

**“Just the right amount of stress within my job to keep it  
challenging and interesting”:**

**Aspirations, beliefs and behaviours; an exploration of  
adolescent possible future selves**

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## Abstract

Adolescence is a challenging time for young people. As they transition towards adulthood, they are required to make plans and decisions about their future selves. This research aimed to develop understanding of the complex and interacting factors that influence young people's decisions and plans and contribute to the existing knowledge around the types of careers that young people hope to have when they are adults, as well as what influences their choices.

Students aged 16-24 ( $N=610$ ), were asked to complete an online written survey about how they imagine their future, they also completed items relating to future-oriented beliefs and behaviours. Both qualitative and quantitative data were collected.

Study 1 explored how young people conceptualise and narrate their possible future selves (PFSs) through the lens of their ideal job. An exploratory content analysis of the qualitative data found that adolescents were capable of integrating factors that went beyond their ideal job role; having a purposeful life and positive functioning were particularly salient features of their narratives. Older and female students were more likely to produce nuanced, integrated PFSs than younger and male students, possibly suggesting greater self-knowledge.

Study 2 examined young people's educational and career aspirations, as well as the factors that might influence their occupational goals. The study also explored more general beliefs about self and the future. Findings from this study suggest that young people have high educational and academic aspirations. Professional roles were the most commonly aspired to jobs, in particular jobs in health, science, research and technology, and culture, media and sports. Family and work experience were the main influences on job choice. Results differed according to participant gender, socio-economic status and age.

This research contributed to knowledge relating to how late adolescents imagine their PFSs. Findings may be useful in developing targeted career support for young people, particularly those who are most vulnerable to poor outcomes.

## List of Tables

Table 1	How Concepts Related to Career are used by the Author in this Thesis.....	25
Table 2.1	Summary of Futuretrack Research that Relates to the Current Thesis.....	56
Table 2.2	Summary of Theories Relating to Career Development.....	78
Table 3.1	Hierarchical Structure of SOC 2020 Tiers.....	92
Table 3.2	Highest Parental NS-SEC Classification.....	92
Table 3.3	Highest Parental Education.....	93
Table 3.4	Amount of Work Experience.....	94
Table 4.1	Code Frequencies and Intercoder Reliability for Initial Codes.....	115
Table 4.2	Frequency of Ideal Possible Future Selves Codes.....	116
Table 4.3	Examples of how Elaboration of Self has been Defined and Measured in the Literature.....	119
Table 4.4	Example Quotations Identified as High and Low in Elaboration in Previous Literature.....	120
Table 4.5	Coding Framework for Elaboration of Self.....	122
Table 4.6	Categories, Sub-categories Representing Young People's Ideal Future Self	126
Table 4.7	Elaboration of Self by Group.....	136
Table 4.8	PFS Salience by Group.....	137
Table 4.9	Spearman Correlations between Study Variables.....	139
Table 5.1	Occupations Classified by SOC 2020 Sub-major Groups and Corresponding Occupational Field.....	147
Table 5.2	Narrative Identity Framework for Self Perceived Influence on Ideal Job.....	150
Table 5.3	Intercoder Reliability of Self-Perceived Influences on Ideal Job.....	151
Table 5.4	Level of Expected and Hoped for Education by Group.....	153
Table 5.5	Differences in Hoped for and Expected Level by Group.....	155
Table 5.6	Correlations for Hoped for and Expected Level Education of with Year Group and SES.....	157
Table 5.7	Ideal Job Classified by SOC 2020 Sub-Major Group.....	161
Table 5.8	Group Differences in Ideal Occupation Field.....	144
Table 5.9	With Whom Participants had Discussed Future Plans with and How Helpful Discussions Were.....	165
Table 5.10	Descriptive Statistics for SCCI Career Behaviour Variables.....	175
Table 5.11	Descriptive Statistics for Agency Variables.....	177

Table 5.12 Spearman Rank Correlations Between Career Behaviours, Beliefs and Participant Demographics.....	181
Table 5.13 Differences in Career Beliefs between Male and Female Participants .....	183
Table 5.14 Tolerance Statistic for Testing Assumption of Multicollinearity for Vocational Development and Certainty of Ideal Job.....	184
Table 5.15 Ordinal Logistic Regressions for Vocational Development Behaviour and Ideal Job Certainty.....	186
Table 5.16 Spearman Rank Correlations Between PFS Elaboration and Salience, and Ideal Career Choice, Future-Oriented Beliefs and Behaviours.....	187
Table 5.17 Tolerance Statistic for Testing Assumption of Multicollinearity for PFS Salience and Elaboration.....	189
Table 5.18 Ordinal Logistic Regressions for PFS Elaboration and Salience.....	189

## List of Figures

Figure 1 The Gatsby Benchmarks .....	22
Figure 3.1 Eight-, Five-, and Three-, Class Versions of NS SEC .....	91
Figure 3.2 Information Provided by ONS Occupational Coding Tool for Secondary School Teacher .....	93
Figure 3.3 University of York Education Ethics Committee Ethical Issues Audit form for Research Students, Question 26.....	106
Figure 4.1 Frequency of Elaboration Scores.....	135
Figure 4.2 Frequency of PFS Saliency .....	136
Figure 5.1 Highest Level of Education Hoped for by Year Group.....	156
Figure 5.2 Hoped for Level of Education by Gender.....	159
Figure 5.3 Expected Level of Education by Gender.....	160
Figure 5.4 Percentage of Participants Aspiring to each Occupational Field.....	163
Figure 5.5 Ideal Job by Socio-economic Classification.....	163
Figure 5.6 Most Popular Ideal Job Choices Classified According to SOC 2020 by Gender.....	164
Figure 5.7 Soc 2020 Classification of Ideal Job by Year Group.....	166
Figure 5.8 Soc 2020 Classification of Ideal Job by Participant Socioeconomic Level...	168
Figure 5.9 Self-Reported Influences on Ideal Job Choice.....	169
Figure 5.10 Influences on Participant Choice of Ideal job by Highest Parental Education.....	172
Figure 5.11 The Distribution of SCCI Vocational Development Scores.....	174
Figure 5.12 Length of Work Experience Undertaken by Participants.....	176
Figure 5.13 Distribution of Scores for Extent of Agreement with Statement ‘I am certain that I will do this job’.....	177
Figure 5.14 Distribution of Scores for the Extent of Agreement with Statement ‘It would be easy for me to get this job’.....	178
Figure 5.15 The Distribution of Confidence for the Future Composite Score.....	179
Figure 5.16 The Distribution of Perceptions of Control Composite Score.....	180

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## **Declarations**

It should be noted that members of the GOALs research group in the Psychology in Education Research Centre (Education Department, University of York) provided support in some aspects relating to the coding of data gathered from the written survey. This support took the form of discussing aspects of codebook development and undertaking reliability checks. However, all of the work presented in this thesis is my own work.

I declare that this thesis is a presentation of original work and I am the sole author. This work has not previously been presented for an award at this, or any other, university. All sources are acknowledged as References.

## Table of Contents

Abstract .....	1
List of Tables .....	2
List of Figures .....	4
Acknowledgements.....	5
Declarations.....	6
Table of Contents .....	7
1 Background and rationale .....	12
1.1 Adolescence; a difficult life stage .....	12
1.2 Brain Maturation.....	13
1.3 Psychosocial development, social development and transitions .....	15
1.4 Future orientation; motivation and the future self .....	17
1.5 Aspirations for the future .....	18
1.6 Supporting children and young people with career development .....	20
1.7 The use of terms associated with ‘career’ and ‘occupation’.....	23
1.8 Positionality statement .....	25
1.9 Research aims .....	27
2 Literature review.....	29
2.1 What are PFS and Why do they Matter?.....	29
Conceptualising PFSs in adolescence.....	29
2.1.1 .....	29
How do PFSs affect young people’s behaviour? .....	31
2.1.2 .....	31
What are the mechanisms for behaviour change associated with PFS? .....	32
2.1.3 How does Identity Based Motivation (IBM) explain how PFSs can promote action? .....	33
Perceptions of time and the future self.....	37
2.1.4 .....	37



2.1.5	How do group differences influence perceptions of difficulty and certainty of future-focused behaviours? .....	41
2.1.6	PFS Narratives .....	48
2.2	Careers; Hopes, Plans and Support.....	52
2.2.1	PFSs and Career Planning, Decision Making and Development.....	52
2.2.2	Futuretrack; Aspirations and Planning Behaviours. ....	54
2.2.3	Job aspirations .....	61
2.2.4	Career information and guidance (CIAG) provision in England .....	67
2.2.5	Understanding career development and support through theory .....	75
3	Methodology.....	4
3.1	Introduction .....	4
3.2	Philosophical Orientation .....	4
3.3	Research Design .....	5
3.3.1	Methodological Approach.....	5
3.3.2	Written Survey.....	5
Participant information and recruitment.....		7
3.3.3.....		7
3.3.4	Sampling. ....	7
3.4	Measures .....	8
3.4.1	Demographic and Contextual information. ....	9
Ideal job. ....		16
3.4.2.....		16
3.4.3	Self-Reported Measures of PFS.....	19
3.4.4	Further quantitative measures relating to future oriented behaviours and beliefs.....	20
3.5	Procedure .....	23
3.6	Pilot and Amendments .....	23
3.7	Ethics .....	24

3.7.1	Informed consent, confidentiality and right to withdraw. ....	24
3.7.2	Gatekeepers, access and participant voice. ....	25
3.7.3	Age and gaining consent.....	25
3.7.4	Potential Harm. ....	26
3.8	Methodological Limitations.....	27
3.8.1	Limitations and reflection on research ethics.....	27
3.8.2	Further Methodological Limitations and Reflections. ....	28
3.9	Coding and Analysis .....	30
4	Study 1 How adolescents imagine PFSs through the lens of ideal job .....	31
4.1	Study 1 aims and research questions .....	31
4.1.1	Aims. ....	31
4.1.2	Research Questions (RQs) .....	31
4.2	Method.....	32
4.2.1	Participants .....	32
4.2.2	Measures .....	32
4.2.3	Procedure.....	32
4.3	Coding and Analysis .....	32
	RQ 1.1 What is the content of young people’s PFS narratives?.....	32
4.3.1	Exploratory content analysis of PFS narratives. ....	32
4.3.2	RQ1.2: How salient and elaborated are young people’s PFS narratives? Coding and analysis of elaboration and salience variables .....	37
4.3.3	Analysis of RQ 1.2 How salient and elaborated are young people’s PFS narratives? .....	1
4.4	Results.....	2
4.4.1	Results for RQ 1.1 What is the content of young people’s PFS narratives? .....	2
	Result for RQ 1.2 How salient and elaborated are young people’s PFS narratives? .....	6
4.4.2	.....	6

4.5	Key Findings .....	13
5	Study 2 Occupational aspirations, beliefs and behaviours .....	17
5.1	Study 2 aims and research questions .....	17
5.1.1	Aims .....	17
5.1.2	Study 2 Research Questions (RQs) .....	17
5.2	Method.....	18
	Coding and Analysis.....	18
5.3.....		18
5.3.1	RQ 2.1 What are young people’s academic aspirations and expectations? .....	18
5.3.2	RQ 2.2 What are young people’s career aspirations and what are the main influences on these? .....	19
5.3.3	Content analysis of self perceived influences on ideal job choice. ....	21
5.3.4	Analysis of quantitative data.....	23
5.4	Results.....	25
	RQ 2.1 What are young people’s academic aspirations and expectations? .....	25
5.4.1	.....	25
5.4.2	RQ 2.2 What are young people’s career aspirations and what are the main influences on these? .....	31
5.5	Key findings .....	30
6	Discussion.....	34
6.1	Introduction .....	34
6.2	How do young people imagine their PFSs through the lens of their ideal job? .	35
6.2.1	What is the content of young people’s PFS narratives? .....	35
6.2.2	How salient and elaborated are young people’s PFS narratives? .....	39
6.3	Young people’s occupational aspirations .....	43
6.3.1	What are young people’s academic aspirations and expectations?.....	43
6.3.2	Main influences on, and motivations for, hoped for career .....	46
6.4	What future-oriented beliefs and behaviours do young people demonstrate? ..	49

6.4.1	Future-oriented behaviours and beliefs .....	50
6.4.2	PFS Salience, elaboration, and future-oriented beliefs and behaviours. ...	54
6.5	Limitations.....	56
6.6	Conclusion .....	57
7	Conclusion .....	58
7.1	Implications for practice .....	58
7.2	Recommendations for future research. ....	61
7.3	Concluding remarks .....	62
8	References.....	64
9	Appendices .....	94
9.1	Appendix A: Pathway to Future Self Survey.....	94
9.2	Appendix B: Ethical Approval process and Timeline as of March 2019.....	112
9.3	Appendix C: Ethics Audit Form .....	115
9.4	Appendix D: Participant Information and Consent Sheet .....	133
9.5	Appendix E PFS Codebook .....	135
9.6	Appendix F Comparing distribution of PFS elaboration scores for year group, parental SES and gender.....	141
9.7	Appendix G Collinearity Statistics for elaboration and salience.....	144
9.8	Appendix H Comparing distribution of career behaviours and beliefs by group ...	145
9.9	Appendix I Comparing distribution of career behaviours and beliefs by group.....	146

# **1 Background and rationale**

## **1.1 Adolescence; a difficult life stage**

Adolescence is considered to be the transition and developmental period between childhood and adulthood. The extended period of adolescence is largely an invention of post-industrial revolution Western culture, whereby the advent of new technology required more time in school, effectively delaying work, marriage and childbearing, and as such adult status (Lawrence & Valsiner, 1997). Adolescence involves puberty, a biologically defined period, whereby the individual matures physically, and results in the individual becoming capable of sexual reproduction. However, it also includes broader changes in thinking, interests, social and emotional development and experiences (Spear, 2000). Furthermore, during this time young people also experience hormonal changes and undergo considerable brain maturation (Blakemore & Choudhury, 2006; Blakemore & Mills, 2014)

Adolescence is widely acknowledged as a complex developmental phase, marked by significant social, emotional, and physical transformations. During this period, individuals endeavour to establish their sense of self and strive for autonomy, while encountering many challenges and pressures (Erikson, 1968). The adolescent period is not clearly defined but is most commonly considered to include the period between 12 and 18 years of age. However, neuroscientific research proposes that brain maturation, particularly in areas related to decision-making and impulse control, continues until around the age of 24 to 30, lending credence to the notion of an extended transition into full adulthood (Steinberg, 2005). Furthermore, research suggests that modern societal changes, prolonged education, and delayed life milestones have also delayed individuals in taking on traditional adult responsibilities (Arnett, 2000) for example, young people in England are now required to stay in education or training until they are 18 years of age (Education and Skills Act, 2008).

