills</p>		

Appendix H: Participant Information Sheet

“The personal and social impact of participating in Men’s Sheds”

What is the project’s purpose?

Some research has been done, asking whether men’s sheds benefit participants. We know that in some places, men say there are clear benefits. But I would like to understand more about why men’s sheds work for people, and in what ways. My study aims to understand the impacts of different men’s sheds.

Why have I been chosen, and do I have to take part?

Your men’s shed has been chosen as a potential research site. You are being asked to participate along with other people at the men’s shed. It is up to your men’s shed to go ahead with participating in the study. It is also up to you, as an individual, to decide whether you take part in the study or not.

What will happen if my men’s shed takes part in the research?

I would like to understand what it is like for you to participate in your men’s shed. If you decide to participate, I will be asking for your:

- 1) Permission to collect some information about where you live, such as postcodes;
- 2) Permission to learn what happens in men’s sheds by observing and asking your group questions;
- 3) Permission to conduct one-to-one interviews

What will happen to me if I agree to take part?

I will attend some of the men’s shed’s activities and ask informal questions to understand what the benefits of men’s sheds are.

You may be asked to take part in a group interview (a focus group) or a one-to-one interview. If you are interviewed, I will ask for your opinions of your men’s shed and how it might have made a difference to you. You can decide not to answer any questions that you are not comfortable discussing. You can also decide how long the interview will last. We can stop at any time. With your permission, the interviews will be recorded using a Dictaphone. Men’s sheds might affect health and wellbeing, but this can also be affected by the area where you live. I would like to ask your permission to collect your postcode to get this background information. The postcode will not be linked to your name. Postcodes will not be used to identify where you live.

What will happen to me if I do not agree to take part?

If your men’s shed decides to participate in the project, I will be participating in some of the activities to understand what happens and how it benefits people. You will get notice of the days that I am there, and you can decide not to participate in activities on those days. If you are there but do not want to participate in the research, no notes or recordings will be made about you, your specific behaviour or the things you say. Notes and recordings will be limited to consenting participants.

What will happen with collected data?

Audio recordings and notes will be typed up. Names will be removed, and no one will be able to identify you. The documents will be used to understand how men's sheds affect health and wellbeing.

The data and findings are likely to be used for illustration in conference presentations, lectures or in press or journal articles. You will not be identifiable in any report or publication.

Other researchers may find the data collected useful in answering future research questions. However, no one outside the project will be allowed access to the original recordings without your written permission.

How do I give my consent, withhold my consent or withdraw my consent, to participate in the project?

Your men's shed is being asked whether the group agrees to being in the study. This means that the group would agree for me to observe what happens at the men's sheds. If there is agreement, then I would be observing behaviour and collecting some individual and postcode information from consenting participants.

Even if your shed agrees to participate, you can withhold your consent to having notes taken about what you do while in the shed. If you do not want to take part in the research, you can opt out by contacting your men's shed leader or the researcher, Steven Markham, in person or on the details near the bottom of this Participation Information Sheet. In this case you will not be asked to take part in focus groups, nor will I include individual information or your postcode in the study.

If you decide to take part in an audio recorded one-to-one or (focus) group interview, you will be asked to sign a consent form.

If you wish to change your mind about giving consent, you can withdraw your consent to participate in any part of the project up until _____.

What are the possible benefits of taking part?

Whilst there are no direct benefits for those people participating in the project, it is hoped that this work will provide evidence of how men's sheds impact individual and community health and wellbeing. This research may help men's sheds, support agencies and policy and practice to enhance people's health and wellbeing.

Will my taking part in this project be kept confidential?

All information collected about named participants will be kept strictly confidential and will only be accessible to me and my research supervisors. However, if there is disclosure of information about criminal activity or risks to public safety, the researcher may be obliged to report this to relevant authorities.

Who is responsible for my information?

This study is part of a research project for a PhD in Health Studies at The University of Sheffield. This PhD research is being funded by The University of Sheffield's Doctoral Academy. The University of Sheffield will act as the Data Controller for this study. This means that the University is responsible for looking after your information and using it properly. This project has been ethically approved by the University of Sheffield's Ethics Review Procedure, as administered by the School of Health and Related Research (SCHARR).

To comply with the General Data Protection Regulation (GDPR) you need to know that the legal basis for processing data about you “is necessary for the performance of a task carried out in the public interest” (Article 6(1)(e)). The use of your data is “necessary for scientific or historical research purposes”. Further information can be found in the University’s Privacy Notice <https://www.sheffield.ac.uk/govern/data-protection/privacy/general>.

What if something goes wrong and I wish to complain about the research?

If for any reason you would like to complain about your treatment by the researcher, you can contact the researcher Steven Markham, or the study supervisor, Janet Harris. If something serious occurs during or following your participation in the project or if you feel an initial complaint has not been handled to your satisfaction, you can contact Anne Cutler, Data Protection Officer, The University Secretary's Office, Sheffield University, Western Bank, S10 2FN, 0114 XXX XXXX, dataprotection@sheffield.ac.uk, who will then escalate the complaint through the appropriate channels.

Contacts for further information

Steven Markham

SMarkham1@Sheffield.ac.uk

Dr Janet Harris

Janet.Harris@Sheffield.ac.uk

School of Health and Related Research, The University of Sheffield, 30 Regent Street, Sheffield, S1 4DA.

Thank you for taking the time to read this information sheet.

Appendix I: Consent Form**Consent Form****The personal and social impact of participating in Men's Sheds**

<i>Please tick the appropriate boxes</i>	Yes	No
Taking Part in the Project		
I have read and understood the Participant Information Sheet or the project has been fully explained to me. (If you answer No to this question please do not proceed with this consent form until you are fully aware of what your participation in the project will mean.)	<input type="checkbox"/>	<input type="checkbox"/>
I have been given the opportunity to ask questions about the project.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to being observed by the researcher.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to take part in focus group interviews (which may include sensitive topics) and this being audio-recorded.	<input type="checkbox"/>	<input type="checkbox"/>
I agree to take part in one-to-one interviews (which may include sensitive topics) and this being audio-recorded.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that my taking part is voluntary and that I can withdraw from the study before _____; I do not have to give any reasons for why I no longer want to take part and there will be no adverse consequences if I choose to withdraw.	<input type="checkbox"/>	<input type="checkbox"/>
I understand that data collected up until any point of withdrawal will be kept.	<input type="checkbox"/>	<input type="checkbox"/>
How my information will be used during and after the project		
I understand my personal details such as name, phone number, address and email address etc. will not be revealed to people outside the project and these will be deleted after any interviews.	<input type="checkbox"/>	<input type="checkbox"/>
I understand and agree that my words may be quoted in publications, reports, web pages, and other research outputs. I understand that I will not be named in these outputs.	<input type="checkbox"/>	<input type="checkbox"/>
I understand and agree that other authorised researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.	<input type="checkbox"/>	<input type="checkbox"/>
I understand and agree that other authorised researchers may use my data in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.	<input type="checkbox"/>	<input type="checkbox"/>
I give permission for details I provide, written notes and audio recordings to be deposited in a data repository so it can be used for future research and learning.	<input type="checkbox"/>	<input type="checkbox"/>
So that the information you provide can be used legally by the researchers		
I agree to assign the copyright I hold in any materials generated as part of this project to The University of Sheffield.	<input type="checkbox"/>	<input type="checkbox"/>

Name of Participant [printed]

Signature

Date

Name of Researcher [printed]

Signature

Date

Project contact details for further information:

Steven Markham
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SMarkham1@Sheffield.ac.uk

Dr Janet Harris
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Data Protection Officer
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