### **1.1.1 The adolescent brain.**

The past, there was a prevailing belief that human brain development reached its full maturity during early adolescence, leading to the assumption that the adolescent brain, despite its relative lack of experience, was equivalent to that of an adult (Steinberg, 2005). However, the advancement of brain imaging methods has facilitated the mapping of the developmental changes that occur throughout the life stages. (Blakemore & Choudhury, 2006), indicating that this may not be the case. Although brain development is slower in adolescence than in childhood, neuroimaging techniques offer

empirical evidence for ongoing increases in neuronal myelination and the establishment of neuronal pathways. This maturation process involves the refinement of neural connections, through synaptic pruning, resulting in improved communication between different parts of the brain (Blakemore, 2008; Spear, 2000). The most significant restructuring occurs in the limbic region and the prefrontal cortex; areas believed to play a critical role in many aspects related to executive functioning including; planning, decision-making, emotion regulation, and learning (Sowell et al., 1999; Spear, 2000). Considering the structural changes to the prefrontal cortex it is, therefore, reasonable to assume that there will also be changes to the executive functions associated with these regions (Blakemore & Choudhury, 2006).

### 1.1.1 Brain Maturation

Research using functional magnetic resonance imaging (fMRI) to investigate the adolescent brain has identified changes in areas that are associated with behaviours and skills which contribute to social behaviours, including perspective-taking and susceptibility to peer influence. Perspective-taking refers to the capacity to adopt another's viewpoint and understand what others might be thinking and feeling. It is considered to be a fundamental component of effective social interactions (Blakemore & Mills, 2014). While the brain is still maturing, as in adolescence, this may lead to difficulties in interpreting other people's emotional states, which may be interpreted as young people lacking empathy or being antisocial. Behavioural research indicates that the development of executive function skills is not linear, and indeed, there may even be a decline in some skills during puberty. Findings from a study by Carey et al. (1980) indicate that between the ages of six and 10, there is a 20% increase in face recognition accuracy, however, this is followed by a 10% decline in accuracy upon the onset of puberty. Changes in cognitive performance have been attributed to the hormonal changes that occur in puberty, however, it is important to acknowledge that changes in self-awareness may also occur during this stage and cannot be disregarded as a potential contributing factor.

Risk taking is a behaviour often associated with adolescence. Research from neuroimaging studies suggests that, when undertaking incentive-driven behaviour adolescents, in comparison with adults, show a lower activation of the mesolimbic system (Bjork et al., 2004). The brain activity of both adults and adolescents was measured while they engaged in tasks that involved anticipation of financial gain or loss as well as receiving feedback on actual gains or losses. The research found that, when anticipating gains, adolescents showed less activation of the mesolimbic system than

adults, but there were no differences when they were notified of actual gains. This suggests that adolescents may engage in risk taking behaviour as a means of stimulating brain regions associated with motivation and effectively providing a reward (Blakemore & Choudhury, 2006).

The structural and functional brain development that takes place during adolescence may be critical components in social (and anti-social) behaviours, and evidence indicates that the adolescent brain is particularly sensitive to environmental and social cues. Research demonstrates that adolescents are more prone to engage in risk-taking behaviours when in the company of their peers. A study by O'Neal et al., (2019) found adolescents took more risks when crossing virtual roads if they were with a peer than they did when alone. These findings were not seen in adult participants. Chein et al. (2011) observed similar outcomes in a study using a driving simulation, with MRI scans showing higher levels of neural activity in the ventral striatum and frontal cortex of adolescents, in comparison to adults, when in the presence of peers.

Although neuroimaging offers a somewhat objective measure of neurodevelopment over adolescence, the evidence as it relates to social behaviour should be interpreted with some caution, as the cognitive neuroscience approach, in contrast to behavioural explanations, is a relatively new field (Foulkes & Blakemore, 2018). The available evidence is not only somewhat limited but, there have been some inconsistencies in findings, particularly those related to the significance of gender differences. Furthermore, it should be acknowledged that other behaviours may be influential in social behaviours and outcomes, including genetics and the environment, with evidence suggesting that previous experiences and family factors such as parenting styles and parent-child attachment styles all have an impact on behaviour and individual identity. Research also indicates that there is a complex and not yet fully understood relationship between brain changes and the hormonal changes that come with puberty and adolescents' social environments (Foulkes & Blakemore, 2018).

#### **1.1.1.1 Cognitive development.**

Adolescence is associated with cognitive development, with an increased ability to reason being seen over the lifespan. Adolescent thinking becomes more flexible and individuals are increasingly able to use both deductive and inductive methods for problem solving. Piaget (1970) referred to this as formal operational thinking. This means that adolescents generally become more able to consider hypothetical, more abstract ideas as they mature. This period also sees an increased capacity for information processing, working memory and ability to discriminate between relevant

and irrelevant information. These changes support the development of abstract thinking and improved performance on a range of tasks (Luna et al., 2004).

## **1.2 Psychosocial development, social development and transitions**

Psychosocial development and identity. In his psychosocial development theory, Erikson (1968) posited that development is characterised by a series of unique psychosocial crises that span from infancy to late adulthood. How the individual navigates and resolves these impacts their self-identity. Psychosocial development theory proposes that starting from around the age of twelve, adolescents begin to explore their independence. Erikson (1968) referred to this as the 'identity versus confusion' stage, arguing that this period, where individuals begin to live a life of their own, apart from their families, is critical in the development of an adequate self, although, unlikely to be a smooth process (Combs et al., 1976; Erikson, 1968). Larson and Ham (1993) emphasise the impact of social transition during the life stage, arguing that as adolescents' perceptions of relationships change, their view of themselves and others also alters. This perspective on adolescent development offers insight into the process by which internal identity development connects to external experiences, hence illuminating the factors contributing to variations in adolescent behaviour across different contexts, such as within educational settings or in their interactions with peers.

Social development and transitions. As individuals move into adolescence relationships tend to change. Friendships become more intimate, and peers may have a stronger influence on adolescents' values and behaviours. At this time the adolescent may begin to separate from their parents in the process of establishing their own identity and becoming more independent (Larson et al., 2006). However, although peers become more influential during adolescence, parental influence appears to still be important for some topics, including politics, religion, morals and careers (Albert et al., 2013).

The process of transitioning into new environments, both physical and social may bring with it additional challenges, such as establishing new relationships and navigating the personal and external expectations that go along with this. Such factors and challenges collectively have the potential to contribute to psychological distress (Khawaja & Dempsey, 2008; Pitt et al., 2018). The extant literature suggests that the challenges associated with transitioning can have a detrimental impact on emotional well-being and academic achievement (Beck, 1997). Studies have shown that more than 75% of students experience at least moderate levels of stress during transitions (Larson & Ham, 1993; Misra & Castillo, 2004). According to Wagner and Compas (1990), the



phenomenon of psychological distress during adolescence can be understood in terms of developmental changes and also their specific meaning to the individual within the evolving social context of this life stage. This perspective provides support for the notion that the stressors encountered by adolescents, e.g. relationship difficulties, and academic demands, are mediated by the developmental process.

### **1.3 Conceptualisations of adulthood**

Adolescence is conceptualised as the period between childhood and adulthood and part of the role of those supporting young people is in facilitating the transition into adulthood. As such there must, therefore, be a consideration of what is meant by the concept of adulthood and where the boundary lies between adolescence and adulthood. The answer is not clear-cut and may depend on prevailing cultural, legal and family perspectives. Arnett (2001) carried out a study asking 519 participants, from the age of 13 to 55, about what it takes to be considered an adult. Participants were asked to evaluate the importance of various possible criteria for the transition to adulthood. These criteria were derived from psychological, sociological and anthropological research into the transition to adulthood (Arnett, 1997, 1998; Perry, 1999), and included; role transitions (e.g. getting married), family capacities (e.g. ability to look after children), norm compliance (eg abiding by the law), and individualistic transitions (eg determination of one's personal value system). The study also considered biological and legal transitions. Taking responsibility for one's actions was the most commonly cited characteristic, followed by determining one's personal values, attaining financial freedom and the capacity to support family. The more traditional markers, such as legal transitions (e.g. reaching a legally determined age) and role transitions (e.g. employment and marriage) were the least likely to be cited as significant criteria.

Conceptualisations of adulthood were largely consistent across all age ranges within Arnett's research. The only criteria with significant differences between ages were norm compliance; with the oldest participants indicating that it was an important feature of adulthood, whereas the youngest did not, and biological transitions; younger participants placed more importance on this than older individuals. One plausible explanation for these variations by age is that the immediacy of experiencing the transition criteria may influence the degree to which individuals view them as indicators of the transition into adulthood. Studies have consistently found that character qualities relating to individualism are most important to young people transitioning to adulthood (Arnett, 1997, 1998) This would indicate that for most, capacity and skills are more significant than specific outcomes. However, it should be acknowledged that this

observation may also reflect the individualistic majority cultures of the participants included in these studies (Triandis, 2001).

#### **1.4 Future orientation; motivation and the future self**

The extant literature indicates that there is an increase in future orientation as individuals move through childhood and into adolescence (Mello & Worrell, 2015; Steinberg et al., 2009). Future orientation refers to the thoughts feelings and concerns that individuals have about the future and the way in which they subjectively engage with their perceptions of the future. This concept of future orientation can be observed through an individual's approach to planning, goal-setting, and the way in which they avoid unwanted situations (Seginer & Mahajna, 2018). Furthermore, this concept serves as an indicator of how people foresee the future, including how positively or negatively they view the future, their preparations and their expectations (Seginer & Mahajna, 2003). Thinking about the future starts in early childhood and continues over the course of life. However, momentum increases in adolescence and early adulthood, critical periods for making significant life choices and decisions (Nurmi et al., 1991; Nurmi, 1995). The individual's perceptions of the future are influenced by a combination of internal and external factors (Seginer & Mahajna, 2003). Adolescents are believed to construct subjective images of their future interests, expectations, and plans, through their interaction with significant people in their lives. Psychological factors, such as self-esteem and social development are also likely to impact the image of the future held by the adolescent (Nurmi, 1991).

One approach to considering future orientation is through the idea of the *possible self* or *future self*. *Possible selves* were introduced as a concept by Markus and Nurius (1986) to describe how people imagine themselves, their hopes, fears and motives, at a point in the future state. King (2001) argues that this hypothetical future self is particularly important for adolescents, as it can serve as motivation or an incentive for present and future actions, offering a mechanism for assessing and evaluating the current self. Although the future self may incorporate many elements, future occupation may be a pertinent feature for young people in education. Over the course of adolescence, young people are expected to consider and make decisions about their future occupations. It is therefore important to understand what motivates adolescents to actively engage in behaviours that facilitate their career development, such as seeking advice or information related to an aspired-to career. This process of prioritising future benefits over current desires, is unlikely to be easy for anyone, however, for adolescents in the throes of rapid developmental changes, it is even more likely to pose a significant

challenge. Research indicates that future or possible selves are important and have been associated with various factors including; life satisfaction, academic outcomes, well-being, and goal attainment (Cameron, 1999; King, 2001; Oyserman et al., 2006; Peetz et al., 2009). Oyserman et al. (2004) contend that imagining the future self enables individuals to try on and explore a range of identities, comparing these with the current self, allowing them to identify barriers and motivating them to proactively make plans and take actions towards goals (Oyserman et al., 2004). Understanding how adolescents think about their futures may help adults who support young people to understand what motivates them and offer individualised and targeted support. This research will use the term 'Possible Future Selves' (PFSs) to describe self representations of what one could be in the future. Using this term acknowledges that it is also possible to have an image of what is or might have been possible for the current self.

### **1.5 Aspirations for the future**

Understanding the career aspirations of young people is important for several reasons. Croll (2008) found that approximately half of young individuals in the UK end up working in professions they aspired to at age 15, so knowing what jobs young people want may help shed light on the alignment between aspirations and the careers they eventually find themselves working in. Furthermore, examining these aspirations may also provide valuable insight into the interplay between personal beliefs and societal structures in the lives of young people, which is critical for addressing inequalities as emphasised in education policy.

Several longitudinal studies of the jobs adolescents aspire to have been carried out over the last decade in the UK, as well as internationally. Findings indicate that on the whole, young people demonstrate high career aspirations (Mann et al., 2020). A range of career aspirations are featured in young people's accounts, with careers in medicine, teaching, business, and law among the most popular. However, it is noteworthy that almost a third of young people's aspired to jobs are concentrated in the top five career choices. Additionally, business-related careers appear to be more popular with older students. However, group differences are evident in the findings, with strongly gendered patterns of interest seen in some career aspirations, particularly those related to science, engineering, and the healthcare profession. The research also points to the influence of socioeconomic status and ethnicity on aspirations indicating that certain groups may need more support to consider different career options and pathways to employment.

Inequality persists in Western societies, with individuals from disadvantaged backgrounds experiencing poorer life outcomes. According to the OECD, people from the lowest socio-economic backgrounds in Europe earn about 20% less than their more advantaged peers (Clarke et al., 2022). Additionally, only half of 15-year-olds from low socio-economic households are expected to complete higher education (Clark & Thévenon, 2022). Achieving social mobility, defined as improving one's socio-economic situation, is challenging and linked to equality of opportunity (OECD, 2018). For over two decades, successive UK governments have pursued increased equality of opportunity and social mobility, with a particular focus on 'raising aspirations' as a key strategy (Harrison & Waller, 2018). This approach, prominently featured in the government's 2016 White Paper on higher education, implies that individuals must set higher goals to improve their life outcomes (DBIS, 2014). However, critics argue that this narrative places undue responsibility on individuals and their families, rather than addressing broader societal factors. They suggest that this 'deficit view' associated with raising aspirations locates the 'problem' within the individual, thus oversimplifying the complexities of social mobility (Allen & Hollingworth, 2013; Baker, 2017; Mendick et al., 2018).

The term 'raising aspirations' is subject to diverse interpretations and operationalizations in practice, potentially leading to differing policy approaches (Rainford, 2023). Aspiration itself can be vague, encompassing not only hopes and dreams but also expectations for the future (Hardgrove et al., 2015). To gain a more nuanced understanding of decision-making for future plans, some scholars propose shifting the focus from aspirations to expectations. Research indicates that disadvantaged young people often have higher aspirations than expectations, with experience and exposure significantly influencing these expectations (Boxer et al., 2011; Khattab, 2015).

Parents and schools play crucial roles in shaping young people's aspirations and expectations and ultimately their outcomes. Parents from higher socio-economic backgrounds tend to provide more practical advice, role modelling, and enrichment, contributing to disparities in opportunities (Archer et al., 2014; Winterton & Irwin, 2012). However, there is concern that the emphasis on raising aspirations may inadvertently imply the need to become middle-class to succeed, reinforcing assumptions that working-class beliefs and attitudes are inferior (Spohrer et al., 2018). Educational and occupational aspirations are complex and influenced by a variety of factors. A longitudinal study of young people in England found that although individuals from

higher socio-economic groups were more likely to aspire to higher education, the aspirations of those in lower economic groups were still higher than the levels of participation (Croll & Attwood, 2013). Additionally, aspirations often exceed what a young person's academic attainment would permit, suggesting that socio-economic and cultural factors play a role but may only have a modest impact (St. Clair et al., 2013). The literature pertaining to children and young people's aspirations is explored in more detail in Chapter 2 (Literature Review)

## **1.6 Supporting children and young people with career development**

Children form views about careers at an early age (Moulton et al., 2018). Understanding the aetiology of individual differences in young people's career choices is key to developing an effective and fair system of careers education. Research indicates that individuals from working class backgrounds are less likely to go to university and less likely to move into higher paid (and higher SES) jobs. While there should not be an assumption that going to university is the best option for all, ensuring that everyone has the knowledge and resources to have the choice to apply may support equality of opportunities. Evidence suggests that career guidance is especially important for certain groups of students, such as those from working class backgrounds, but that students from disadvantaged groups are among the least likely to receive careers guidance (Mann & Percy, 2014).

Individuals receive careers information from a variety of sources including parents, family, teachers and the media, as well as careers guidance professionals. These sources of guidance can be variable in quality and impartiality. This, along with the perceptions among some students that certain subjects are too difficult or unsuitable for them, could be linked to the low aspirations and expectations shown by some students (MacDonald, 2014). Good careers guidance in schools is critical for young people, in providing them with an understanding of the world of work and the routes into it. High quality guidance helps young people acquire the skills they need to make appropriate choices about their pathways and navigate their journey into work that is fulfilling and contributes to a productive economy (Department for Education, 2023). Research findings indicate that adolescents often do not feel supported in making career-related choices, with one study reporting that over a third of Year 11 students had received no career education at all, and approximately half of those that had felt dissatisfied with the quality of information received (Archer & Moote, 2016). The Careers and Enterprise Company (CEC) investigated how young people in secondary schools

and further education in England made career decisions and how they used careers information to aid their career thinking (Behavioural Insights Team, 2016). Young people indicated that making career choices was difficult and that they felt overwhelmed by the enormity of choices available to them. Findings suggested that these difficulties may result in disengagement from the process or fixing prematurely on one option. Young people often feel unable to make informed choices, not because of a lack of information but because the information is not personalised. Furthermore, findings indicated that whilst there was a range of understanding about career and study options, even the most engaged students had a limited awareness of current job options. The career decision-making process appears to be complex according to participants in this study.

The literature suggests that future careers and academic success are common elements of the future self (Oyserman & James, 2011; Shepard & Marshall, 1999). Career aspirations and expectations are understood to be influenced not only by individual factors and motivations but also by a range of social factors, including socioeconomic status, gender and ethnicity (Cochran et al., 2011; Harrison, 2018, 2019), suggesting an inherent structural disadvantage for some groups. There have been some legislative attempts to support and guide future aspirations for children and young people and minimise disadvantage in the UK through statutory education. In 2017, the Department for Education implemented the Career Strategy contending that, “high quality careers education... is critical to young people's futures” (DfE, 2017, p.8). These reforms, backed up by additional statutory guidance (DfE, 2023), urge education providers to; develop a career programme based on the Gatsby benchmarks (Holman, 2014, Figure 1), have a named *Career Leader*, and provide independent career guidance starting in Year Seven. Additionally, the National Curriculum (DfE, 2014) outlines the legal requirement for state-funded schools in England to “offer a curriculum which is balanced and broadly based and which: promotes the spiritual, moral, cultural, mental and physical development of pupils at the school and of society prepares pupils at the school for the opportunities, responsibilities and experiences of later life” (DfE, 2014, Section 2.1). Since 2020 (DfE, 2019) schools have also had a statutory duty to teach religious education and sex and relationships in Key Stages 3 and 4.

**Figure 1**

***The Gatsby Benchmarks***

*Taken from: Good Career Guidance (Holman, 2014)*

Benchmark	Summary
1 A stable careers programme	Every school and college should have an embedded programme of career education and guidance that is known and understood by students, parents, teachers, governors and employers.
2 Learning from career and labour market information	Every student, and their parents, should have access to good quality information about future study options and labour market opportunities. They will need the support of an informed adviser to make the best use of available information.
3 Addressing the needs of each student	Students have different career guidance needs at different stages. Opportunities for advice and support need to be tailored to the needs of each student. A school's careers programme should embed equality and diversity considerations throughout.
4 Linking curriculum learning to careers	All teachers should link curriculum learning with careers. STEM subject teachers should highlight the relevance of STEM subjects for a wide range of future career paths.
5 Encounters with employers and employees	Every student should have multiple opportunities to learn from employers about work, employment and the skills that are valued in the workplace. This can be through a range of enrichment activities including visiting speakers, mentoring and enterprise schemes.
6 Experience of workplaces	Every student should have first-hand experiences of the workplace through work visits, work shadowing and/or work experience to help their exploration of career opportunities, and expand their networks.
7 Encounters with further and higher education	All students should understand the full range of learning opportunities that are available to them. This includes both academic and vocational routes and learning in schools, colleges, universities and in the workplace.
8 Personal guidance	Every student should have opportunities for guidance interviews with a careers adviser, who could be internal (a member of school staff) or external, provided they are trained to an appropriate level. These should be available whenever significant study or career choices are being made. They should be expected for all students but should be timed to meet their individual needs.

More recent research on the quality and impact of career guidance demonstrates that while there have been improvements, the availability of careers guidance in schools is inconsistent, with disadvantaged schools, having the worst provision (Holt-White et al., 2022; Stewart, 2021). Indeed a survey of adolescents in the UK reported that only 43% of pupils reported having access to a career advisor with even fewer (33%) expressing that they understood what skills employers looked for (Youth Employment UK, 2021). Additionally, young people indicated that they were often given limited information on vocational qualifications and training.

The perspective taken by careers policy that; “Good careers guidance ... raises aspirations... [and] supports social mobility by improving opportunities ... especially [for] those from disadvantaged backgrounds ” (DfE, 2018, p. 12) which implies that inequality can be achieved through education and employment offers a somewhat disembodied view of the individual, suggesting that everyone just need to be given access to resources and information (Houghton et al., 2021). This view lacks an acknowledgement of the wider impact of inequality and socio-economic barriers (Shaw, 2013). Holman’s (2014) *Good Career Guidance* report, on which, ultimately the career strategy was based, claims to be evidence based. For example, it points to the importance of careers education in developing understanding of what a *scientist* does, claiming this will help young people to imagine themselves in that role. However, there is very little evidence to back up these ideas, or theory to explain the mechanisms through which it might work.

Alongside this adolescents are going through other forms of transitions and undertaking high stakes testing. Young people are expected to make decisions about and manage their career paths, making it important to understand what motivates individuals to engage pro-actively in positive career behaviours such as seeking information, advice or experience of work (Strauss & Kelly, 2016). This is a process which requires individuals to prioritise future outcomes over short-term benefits, a challenging undertaking for many but one that may be particularly tricky for adolescents who are undergoing rapid and significant developmental changes. Understanding the mechanism through which young people imagine themselves in specific job roles, and indeed the future more holistically may help educators provide pupils with more targeted and effective support to make decisions about their futures.

### **1.7 The use of terms associated with ‘career’ and ‘occupation’**

There is a lack of clarity and consistency surrounding terminology around the area of ‘occupation’ within the literature with; ‘occupation’, ‘career’, ‘job’, ‘work’ and ‘vocation’ often being used interchangeably (Patton & McMahon, 2014). In considering career theories and research it is therefore important to understand the ways in which the concept of a ‘career’ has typically been used and defined in the literature, as well as how it is used within this thesis.

‘Work’ is most often used to refer to the domain of life in which labour is provided to produce goods or a service, which may be paid or unpaid, while a ‘job’ refers to the *position* of employment that one holds. The concept of a ‘career’ usually focuses on professional work life and advancements related to this work. Super (1976), however, went further with his definition, also including other life roles and context, “The sequence



of major positions occupied by a person throughout his preoccupational, occupational and post occupational life; includes work related roles such as those of student, employee, and pensioner, together with complementary vocational, familial and civil roles” (Super, 1976, p.20). He and other researchers have claimed that a career is the means by which an individual implements a self-concept. This concept of ‘career’, however, implies that individuals are free to choose the work through which they can express their identity and, in doing so, fails to acknowledge that for many, work is no more than a means of meeting a need, for instance, financial need or convenient hours, or that individuals may use other means to express their self-identity. Other researchers, such as Savickas (2002), emphasise the subjective nature of individual career construction, suggesting that careers develop through perceptions of working behaviour rather than the realities of the work itself. In her theory of Circumscription, Compromise, and Self-Creation, Gottfredson (2005) highlights the developmental nature of choosing a career choice and the importance of identity. She argues that throughout childhood and into adolescence, individuals develop a better understanding of themselves and the world around them. Young people go through a process of *self-creation* which refers to developing consistency in behaviours, and beliefs, and increasing self-insight. Young people develop an understanding of what they would like to be and what they would like to avoid, including their choice of career. Gottfredson posits that career choice is guided by self-knowledge and the desire to fulfil wishes related to this, however, this is often sacrificed in order to meet other expectations including job prestige and job sextype.

According to Young & Valach (2004), careers develop over time through the use and experience of goal-directed projects and actions. Other researchers, such as Richardson (1993) point to ‘career’ as an irrelevant concept, constructed through western middle-class ideology, and argue that career development should not and cannot be separated out from the development of the individual as a whole. Richardson argues that personal, family and work life interact and are embedded within each other, making it impossible to study one aspect outside of the context of the individual’s full development.

In an alternative definition, Arthur et al., (1989), claimed that “everyone who works has a career” (p.8), defining career simply as “the evolving sequence of a person’s work experiences over time” (p. 8) and went on to define career theory as “the body of all generalizable attempts to explain career phenomena” (p.9).

Occupation includes activities that might be considered part of career development and or the way that most of our time is spent doing e.g. work, or study. While in the

career literature, occupation is often used interchangeably with 'job' or 'career', there is also a wider use within the fields of occupational science and occupational health. Within these realms there is still no clear consensus however, the term often relates to "experiences that are active, purposeful, meaningful, contextualised and human" (Molineux, 2009, p.18).

This thesis uses the terms, career, occupation, job and work. Due to the lack of consensus on how these terms are defined within the literature, the way in which they are used within this research is outlined in Table 1.

**Table 1**

*Outline of How Concepts Related to Career are used by the Author in this Thesis*

<b>Concept</b>	<b>How the concept is used in this thesis</b>
Career	Experience of work over time eg career in teaching might include being a main grade teacher and head of department, or just becoming more experienced in the role over time.
Occupation	A way of meaningfully using time in terms of work and or study
Job	The name given to the working role eg teacher
Work	The activities carried out when carrying out job eg teaching

### **1.8 Positionality statement**

I went into this research after being a secondary school teacher in England for over 17 years. Having taught young people from 11-18 years of age, I felt I had a good understanding of adolescence as well as experience of the English educational system. I enjoyed working with young people and was aware of the struggles that they experienced as they passed through this difficult stage. However, as a teacher, I could be very frustrated at times by young people's behaviour, and in particular their approach to learning. Prior to undertaking this PhD, I completed a Master of Science in Psychology in Education, which covered lifespan development. I found learning about neurodevelopment to be influential on my understanding and perspective of teenagers. In addition to this, I have two children who over the period of my return to study, between them, transitioned through GCSEs at school, to A Levels at school and college, and onto university study. Despite my children having no additional needs, and being in a position of relative advantage, this was a challenging period for us all and very much reinforced the difficulties inherent in transitions and decision-making.

Alongside my studies, I have also trained as a therapeutic counsellor, with one substantial placement taking place in a college with young people from the age of 16 upwards. This in particular has had an influence on my perspective of young people but also on my reflexivity. Here, I was seeing young people who were undergoing enormous challenges or were dealing with the impact of traumatic experiences while trying to complete their education. I was struck by the resilience of these students but my experience also highlighted to me that young people are often going through so much that educators are unaware of. I feel as educators we need to remember that young people are complicated and complex with a wide range of different, and often dynamic, strengths and needs, which are impacted by a number of interconnected internal and external factors.

In addition to this, counselling involves a great deal of reflection on the process, including self-reflection, but often more significantly in clinical supervision. Here I, as a counsellor, was encouraged to challenge my processes, what I had done, why I had done it and how I felt about it. How could I have looked at this from a different perspective and what impact might my words and actions have had on the client and our relationship? What impact did these things have on me? This constant reflection and reflexivity has now been embedded into the way that I have carried out my research. In this thesis, I start from the assumption that as a researcher, I have an influence on the research and I have tried to make this transparent throughout. I have aimed to be open about my research process and decisions and have tried to acknowledge the influence of my position throughout my methodology, analysis and discussion.

I have tried to take a reflexive approach, one that includes a conscious revelation of the role of the beliefs, values and experiences held by the researcher in the selection of methodology along with deliberate self-scrutiny in relation to the research process. Such reflexivity and getting away from the positivist notion that researcher influence equals contamination has been increasingly seen to be critical within research. I wanted to understand more about how young people think about the future, what they want from their futures and whether the systems around them adequately support aspects of their transition into adulthood. However, I also want to acknowledge the influence of my experience and positionality on my research process.

## 1.9 Research aims

Adolescence is a difficult life stage to navigate, with significant brain maturation occurring alongside considerable social, emotional and other biological development. At the same time, adolescents are going through other forms of structural transitions and undertaking high stakes testing. The transition from adolescence to adulthood is challenging and involves careful consideration of a range of future self options. Young people are required to give careful thought about who and what they want to be in the future, consider their motivations and use this information to make plans for and take action towards this future. Young people are expected to make decisions about and manage their career paths, making it important to understand what motivates individuals to engage pro-actively in career behaviours such as seeking information, advice or experience of work (Strauss & Kelly, 2016). This is a process which requires individuals to prioritise future outcomes over short-term benefits, a challenging undertaking for many but one that may be particularly tricky for adolescents who are undergoing rapid and significant developmental changes. Certain groups, such as those from low socioeconomic status or with special educational needs may be further disadvantaged in the process.

Young people from the lowest socioeconomic backgrounds have poorer life outcomes than their more advantaged peers (Clarke et al., 2022), and as such may need more support than others to navigate transitions and make plans for the future. The government's existing approaches of increasing social mobility through raising aspirations via career guidance in school and the widening participation (to HE) agenda, may be beneficial to some. However, these strategies frame inequality as a simple problem, whereas in fact, it is widely acknowledged as being a *wicked problem*, one that demonstrates political complexity and complexity of the values at stake (Geuijen et al., 2017). Additionally, such approaches have been criticised as locating the problem within the individual rather than looking at it as a wider societal issue.

This research aims to develop understanding (Allen & Hollingworth, 2013; Baker, 2017; Mendick et al., 2018) of the complex and interacting factors that influence young people's decisions and plans. This thesis also aims to contribute to the existing knowledge around the types of careers that young people hope to have when they are adults, and what influences their choices. Understanding the salient features of young people's PFSs and considering this in the context of adolescent motivations and beliefs may help shape career guidance policy, or indeed more holistic 'life guidance', policy and practice that is equitable in meeting young people's needs. As such this research

aims to make a contribution towards enhancing career support by exploring how late adolescents imagine their PFSs and examining the relationship between PFSs and future-oriented beliefs and behaviours. Understanding the mechanism through which young people imagine themselves in specific job roles, and indeed their future more holistically may help educators provide pupils with more targeted and effective support to make decisions about their futures.

This thesis is comprised of two studies. Study 1 explores how young people conceptualise and narrate their PFSs through the lens of their ideal job. Ideal job is used as a cue for eliciting other aspects of identity, as occupational selves are the most commonly identified possible selves identified in previous research (Oyserman & James, 2011; Shepard & Marshall, 1999). In taking a qualitative, narrative perspective, the study aims to obtain a richer understanding of young people's identity than previous research which most commonly uses a quantitative approach. Within this study, there is an exploration of how easily brought to mind (salience) and how detailed (elaboration) young people's narration of their future selves were, as well as a consideration of some of the factors that may influence the individual PFSs (gender, year group, SES and work experience).

Study 2 explores young people's educational and career aspirations, as well as the factors that might influence their occupational goals. The study was designed to investigate young people's beliefs and behaviours related to their occupational future selves. Specifically, it asks how actively engaged young people are in planning to meet their occupational goals, how certain they are about meeting them and how difficult they perceive it would be to achieve their ideal occupation. The study also explores more general beliefs about self and the future, considering the extent to which adolescents feel in control of their lives and their self-confidence for the future.

## 2 Literature review

### 2.1 What are PFS and why do they matter?

Young people are expected to make decisions about and manage their career paths, making it important to understand what motivates individuals to engage proactively in career behaviours such as seeking information, advice, or experience of work (Strauss & Kelly, 2016). This is a process which requires individuals to prioritise future outcomes over short-term benefits, a difficult undertaking for many but one that may be particularly tricky for the typical adolescent who is undergoing rapid and significant developmental changes. There is no shortage of information sources, with the internet becoming ever more sophisticated in what it offers, but young people do not necessarily access the information in ways that benefit them. Additionally, some young people are likely to get much more support, information, knowledge and experience from the environment in which they live- from family and friends around careers and education and have generally higher expectations. The wider environment and experiences are likely to influence thinking patterns which in turn influence the extent to which individuals use and seek information when planning for their academic and vocational futures (Strauss & Kelly, 2016). The way in which individuals think about their present selves and their current behaviour may impact their PFSs; furthermore, how one conceptualises one's future is also likely to impact one's current and ongoing behaviour.

#### 2.1.1 Conceptualising PFSs in adolescence.

The term possible selves was introduced by Markus and Nurius (1986) as the future-oriented aspect of self-concept. They proposed that possible selves are associated with dynamic properties of the self-concept and that they may change and distort beliefs and motivate behaviour. Other researchers have used various terms to name similar concepts, including 'future selves' (Leondari et al., 1998; Wilson et al., 2012) and possible identities (Oyserman & James, 2011). This research will use the term Possible Future Selves (PFSs) to describe self-representations of what one could be in the future. Using this term acknowledges that it is also possible to have an image of what is, or might have been possible for the current self.

Oyserman (2009) describes *future selves* as, working theories of who one might become, based on an evaluation of one's skills and characteristics as well as a consideration of what is possible for people like oneself. They include positive images that we would like to move towards; for example, a possible self that is healthy, academically successful and happy; or, conversely, one that we wish to avoid, a future

self that is lonely or unsuccessful at work (Markus & Nurius, 1986). Markus and Nurius suggest that possible selves are important because they can offer an incentive to current and future behaviour, providing an interpretive context for the way one currently views oneself. They argue that individuals will make a judgement about whether a future self is one to be approached or one that needs to be avoided. Furthermore, imagining one's self in the future may also offer a marker by which to evaluate one's current self, by making a comparison about how close one is to the PFS, and how much work may be required to achieve or avoid it (Markus & Nurius, 1986).

However, Markus and Nurius (1986) indicate that these PFSs are not simply a list of imagined roles or states of being but rather are, the “cognitive manifestation of enduring goals, aspirations, motives, fears, and threats” (p. 954). While some motives such as hunger activate behaviour directly, others, such as the desire for academic or vocational success, do not. PFSs can provide the bridge between self-concept and motivation by offering self-relevant meaning, organisation, and direction for working towards desired future selves (or away from feared selves).

What cognitive and neurological processes are involved in developing PFSs?

Research has found that imagining one's future (prospection), and the past uses similar cognitive and neurological processes. Future thinking can take many forms (e.g. prediction or intention), but content is proposed to vary from episodic (specific autobiographical experiences that might happen in the future e.g. attending a birthday party), to semantic (a more general abstract perspective of how one's world may be in the future, e.g. the economy after Covid) (Schacter et al., 2017). Early studies provided initial evidence that future thinking serves various functions, including decision-making, planning, emotion regulation and the formation of intention (Barsics et al., 2016). However, this is likely to be only a partial account of prospection as it is also likely to involve additional cognitive systems.

Neuroimaging evidence has shown that the level of episodic detail generated for autobiographical memories is correlated with the number of details imagined for future events, and also that impairment to relational memory is correlated with episodic detail for past and future events (Addis et al., 2007). Despite the strong evidence supporting the contribution of memory, other cognitive processes also contribute to episodic future thinking. For example, studies have shown that generating autobiographical memories, and future scenarios makes demands on executive function (D'Argembeau et al., 2010).

The exploration of future selves may be particularly pertinent to adolescents. Erikson (1968) described adolescent identity development as a process of defining

oneself within the current historical, cultural and sociological context. There is an increasing focus during identity development in adolescence on developing personal scripts about the future self that are congruent with the perceptions about the past and present (Erikson, 1968). The construction and transformation of PFSs are generally addressed as individual enterprises with research focusing on the processing of social information.

### **2.1.2 How do PFSs affect young people's behaviour?**

The way in which we think about ourselves in the future and the content of our PFSs does appear to matter. Cross-sectional and longitudinal research demonstrates associations between PFSs and many behavioural and cognitive outcomes including well-being, goal attainment, academic success and life satisfaction. For example, career focussed PFSs predicted subsequent grades when the chosen career was perceived as education dependent (Oyserman & Destin, 2010) and a longitudinal study of low-income teens found that adolescents who aspired to stay in education longer reported gaining more work as well as having jobs with greater prestige (Beal & Crockett, 2010). There is also evidence indicating that PFSs can influence physical and mental health (Dark-Freudeman & West, 2016; Loveday et al., 2018), and have a mediating effect on motivation and proactive behaviour. This is beyond the scope of the current research but highlights the value of developing greater understanding of PFSs in the context of the individual.

Despite much of the research only showing associations over time rather than establishing causal processes, there have been attempts to manipulate some aspects of PFSs, including the salience and content, and to measure the immediate behavioural consequences. Ruvolo and Markus (1992) measured student persistence in academic tasks after they were randomly assigned to either the positive (prompted to imagine a future where things had gone well for them) or negative future self condition (prompted to imagine things had gone badly for them). Students prompted to imagine a positive future self demonstrated more persistence than those in the negative future self group. This suggests that the content of future selves may be able to influence future behaviour, at least in the short term. Despite the recent replication crisis within priming research in particular, subsequent research has demonstrated similar findings (Fisher & Oyserman, 2017; Oyserman et al., 2018).

There is also some evidence to suggest that the effects of interventions that manipulate PFSs may last for more extended periods of time. Oyserman et al. (2006) found that children assigned to an intervention designed to change school possible



selves had a short-term influence, with this group reporting more school-focused possible identities linked to behavioural strategies to achieve them (e.g. do homework, listen in class) than those children assigned to the control group (school as usual). Perhaps more importantly, though, the behavioural impact was maintained over an extended period, with school grades and behaviour showing significant improvement over the following two years. Analyses showed that the intervention significantly increased the number of plausible possible selves generated and also had a positive impact on self-regulatory outcomes (eg school-reported absences reported with a Cohen's  $d$  of approximately .80). While this study was carried out on a quite specific sample, low-income, minority youths, the findings do suggest that not only is it possible to manipulate PFSs, but it also opens up the possibility of developing interventions which promote motivation and proactive behaviours. While young people may have the capacity to imagine their future selves, they may, however, need the support to do so at the most effective time and in the most effective way. Understanding the conditions necessary for initiating changes in future thinking and motivating action may be key to professionals involved in career guidance developing effective practice that supports young people in planning for their vocational and academic futures. This could be particularly beneficial to young people who do not have the wider support and experience that more advantaged young do, or those who are disengaged with the 'normal' pathway, for example, those no longer in education, employment or training.

### **2.1.3 What are the mechanisms for behaviour change associated with PFS?**

We all hold images of what our future self may be like; however, although a PFS can influence and motivate current behaviour, it does not always do so. Our PFSs are not fixed and can be revised or discarded depending on context and constraints. This process is not necessarily a deliberate action or under conscious control. Oyserman posits that future identities are dependent on the "social context within which the self is enacted" (2011, p. 120). If PFSs are subject to comparisons with our current selves, then it is important that any research into this construct takes the socio-cultural context into account. For young people planning for their academic and occupational futures, this may include their home and school environment, socioeconomic status as well as other factors such as age, gender and personality. This fits with Bronfenbrenner's ecological systems theory (1977), which takes a holistic approach to explain how various factors work together to shape a person's behaviours over their life course.

#### **2.1.4 How does Identity Based Motivation (IBM) explain how PFSs can promote action?**

PFSs commonly include academic and career success, but often individuals' achievement falls behind their aspirations, with some groups being more likely to experience this gap including boys and young people from disadvantaged backgrounds (Oyserman et al., 2006). The literature suggests that PFSs can promote proactive behaviour only if certain conditions are maintained, indicating that it may take more than high aspirations for the future to drive action and achieve success.

The gap between aspiration and achievement may be influenced through structural factors which affect individuals' perceptions of what is possible for them and 'people like them' in the future. The identity-based motivation (IBM) theory (Oyserman, 2007) uses a culturally sensitive framework to explain the processes underlying these effects. The IBM model assumes that identities are dynamically constructed in context. Furthermore, the model posits that people interpret situations and task difficulties in ways that are congruent with their current identity and prefer to take action that is identity-congruent over identity-incongruent action. When action feels identity congruent, any perceptions of task difficulty are more likely to signpost that it is because the task is important and meaningful. When action feels identity incongruent, the same experienced difficulty implies that the behaviour is pointless because it is too hard and therefore impossible and as such "not for normal kids like me" (Destin & Oyserman, 2010, p. 1011).

The IBM model implies that PFSs can change behaviours in certain conditions. Extant literature indicates that congruence of future self with present self and connection to future self promote proactive behaviour. Young people are more likely to take action if a distal future feels linked to and continuous with their proximal future (After my science A Levels I will study medicine, and then I will work as a junior doctor, so I need to work hard on my current studies) (Oyserman et al., 2015), if the future feels close (Oyserman, James, et al., 2011; Peetz et al., 2009; Wilson et al., 2012), and when it is easy to see the future self in context (Destin & Oyserman, 2010). A further condition that may impact motivation towards a behaviour is that of an individual's perception of how difficult a goal is, and their level of certainty of successfully achieving it (Oyserman et al., 2015; Smith et al., 2014). Thus, any intervention that makes it easier to imagine a future self should increase the connection that the individual feels with that future, making the future real, and making this self easy to link to the self they already know.

**Connection and congruence.** According to the IBM theory, people are motivated to act in a way that is congruent with their identity. Individuals will work towards futures that they believe people like themselves can attain while also working to avoid futures that they do not feel are congruent (Oyserman et al., 2015). This builds upon Gottfredson's (1981) theory of circumscription, which indicates that self-evaluations of 'goodness of fit' for a role are made using a young person's developing awareness of occupational differences in gender type, then prestige, and finally field of work. They successively rule out more sectors of work as unacceptable for someone like themselves. PFSs provide a lens through which individuals make sense of the present feelings and context and act as a guide in the pursuit of goals but may also explain why PFSs do not always motivate behaviour. This may be due to a disconnect between now and the future, or because the actions needed are not congruent with other aspects of the present self. Indeed, this may suggest that for some, their imaginations of the future may become more of an aspiration than an expectation. One such example is when the temporal distance between the present and the future is perceived as being very far away and as such the individual feels disconnected from this future self, even seeing their future self as a stranger (Hershfield et al., 2011) causing difficulties in being able to bring to mind a detailed and concrete image of this future (adult) self.

The IBM theory, which explains when and in which situations people's identities motivate them to take action toward their goals, predicts that one way that young people can be motivated to action towards a PFS is by experiencing their present self as connected to their adult self (Nurra & Oyserman, 2018; Oyserman et al., 2015). How close a PFS feels can influence current behaviour in several ways. A future that feels close is likely to feel connected and overlapping with the present, bringing greater vividness and clarity to the image. This connection may also motivate action through its effect on perceptions of certainty of this future. A future that feels a long way in the distance includes currently unknown entities which could disrupt current plans (I did want to study Modern Foreign Languages and do work placements in Europe, but I'm not sure how Brexit will influence this). Alternately, if a future self feels imminent individuals may feel that they cannot afford to put off taking action any longer.

### **2.1.5 How do demographic and structural factors influence PFSs?**

We all have images of ourselves in the future but these images are not always clear and accessible. The literature indicates that several demographic factors including age, gender and relative level of disadvantage/advantage (eg belonging to a low SES neighbourhood, or a minority group) may influence both the content and the accessibility

of PFSs (Bohn & Berntsen, 2013; Henry & Cliffordson, 2013; Oyserman, Johnson, et al., 2011). The rapid neurocognitive development that occurs throughout childhood and into adolescence, particularly in relation to its role in memory and perception has been associated with the ability to form coherent prospect images (Bohn & Berntsen, 2013). These factors are also understood to be influenced through congruence and connection with current identity which is believed to be mediated through their influence on perceptions of the difficulty and certainty of successful task completion and an individual perspective on time (this task is impossible for someone like me).

### **2.1.6 Is the ability to form detailed salient PFSs age-dependent?**

Having a clear and accessible image of a future life is important for setting goals and making decisions about the future (Bohn and Bernsten, 2013), but at what point do children develop this ability? There is an assumption that remembering the past and imagining the future are intertwined processes that rely on the same mind-brain systems (Bohn & Berntsen, 2013). There is also some evidence that the ability to remember autobiographical events and imagine personal futures develops at around the same time, during the preschool years (Atance, 2008; Atance & Meltzoff, 2005). Research suggests that this ability to remember the past and imagine the future relies on many of the same neural networks, and it is believed that both use the same episodic memory system (Addis et al., 2007). This may be because future events are simulated by extracting and recombining details from past events. However, research on adults indicates imagining the future involves more semantic knowledge than is required for remembering past events (Bernsten & Bohn, 2010).

Studies that have compared children's ability to remember the past and imagine the future, however, have found important differences that support the suggestion that semantic knowledge is more important for imagining the future than remembering the past (Hayne et al., 2011; Quon & Atance, 2010; Suddendorf, 2010). Three to four year olds, when asked what they had done yesterday and what they would do tomorrow, showed a correlation between the likelihood of correct answers in each condition regardless of age; furthermore, the four year olds were better at giving probable answers to questions about the future (but not about the past, than three year olds), they also found that children drew more on semantic knowledge when answering questions about possible future events than when answering questions about the past (Suddendorf, 2010). Additionally, reporting future events was correlated with scores on a semantic task (name all the things you can think of with wheels). These results are consistent with the idea that semantic knowledge is more important for imagining the future than

remembering the past. Taken together, these studies provide evidence that imagining personal future events relies more heavily on semantic knowledge than remembering the past.

These differences continue throughout childhood. Gott and Lah (2014) showed that 14- to 16-year-olds included significantly more semantic and episodic details in their narratives of past and future events compared to 8- to 10-year-olds and that this difference was greatest for episodic details. This indicates that episodic prospection appears most challenging, although this reduces with continued development in adolescence.

The acquisition of an adult-like cultural life script may be an additional factor involved in the simultaneous development of past and prospective life story coherence. Berntsen & Bohn (2010) found significant differences between past and prospective life stories, with prospective life stories being shorter and less detailed, but also containing more life script events (the nonpersonal stories that apply to most members of a culture), suggesting that prospective life stories are influenced not only by semantic knowledge but more specifically, schematic knowledge which may be gained through the young person's socio-cultural context and experiences. This may suggest that those who do not have the advantage of wider support and positive contextual experience may have less well developed and detailed PFSs which are not effective in motivating action.

### **2.1.7 How does age impact feelings of connection to PFSs?**

Young people become more future-orientated as they develop a greater understanding of the complexity of time (Erikson 1968). As children transition into adolescence, they mature in their cognitive capacities (Piaget 1955, 1975) and begin to engage in the process of identity formation (Erikson 1968), which enables them to think about time in a new way when compared to childhood. Integrating the time periods is likely to play a key role in forming a personal identity (Erikson, 1968). Research on cognitive abilities indicates that adolescents are capable of abstract thinking and considering the hypothetical (Piaget 1955, 1975), advances that enable them to develop greater time perspective. The ability to consider the past, the present, and the future at the same time, allows individuals to hypothetically place themselves in various time periods of their life.

Cross-sectional research focusing on the future indicates that adolescence is associated with an increase in thinking about the future. This increased focus may help adolescents build a clearer picture of what different futures might look like for them. Studies of adolescents indicate that an emphasis on the future increases with age, as

does the distance into the future that they think about, indicating that adolescence is characterised by an increase in future thinking compared to childhood (Wessman & Gorman, 1977).

Greene (1986) examined the future thinking of individuals aged 15, 17, and 19 years of age, with a measure of future extension, finding that older participants reported thinking farther into the future than their younger counterparts. However, Lennings et al. (1998) did not find differences in past or future time extension between high schoolers with an average age of 16 and college students with an average age of 19. In a review of neuroscience research, examining structural changes in the brain, Steinberg (2008) reported that future orientation increases from early to mid-adolescence. In a subsequent study of individuals aged 10–30, Steinberg et al. (2009) found that adolescents aged 16 and older were more oriented towards the future compared to their younger counterparts. In this study, future orientation was defined as a concern for the future, the anticipation of consequences, and delay discounting. This latter study's results may explain the lack of differences in the Lennings study (Mello & Worrell, 2015). The shift from a focus on the present in childhood to a perspective that includes both a past and a future is likely to be related to an increase in planning for a young person's academic and vocational future. These findings may have implications for the most effective timing for interventions, for example those that support occupational (career and education) decision making. Targeting young people too early may mean they are not able to imagine the future in a way that would be beneficial, ie having limited capacity to extend their thinking past the current context (eg to time beyond school or college), have enough self knowledge to integrate their identity into that future self.

### **2.1.8 Perceptions of time and the future self.**

Time is often described in terms of distance, for example, if we consider a future event as being a long time away it is perceived as being far into the distance. Whether one sees the future as more distal or proximal may play an important role in developing a salient future self, but why might this be viewed differently at different ages? One explanation is individual perceptions of how fast time seems to travel in our past and present. It is a commonly accepted phenomenon that time appears to speed up as we age. The time until next Christmas as a seven year old seems interminably long whereas a parent may be left wondering where the last year has gone.

There are several theories which attempt to explain why our perception of time speeds up as we get older. One idea is that we perceive a period of time as the proportion of time we have already lived through. To a two-year-old, a year is half of their

life, which is why it seems such an extraordinarily long period of time to wait between birthdays when you are young. To a ten-year-old, a year is only 10% of their life, (making for a slightly more tolerable wait), and to a 20-year-old it is only 5%. Bejan (2019) offers a physics based explanation suggesting that measurable 'clock time' is not the same as time perceived by the mind. He argues that 'mind time' is a sequence of images that result from stimulation of the sensory organs and that the rate at which changes in mental images are perceived decreases with age. Given this viewpoint, it is not surprising that time appears to accelerate as we grow older, which when describing time in terms of temporal distance explains how the future may feel very distant as a child but reduces through adolescence and into adulthood.

The future may feel close (I have exams next week) or further away (I will have children in my 30s). It may be explicitly marked (at the end of this term) or more vaguely (when I am 'grown up'). How that time is marked may influence how vividly that future self is imagined, and the likelihood of it motivating action towards it. Younger people may mark time until the future begins such that the future is perceived as an almost separate entity from the present. This may lead to future adult PFSs that feel vague, distal and disconnected. Thinking about the future as a more distant event is likely to result in viewing it more abstractly with a general essence of the event, whereas, a more proximal perspective is likely to activate a more concrete contextual view (Oyserman, James, et al., 2011; Trope & Liberman, 2003). Young people who consider their future to start much later may feel that there is not much that can be done now towards that future. It may be difficult imagining oneself in a distant future and when that future is in a different life stage, this is likely to result in a lack of connection between the present and the future adding to this difficulty (Oyserman et al., 2011).

The social cognition perspective (Strack & Schwarz, 2016) suggests that our current judgement and behaviour will only be changed by things that are easily brought to mind and relevant to the current task (Oyserman et al., 2012). This implies that an adult PFS will influence judgment only if it is accessible and perceived as relevant to the current self. This idea of relevance may be particularly difficult for young people who may perceive the distal future as being so far away that it has no relevance to the present (Nurra & Oyserman, 2018). Indeed, if the future is so far away whether one takes action today or tomorrow may seem irrelevant (Oyserman & Lewis, 2017).

Research into temporal discounting (the extent to which people place less value on rewards that are further into the future compared to those in the present) supports the role of perceptions of distance of future selves for current actions of relevance to their

future selves for current action, showing that people are more likely to prefer immediate smaller reward to far larger ones when a future “me” is far enough away. People are more likely to regard future “me” as discontinuous with current “me”, or even a stranger when the future self is sufficiently distal (Pronin & Ross, 2006).

Neurological studies indicate that we may in fact process information about our future selves as if they are strangers, as the neural activation shown by individuals thinking about their future selves shows a similar activation to that seen when thinking about other people (Hershfield et al., 2009). The IBM theory suggests that for action towards a future self to be successful, it has to be linked with the present. (Oyserman, 2015), therefore, mechanisms for avoiding viewing one's future self as a stranger may be pivotal in promoting positive action towards the future. Hershfield et al. (2011) found that participants shown age-progressed images of themselves exhibited a greater tendency to accept delayed monetary rewards over more immediate ones. This indicates that making the PFS less of a stranger to one's current self increases willingness to prioritise that PFS over their current self. Research indicates that students who perceive their PFS as a stranger may not be as motivated to engage in self-regulatory behaviours that will help them to achieve their desired PFS.

Studies have manipulated distancing from the future self by using the words “near” and “far” when asking questions about how connected they feel to the future (Nurra & Oyserman, 2018), or by manipulating the subjective temporal distance of the future self by, inducing participants to locate the same target date on a timeline, spatially, much closer to today in the ‘future is close’ than in the ‘future is distant’ condition (Wilson et al., 2012). Even brief interventions aiming to increase the salience of successful academic future selves have led to improved self-regulatory behaviours, including increased attendance and attainment over time (Oyserman et al., 2006).

How close or far away individuals perceive their future selves to be may also be important because of the amount of detail it brings to their view of their future selves, closer objects can be seen with greater clarity (Landau et al., 2017). For example, in one study, adults who rated an imagined retired future identity as being more vivid reported being more financially prepared for their retirement (Ellen et al., 2012). In another study, participants shown a photograph of themselves that had been digitally aged (so that they were looking at their future self) were more likely to take future-focused action if they reported that their future self was vividly experienced. One way that such linking can occur for students is by believing that school is the path to one's far future (Destin & Oyserman, 2009; Landau et al., 2014). This possibility was tested in a



randomised control trial with middle school students (Oyserman et al., 2006). Students in the intervention group took part in activities designed to create a sense that their adult future self was imminent and connected to their current selves. The students in this group, who took part in several activities which included choosing adult images and drawing timelines from the present to the future, showed improved classroom engagement, time on homework, attendance and grades and effects were stable over two years.

This study is somewhat limited due to its relatively small sample size ( $n=62$  experimental group) and its single school focus. Further issues relate to the intervention's reliance on brief self-report measures of variables of interest. However, the within-school intervention does demonstrate high ecological validity, being that it was carried out within the adolescents' everyday environment and context. Furthermore, the intervention did show a small to moderate effect size. The findings reported the young people who took part in the intervention got into trouble at school less (with a reported effect size of  $d=0.33$ ) and demonstrated higher school attendance (with a  $d=0.45$  reported effect size). This indicates that giving young people the opportunity to see the connections between present and future at their own pace can have a positive impact on PFSs and self-regulatory behaviours. Events that seem very far away may seem unlikely or uncertain, in which case action may feel like a waste of time, and certainly, people may feel it is pointless to take action now, however valuable they believe that action to be ("I really need to find out about good careers for me") if it can be put off until a later date ("there is no point in looking at careers at 15 as I can't leave education until I'm 18"), particularly if one has more pressing tasks ("I'm very busy with my GCSEs") (Liberman & Förster, 2008; Trope & Liberman, 2003). Additionally, likelihood of action decreases the further into the future that events are ("it is almost certain that I will sit my GCSE exams in 6 months, but there is more uncertainty that I will go to university in three years, as I could fail my A Levels, I may not be able to afford to go due to changes to future funding policy") (Liberman & Förster, 2008).

Further indications that the current self is viewed differently from the future self can be seen in the way in which people describe their present and future selves. Pronin and Ross (2006) found that people described their distal future in terms of traits and their more proximal and current self in terms of the context. They also reported that individuals included more concrete actions about the situation rather than traits, thus indicating that the current and nearer self is more concrete and generates more specific action. When specifically asked to imagine actions that the future self will take in the far

future actions were based on values, this again may indicate that the PFS is viewed as a rather vague entity rather than a concrete image (Gilead et al., 2020). However, Oyserman (2011) suggests that this focus on traits and values may be the root of some of the motivating effects of possible future identities and that individuals are motivated by their own values and not limited by the situational constraints of the present. This further reinforces the idea that supporting young people to explore their values and identity may be beneficial in occupational planning and development.

The extant literature suggests perceptions of temporal distance between the present and the future may play an important role in the extent to which an individual is motivated to current action. Typically goals that are perceived as being in the distal future are viewed as more abstract focusing more on why one would want to achieve the goal (this job will pay well) rather than concrete goals which focus on strategies for how to achieve them (Trope & Liberman, 2010). The literature does suggest that it is possible to prime a connection between the distal, abstract, future adult self and the current self, motivating children to take action in the present. Oyserman (2011) suggests that if the present is connected fluidly as a continuum with the future, then the “present can be used to set the groundwork for the future” (p.129).

The impact of identities for action and meaning-making is not fixed, but part of a dynamic process which is dependent on the perceptions about the current situation. A small shift of context for young people that results in “adult future me” feeling relevant to and close to “current me” can result in feeling more connected with that PFS (Oyserman, 2015). Young people who perceive adulthood as imminent are likely to experience current “me” and future adult “me” as connected constructs. This suggests that to motivate young people to take action towards their academic or vocational futures educators should increase contexts in which current “me” and adult future “me” are experienced as connected and overlapping (Destin & Oyserman, 2009). Within a career guidance context, this might include increased opportunities to step into future careers and higher education, for example through more, individualised, work-related experience and interactive experience with higher education (HE). However, this may be more beneficial if the individual’s values, traits and identity are first explored and taken into consideration.

## **2.1.9 How do group differences influence perceptions of difficulty and certainty of future-focused behaviours?**

### **2.1.9.1 Interpretation of difficulty.**

Goals and aspirations for the future are often difficult to achieve and success is

uncertain. How these difficulties and uncertainties are interpreted is likely to be important in predicting future-focussed action. The literature (Aelenei et al., 2017; Oyserman & James, 2011; Smith & Oyserman, 2015) indicates that the interpretation that young people give to their experiences of difficulty with their schoolwork can impact the level of certainty they have of attaining successful academic PFSs, as well as their academic and self regulatory outcomes. Most students aspire to achieve well at school and in their subsequent careers, but aspirations are not a guarantee of success. Students often experience working towards goals such as academic qualifications, as being difficult and how they interpret this difficulty may explain the gap between aspiration and achievement. Whilst some students may interpret the difficulty they experience as implying that the work is difficult because it is important (“I am finding this test difficult to revise for because it is so important that I get a good result”), others may interpret difficulty as the task being impossible (“I am finding this test difficult to revise for because I am not clever enough to understand the work”).

The motivational consequences of students’ interpretation of their experienced difficulty may be driven by the effect of implied social context. Students who were primed to believe that they found tasks difficult because it was important (rather than impossible) were found to be more academically engaged and invested more time on an academic task (Smith & Oyserman, 2015) than a control group. Students who framed difficulty as ‘school success is impossible’, found engagement in school as less like a “me” thing to do and reported that it was not worth their time. In contrast, students who interpreted difficulty as a sign that school success is important demonstrated a sense that school engagement is a “me” thing to do, prioritised schoolwork and spent more time on difficult tasks. The small but significant effects demonstrated in this study highlight that interpretation of experienced difficulty may play an important role in motivation towards PFSs, but that engagement and success may also depend on how one’s interpretation of difficulty compares with others’ interpretations. It is important to note, however, that this study looked at the immediate outcomes of manipulating interpretation of experienced difficulty and these were measures of opinions (e.g. how likely they were to skip socialising to prepare for class) rather than changes in their actions (have they actually stopped skipping class?).

The indication that motivation and proactive behaviour are a result of the interpretation of task difficulty rather than the actual difficulty has implications for the guidance given to young people within educational and vocational contexts. Young people can be supported in pursuing appropriate and challenging goals by encouraging

alternative interpretations of difficulty (rather than just trying to convince them that the task is not too difficult (i.e. yes it is difficult, but it is important, not just 'you can do it').

Participating in HE is associated with higher earnings and a better quality of life (Britton et al., 2016). Although not all students benefit equally, due to the demographic and academic factors that also play a role in shaping outcomes, a relatively low number of young people from disadvantaged backgrounds access HE. Despite efforts to improve social mobility students from the most deprived backgrounds are the least likely to attend university with the most advantaged 18 year olds being 2.3 times more likely to accept a place at university than the most disadvantaged (UCAS, 2023). The way in which an individual interprets task difficulties may play an important role in their actions (Smith et al., 2014). Therefore, how an individual interprets task difficulties associated with being offered a place, and actually attending university, may play an important role in their actions. It should be noted, however, that this is certainly not the only influence and to ignore other contextual and structural factors (as discussed elsewhere in this review of the literature) risks placing the blame for any poor outcomes very much within the individual (Fryer et al., 2022; Jones, 2016). For example, it has to be objectively easier for those who are offered high levels of guidance and help, from experienced support networks (e.g. independent schools or family members who have experience of navigating the process), to write their personal statements and make a university application. Indeed, as discussed below, the meaning people make of experienced ease and difficulty and the strategies they are willing to use to attain their goals are influenced by identities and the socio-cultural context (Oyserman & Destin, 2010; Oyserman et al., 2017).

A broad, complex range of factors may explain how disadvantage influences educational attainment and access to HE. These factors have been said to include parenting styles, parental aspirations for educational success, school setting, engagement in risky behaviour, as well as the young person's perceptions of self (Goodman & Gregg, 2010; Schmidt et al., 2015). Furthermore, a longitudinal study undertaken by Gorard and Siddiqui (2019) indicated that understanding the impact of factors and context over time rather than as a snapshot in time may provide a more robust understanding of the influence of disadvantage. They reported that poverty and special educational needs at age 5, as well as over the course of education were predictors of educational outcomes at the end of Key Stage 4. A full exploration of the influence of disadvantage on attainment and access to HE is outside the remit of this thesis. However, one explanation is that disadvantage, and subsequent level of

education may be associated with interpretation of experienced difficulty. Aelenei, Lewis and Oyserman (2017) found that higher levels of education are associated with an increased belief that experienced difficulty is a signal of task importance and that this effect is more pronounced for racial minorities. Furthermore, high endorsement of this productive interpretation of difficulty is associated with higher future earnings. This suggests that guidance is particularly important for young people who are considering whether to continue with their education, as it may encourage them to adopt a “no pain, no gain” perspective in which experienced difficulty with schoolwork implies the importance of succeeding in school.

Although much of this research was correlational and dependent on self-report, Aelenei, Lewis and Oyserman (2017) carried out a further study which addressed a number of these limitations. Students were guided in their interpretation of experienced difficulty, and the effect of the level of endorsement of a productive interpretation of experienced difficulty was explored (the extent to which students agreed that experienced difficulty implies importance and disagreed that experienced difficulty implies impossibility). The effect of context was also examined by comparing community college students with university students. Students who believed that the difficulty that they experienced implied importance and not impossibility, demonstrated greater certainty about attaining their academic PFSs. Students with this perspective were also more willing to make sacrifices to attain these identities. Moreover, community college students benefited more than university students from being guided to consider that experienced difficulty implies importance, rather than impossibility, implying that social context may play a role in such interpretations. Despite being only a small intervention and given prior research, it does point to the positive impact of having academic PFSs linked to strategies to attain them, on academic outcomes. That said, this study does not document a longitudinal process.

IBM theory can provide insight into how social class and cultural contexts affect the likelihood of shortfalls in aspirations for meaningful and successful lives. IBM indicates that the meaning people make of experienced ease and difficulty and the strategies they are willing to use to attain their goals are influenced by identities (Oyserman & Destin, 2010; Oyserman et al., 2017). Fisher et al. (2017) suggest that although people are sensitive to experienced ease and difficulty, they are often not aware of the sources of these experiences. They assert that people make “culturally-tuned inferences” (p.61) about what their experience means for the person they currently are and who they might become as well as what action they might take in relation to this.

Western culture often attributes personal rather than structural causes of success and failure, inferring that class-based outcomes are deserved reflections of character (Friedman et al., 2015).

IBM theory can be used to explain how social class holds so much influence over which identities come to mind and what these identities imply for meaning-making and behaviour while remaining invisible as a cause. Fisher and Oyserman (2017) gave students difficult problems to solve; one group received training on how to solve the problems and others did not. Working class students reported lower performance when performance was public (students raised their hand after solving each problem) unless they were told that others might have received extra preparation prior and they themselves received prior preparation. This implies that interpretation of experienced difficulty was a key factor in performance for these working-class students and that they were likely to interpret experienced difficulty as impossibility unless they were given support in the form of an alternative interpretation of difficulty.

#### **2.1.9.2 Interpretation of certainty.**

An identity-based model of motivation posits that it is not just perceptions of difficulty but also interpretation of certainty of achieving a given aspect of the future self, that can promote action if the task feels identity congruent. Self-efficacy theory assumes that people are more likely to work on goals when they believe that they are more certain to have a positive outcome, that if they have the skills and they try there is relative certainty of the outcome and that this certainty is derived from an individual's own experience or that of relevant others (Bandura, 2007). However, an identity-based model of motivation posits that this is an oversimplification and that tasks that are perceived as being uncertain and difficult may even promote action if the task feels identity congruent.

Excessive uncertainty may reduce motivation and current positive action. A large scale study of adolescents in the USA found that excessive uncertainty can reduce self-regulatory behaviours and current efforts (Griffin et al., 2004). Seventh-grade students were asked about their chances of attaining positive future selves, getting a well-paid job having a happy family life. The following year students were given a questionnaire which assessed risky behaviours. They found that students who perceived themselves as having low chances of having positive futures were more likely to binge drink in 8th grade. Similarly, eighth-grade students who were asked about their possible identities, their level of certainty and how prepared they were to achieve these goals reported that high uncertainty was undermining (Honora & Rolle, 2002). Students who believed they

could not attain their desired academic identity were more likely to engage in maladaptive behaviours in school (Smith et al., 2014). However, this may be a rather simplistic interpretation as young people from more disadvantaged backgrounds may be pessimistic about their life chances and maladaptive behaviours such as drinking may be a mechanism for coping with their socio-economic situation.

Too much certainty of success, however, could also have an undermining or counterproductive effect on action towards PFSs. Amir & Ariely (2008) suggest that much of the research into the effect of goals and feedback on motivation may lack nuance with the literature pointing to a variety of personal and task characteristics that may moderate this relationship, highlighting the level of progress certainty as one such moderator. Amir and Ariely (2008) demonstrated the impact of certainty on game performance. Participants were given differing levels of feedback on their progress through the game; findings indicated that while some feedback was more effective than none, participant effort was in fact reduced with very high levels of feedback. When participants could see their progress to the finish, this helped to guide and motivate, but when this was given, alongside feedback, effort reduced as participants demonstrated overconfidence. These findings further support there being an optimal level of certainty. These findings do make sense; however, progress towards the goal of a PFS in real life is inevitably more complex than the unidimensional and linear progress seen within a game. Real-life tasks may generate many sub-goals, involve nonlinear progress as well as having more significant and longer lasting rewards or consequences associated with the outcomes. These results imply that when aiming to generate behaviour motivated towards their PFSs, that is strong and long-lasting, consideration should be taken as to the type of feedback and how much of it is provided, ie it should be encouraging but also critical. This offers a more nuanced explanation of motivation and action than those based purely on the individual's confidence in their ability to carry out or achieve a task (self-efficacy; Bandura 1977), or the causes and consequences of behaviours (operant conditioning; Skinner, 1953).

James and Oyserman (2014) found that students primed with information about the uncertainty of a situation, for example, the uncertainty of employment after graduation from their university generated more possible future identities focused on occupation and more strategies to attain than those primed with certainty or a control group. Students in one study were asked to describe their future possible identities, what they would be doing in the coming week as well as their likely use of alcohol or drugs in the following week. Students in the optimal uncertainty group were the most likely to

focus on academic possible future identities and report that they would drink/drug less and spend more time studying in the following week. The suggestion is that this leads individuals to feel motivated to act proactively. However, it is not clear whether the students actually maintained these feelings or if they did indeed take the action that they indicated. Good intentions do not always translate to action (James & Oyserman, 2014). There is evidence that primed motivational changes can be maintained over time, but the literature is limited, and it is difficult to establish exactly how extensive interventions need to be for sustained or even permanent change.

Much of the literature has focused on perceptions of certainty of task outcome. However, Smith et al. (2014) suggest that this is an overly simplistic explanation of the role of certainty. They indicate that people, in fact, experience a level of certainty about themselves as well as the world, positing that it is the combination of these that brings about action or inaction towards PFSs. They found that when students experience certainty about themselves but uncertainty about their path (the world) they are more inclined to be motivated to work on self goals immediately. They called this *productive uncertainty*, proposing that this was an impetus for action as “world processes may interfere and success is not guaranteed (despite one’s capabilities)” (Smith et al, 2014, p. 694). Furthermore, Smith et al (2014) contend that if young people are supported to develop an awareness of their own capabilities as well as the uncertain nature of the world this will support goal directed behaviour across a variety of domains. These findings, however, may not hold outside of the research environment. A question remains over the validity of using prompts to prime self or world certainty. This study primed participants by asking them to read statements such as “In many ways, the world is a very certain place.” (p. 690). Effects may have been partially due to mood or positive experience of certainty rather than direct manipulations of certainty due to assessing the impact immediately. Additionally, it is not clear how an awareness of (productive) uncertainty may be generated, conveyed or understood in context.

Conceptualising PFSs.

There is very little consistency in the way in which future orientation has been conceptualised within the literature, being variously described as different constructs, beliefs and behaviours, eg as possible (future) selves, aspirations and planning. Within this thesis, I use the term ‘future orientation’ as the overarching concept of thinking about and planning for the future but specific dimensions are used for clarity. *Possible Selves*, as discussed earlier in this literature review are viewed as the cognitive manifestation of enduring goals, aspirations, motives, fears, and threats, providing them



with specific self-relevant form, meaning, organisation, and direction (Cross & Markus, 1991; Markus & Nurius, 1986; Strauss et al., 2012). Here, I make the distinction between PFSs and possible selves, to make transparent that this research will focus on who or what one might become in the future, rather than the alternate self one might be now, if our circumstances had worked out differently (King et al., 2015, p.122).

#### **2.1.10 PFS Narratives**

PFSs can be conceptualised in two main ways, either as narratives or as collections of selves (for example, teacher, mother, partner, homeowner, happy). A narrative approach (Hoyle & Sherrill, 2006) reflects a more singular, holistic view of the future self (although we may still focus on a feared, desired or expected self). A narrative conceptualisation of identity proposes that identity is constructed through a process of sense-making. Oyserman, however, focuses more on an individual's collection of possible selves in self-concept in her work (e.g. Oyserman & Lewis, 2017), using lists of individual possible future identities, which participants then rate for variables such as how difficult they would be to achieve or how close this self feels to them rather than the actual content of the PFS itself.

This current research, however, uses a narrative approach, to identify the main goals, purposes and values contained within written PFSs or activated by thinking about that PFS. This is particularly important as a narrative may elicit information about the salience and elaboration of, and motivations behind, aspirations, fears and expectations for the future, in a way that a list of PFSs cannot. Furthermore, the literature suggests that narrative identity, though connected to other personality constructs is a distinct aspect and as such is one that is worth studying in its own right (Adler & Clark, 2019) with a review by Adler et al. (2016) also indicating that narrative identity constructs have incremental validity in predicting psychological wellbeing.

The narrative identity content related to specific meaning-making within or attributed to the PFS may be important to wellbeing through two main mechanisms. Firstly, integration and unity of one's identity over time promotes greater wellbeing, thus PFSs that demonstrate higher levels of continuity and integration of self are more likely to exhibit greater wellbeing (Habermas & Bluck, 2000; McLean & Breen, 2009). Secondly, being able to create individualised meaning for one's life stories helps imbue a sense of purpose and meaning within and for one's life (McAdams & McLean, 2013). Individual differences may be reflected in specific narrative identity components of PFSs. An individual's sense of purpose in life may be captured by examining motivational themes (eg agency and communion). The psychological literature on basic human

concerns points to a distinction between categories of motivation and underlying purpose, such as those relating to achievement or interpersonal relationships, as well as an association between motives and autobiographical memories (McAdams, 2018). Oyserman (2019) argues that the overarching themes of future selves may include aspects such as achievement and interpersonal relationships and that this may be understood by considering intrinsic and extrinsic motivations.

Affective themes of the narratives may also be important in the meaning making process for example the emotional tone and valence of the narrative. A sense of unity of self may be captured by exploring the structural elements of the narrative (eg coherence) (Adler et al., 2016). Creating a coherent life story depends on autobiographical reasoning, for example making the connection between events and the self (Habermas and Bluck, 2000), for example considering how a past experience is responsible for changes in the current self 'I am more independent because of this event'. I argue that reflections on previous experiences and current selves within narrations about the future- a coherence between past and future self will indicate a coherence in self.

Theories of narrative identity suggest that adolescents and adults make sense of their lives by constructing and telling stories about their experiences (e.g. Habermas & Bluck, 2000; McAdams & McLean, 2013). These narratives, which connect the reconstructed past to the perceived present and the anticipated future, serve to provide the self with a sense of purpose and unity (e.g., McAdams, 2001). The life story is an internalised and evolving narrative that individuals construct to make sense of who they are and how they develop across their lives. Stories that thematically and structurally distil an especially strong sense of purpose and unity ought to be psychologically beneficial for their narrator, promoting wellbeing (e.g., Adler, 2012; Adler et al., 2016; Bauer et al., 2008; McLean et al., 2019). McAdams and McLean (2013) assert that narrative identity should also provide convincing causal explanations for the self, reflecting the richness of lived experience, and advance socially valued actions.

#### **2.1.10.1 Elaboration and Salience within PFS Narratives.**

Gathering a narrative PFS allows for an exploration of the salience and elaboration of the PFS. A salient possible self is considered to be one that is "readily available in one's mental life" (King & Smith, 2004, p.969), and likely to be actively, and often, thought about. King and Smith (2004) contend that salience is the "mental investment the person makes in a particular possible self" (p. 969). Salient PFSs have been found to affect the individual's behaviour in the domain to which it is linked. For

example, higher salience of academic PFSs has been found to be associated with grade improvement, higher academic application and higher test scores (Oyserman et al., 2006), and higher salience in health related PFSs in older women has been linked to higher likelihood of complying with guidelines for cancer screening (Black et al., 2001). Leonardi et al. (1998) argue that a salient and activated PFS plays a key role in promoting proactive behaviours and Strauss et al. also suggest that “identities can become chronically accessible if they are activated and used frequently” p. 7. The PFS may act as a motivational resource by offering a compass or guiding beacon to focus on as one navigates through life (Fugate et al. 2004). As discussed earlier focusing on the PFS and comparing it with the current situation may create discrepancy between the hoped-for future and the current self, however, this is only likely to be effective if the PFS is easily activated.

Elaboration, in contrast, to salience, refers to the level of vividness or richness of detail and complexity included in the PFS narrative (King & Raspin, 2004; King & Smith 2004). An elaborate PFS may provide additional motivation for proactive behaviour. Niedenthal, Setterlund, & Wherry (1992) demonstrated that when individuals had more elaborate, complex PFSs, containing a range of elements they were less likely to be affected by negative feedback about their future goals. Furthermore, Stein (1994) showed that those with less elaborate identities were less likely to seek advice and information about how to achieve their hoped-for future selves and were less likely to prepare for unforeseen events. Stevenson and Clegg (2011) suggest that the level of elaboration of self is important. However, in their study of HE students in the UK, they found that some individuals, while demonstrating limited elaboration of the future self, showed a higher elaboration of the self in the present. They proposed that focusing on opportunities of the present, both academic and extracurricular could offer an advantage for present and future success and that it was difficult to meaningfully separate out the present self from the future self.

Although salience and elaboration are likely related, they are distinct constructs, elaboration refers to the richness of the PFS image and can be judged by an observer, whereas salience is a subjective assessment of the role that the image plays in their cognitions (King & Raspin, 2004; King & Smith, 2004). King and Smith argue that it is possible to develop an elaborate PFS in the moment, in response to a prompt, having never previously entertained it (ie low salience). Furthermore, a very simple PFS narrative, low in elaboration, may be consistently present in an individual’s life, thus demonstrating high salience. Strauss et al. (2012), however, propose that elaboration

will only provide motivation and drive current behaviour when the PFS is salient and an active part of the self-concept, and that the individual needs to be alert to situational cues, in order to actively process pertinent information and engage in proactive behaviours. Research carried out by King and colleagues (e.g., King et al., 2015; King & Raspin, 2004) investigates the relationship between elaboration and salience of written narratives and psychological wellbeing, however, this is focused on alternative or lost future selves (e.g. my future if I had been straight not gay or did not get divorced) rather than futures that are still possible, and only included adults. Overall, results indicate that happiness is best predicted by investment in current goals and the capacity to relinquish goals that are not available, relinquishing one's previous sources of meaning and embracing new ones. However, this involves a reflection of what might have been which is particularly important for those later in life, perhaps less so for those in adolescence who are making choices for their future with more limited experience.

The future can seem like an unknown and scary place but the way that young people think about the future could impact current behaviour and beliefs. Focusing on PFSs may be important. PFSs that are clear, detailed and accessible may act as a beacon to guide the path to a desired future or away from a feared future that may occur if effort is not maintained. Furthermore, the vividness of these images may be more important. Lee and Oyserman (2007) argue that PFSs that enable one to develop strategies for overcoming difficulties can improve self-regulation and self-control by enabling one to focus on one's desired future and limit the influence of distractions. Thus, thinking about the future may lead to individuals developing goals, strategies and a greater sense of purpose, which has been linked to higher wellbeing. In doing this, individuals may also reflect on and evaluate their values as well, which in turn may lead to taking action towards achieving future goals.

In conclusion, a focus on the possible future allows individuals to experiment with and try on potential identities (maybe I could be a teacher, a parent, wealthy). The current self-concept includes thoughts about our past self; our experiences, accomplishments, and failure, but also includes our hopes, plans, goals, and possibilities for the future (Oyserman et al., 2004). Imagining our potential future self actively and with clarity allows us to make evaluations against our current selves and judgements about the suitability of these futures. Making such evaluations facilitates the identification of potential obstacles to achieving goals and helps the individual to plan and motivate actions to achieve or avoid them. This may be particularly important for older adolescents, who are undergoing many developmental challenges and transitions while

making decisions and plans for the future. Adolescence is a key stage for identity development (Erikson, 1968) and how one thinks about and imagines one's future may play an important part in this. This prospection is believed to be adaptive as it allows us to make judgements against our current selves in order to make plans and actions towards that which will allow us to survive (and prosper) and avoid that which will be detrimental to our survival and wellbeing (Roepke & Seligman, 2016).

## **2.2 Careers; Hopes, Plans and Support**

### **2.2.1 PFSs and Career Planning, Decision Making and Development**

Ruvolo and Markus (1992) maintain that individualising one's goals through vivid future-oriented representations of the self provides an important link between motivation and one's self-concept. They also claim that PFSs that are vivid and concrete have a particularly motivating effect. Oyserman and Markus (1990) maintain that PFSs provide "motivational resources that individuals can use in the control and direction of their own actions" (p. 122). Future orientation, career decisions, and career identity have been empirically and conceptually linked (Nurmi, 2004; Nurmi, 1991) and identity and career development (Gottfredson, 1981; Nurmi, 2004) have been empirically and conceptually linked.

This suggests that the construction of PFSs is a key component of career and academic development. Current literature suggests that interventions that manipulate content and salience of PFSs may have a positive impact on motivation, self-regulatory behaviours and subsequent life outcomes. Additionally, having a salient future work self has positive effects on both career adaptability and career exploration highlighting the importance of promoting the development of future work selves and proactive behaviours among students (Strauss & Kelly, 2016).

The ability to imagine oneself in a job may be an important factor in the career development process. Developmentally, adolescence is the time in which youth increasingly focus their attention on their future potential (Erikson, 1968). The future work self construct builds on the concept of PFSs, referring to the possible self that reflects one's hopes for one's future working life (Strauss et al., 2012). Strauss, Griffin, & Parker (2012) highlight future work self as a key element of individuals' attempts to actively shape their future work lives. They indicate that the salience and elaboration of possible future work self are especially important constructs in the context of today's careers, requiring individuals to take a proactive role in shaping and managing their careers. They propose that the more clearly an individual holds an accessible view of their future self at work, the more this will motivate proactive behaviour. Their research,

which draws on self-regulation theory, proposes that the more clearly an individual holds an accessible view of their future self at work, the more this will motivate proactive behaviour. Their research provides support for the role that future-oriented identity plays in the motivation of proactive behaviour, indicating that the salience and elaboration of the future self are associated, but separate constructs from future orientation. The research also suggests that a discrepancy between one's current self and one's future self can motivate proactive behaviour but only if the future self is particularly clear and accessible (Strauss et al., 2012; Strauss & Parker, 2014). Furthermore, engaging in proactive behaviours is likely to have an impact on an individual's current and future work selves resulting in some identity revision (Strauss & Kelly, 2016). Having the opportunity to visualise oneself in a career could help select suitable possible work selves from a pool of potential work selves, thus making effective career decisions. Exposure to, and effective engagement with, careers (not just advice) may be important in developing future work self salience and elaboration. Future work self conceptualises visions of one's future working life, both hoped-for occupational future as well as those that one wishes to avoid (Strauss et al., 2012). According to the proactive motivation model (Parker et al., 2010), future work self provides motivation to pursue desirable future career possibilities which may prompt engagement in various proactive career behaviours (e.g. career planning, skill development) (Strauss et al., 2012).

From a career construction perspective (Savickas, 2002; Savickas & Porfeli, 2012), future work self is regarded as an indicator of career adaptivity, which refers to an individual's flexibility or willingness to make changes to oneself or environments in order to achieve adaptive career outcomes. In addition to the "reason to" factors denoted by future work self, the proactive motivation model posits that "can do" factors such as abilities or psychological resources also serve as important driving forces for individuals' proactive career behaviours (Parker et al., 2010). A recent study by the Sutton Trust (Donnelly & Gamsu, 2018) reports that disadvantaged students in the UK are over three times more likely to live at home while attending university than their most advantaged counterparts. While this may reduce the financial burden of university accommodation, it may also limit their access to the most appropriate university for them, and result in individuals missing out on wider university activities that improve networking and life skills.

A further UK study (Behavioural Insights Team, 2016) explored how young people construct, experience and make sense of their future career pathway career decisions, and found that decisions are often based on whether individuals had an

image of themselves doing a given job that they found appealing. This indicates that encounters that tell young people what a job may be like for them could be crucial to effective career development. Young people varied in the number of jobs that they imagined themselves doing, and these images came from various sources. Parents and family were cited as the most ubiquitous source, but personal exposure to work and the media also featured. Exposure to work may be particularly pertinent, as a large-scale study of views of careers education and work experience (Archer & Moote, 2016) found that more than half of the study's participants had not undertaken any work experience, highlighting inconsistent opportunity in an area that may be particularly important in developing a salient future self.

Much of the extant research treats proactive career behaviour such as career exploration, as a consequence of having a well-developed future work self. However, it seems likely that this relationship may be reciprocal, and that career exploration may also be an antecedent to the development of the future work self. Certainly, it makes sense that having a clear image and goal for the future can promote current action, but engaging in proactive behaviours such as undertaking work experience or researching university courses are likely to offer the chance to imagine a PFS that has more detail and becomes more accessible. There is emerging evidence to support this reciprocal relationship between proactive behaviour and proactive motivations (Guan et al., 2017). Using a cross-lagged design Guan et al. (2017) found that future work self and career exploration are reciprocally related over time in Chinese students. Additionally, they reported that these reciprocal effects are mediated by career adaptability. Appreciating that the relationship is reciprocal may be particularly important when guiding young people as they plan for the future since individuals constantly refresh and update their career orientations based on past experiences (Savickas, 2002; Strauss & Kelly, 2017). Savickas (2002) suggested that engaging in vocational behaviours could help individuals accumulate adaptive resources and reconstruct their images of future careers.

### **2.2.2 Futuretrack; Aspirations and Planning Behaviours.**

Futuretrack (Warwick Institute for Employment Research, 2021), a large scale, longitudinal investigation, gathering data on individuals applying for undergraduate courses through the Universities and Colleges Admissions Service) (UCAS) during the 2005-6 period, and over subsequent years, may provide valuable information about young people's decision-making and planning for the future. Futuretrack largely focused on the experiences of the UCAS application and subsequently attending HE in its earlier stages (including study, accommodation, extracurricular activities, and finances), going

on to explore the impact of attending university on career outcomes. Although much of the Futuretrack research falls outside of the scope of this thesis, certain aspects are pertinent. Specifically, research relating to hopes and plans for the future (attending HE and careers), motivations and influences on occupational choices, career development, and the use and impact of career advice and support.

The Futuretrack study invited all UCAS applicants from 2005-6 to take part in an, online, primarily quantitative, survey. The research engaged approximately 120,000 respondents (23.8% of all applicants) in the first stage, from various academic and demographic backgrounds. Of the first sample, 87% were from the UK, 50% were 18 years of age, or under (Purcell et al., 2008). The initial survey, *Stage 1*, was followed by five further stages, with the most recent survey (Stage 6) being undertaken in 2020, 11-12 years after the cohort had completed their degree, asking about career paths and the impact of career support and guidance opportunities (Purcell et al., 2021). Table 2.1 provides an overview of the areas explored that are pertinent to the research presented in this thesis, at each stage.



**Table 2.1***Summary of Futuretrack Research that Relates to the Current Thesis*

<b>Stage</b>	<b>Area explored (as pertinent to current research)</b>
<i>Stage 1</i> Applicants about to start HE course. (Purcell et al., 2008)	<ul style="list-style-type: none"> <li>• Reason for application to HE and choice of institution</li> <li>• Support in application and planning for the future</li> <li>• Clarity of future plans</li> </ul>
<i>Stage 2</i> End of first year at HE (Purcell et al., 2009)	<ul style="list-style-type: none"> <li>• Clarity of future plans</li> <li>• Use of career information and guidance</li> </ul>
<i>Stage 3</i> Final term of last year of course (Atfield & Purcell, 2010)	<ul style="list-style-type: none"> <li>• Use of career information and guidance</li> <li>• Beliefs and behaviours towards career planning</li> <li>• Broad future plans and Clarity of future plans</li> </ul>
<i>Stage 4</i> 2 years post-graduation (Purcell et al., 2012)	<ul style="list-style-type: none"> <li>• Impact of careers advice and guidance</li> </ul>
<i>Stages 5 &amp; 6</i> 10 years post-graduation (Elias et al., 2021; Purcell et al., 2021)	<i>Areas of research not pertinent to current research.</i>

*Stage 5* examined career outcomes, income, student debt and current values (Elias et al., 2021) and *Stage 6* explored the impact of Covid 19 on careers and working life (Purcell et al., 2021). However, these stages are not discussed here in any detail, as the areas explored do not relate directly to the aims of this current research. Additionally, during these stages, the majority of respondents were at least 27 years old, and no longer in education, whereas this current research relates to young people between the ages of 16 and 24 who are in education.

#### **2.2.2.1 Hopes and plans for the future.**

Over the first three Futuretrack stages participants were asked about their plans for the future (Atfield & Purcell, 2010; Purcell et al., 2008, 2009, 2012). At *Stage 1*, as participants were about to start their university courses, they were asked about the clarity of their plans for the future (Purcell et al., 2008). Over 50% of applicants indicated that they had a clear career focus, while less than 3% had no idea about their future careers. About a quarter of applicants agreed they needed more help and advice in choosing their course, while 15% were unsure. At this stage, greater clarity was associated with being female, older, and having chosen career-centric subjects like

medicine and dentistry. Older students were more likely to be career-focused, and those with the clearest career goals were less likely to accept a place at an HE institute. At *Stage 2*, the end of the first year of university, individuals who reported having a 'clear idea' about their future careers were notably more likely to have engaged in paid work during their studies, averaging over 16 weekly term-time hours. Individuals from routine manual backgrounds were more likely to have worked long hours compared to those from professional and managerial backgrounds (Purcell et al., 2009). While at first glance, the idea of having a high level of clarity around plans for the future might seem advantageous, it may be more important to look at the underlying reasons for this. On the one hand, some individuals may not feel that they need to commit to a career pathway, particularly in the earlier stages of their study, and are happy keeping options open, for others, uncertain plans for the future may feel more problematic. By the end of the first year of study (*Stage 2*), the most common post-degree plans among respondents included undertaking a taught master's degree (36%) and opting for a gap year (24%) (Purcell et al., 2009). Notably, 31% did not consider a gap year or further training/research (or did not indicate that they were unsure). Purcell et al. (2009) made the assumption that these individuals planned to enter employment after graduation, although this was not an option which was explicitly offered. Findings indicated that younger students were more inclined than mature students to plan and take a gap year after completing their degree. Perhaps reflecting more urgency on the part of mature students to start or return to their careers and earnings. This research did not collect data on how participants felt about their plans or specific career aspirations, however, career development behaviours were explored in subsequent stages.

#### **2.2.2.2 Motivations and influences.**

Motivations and influences on future plans were explored at *Stages 1 and 3*. At *Stage 1*, the most common reasons for attending university were to secure a good job, enjoy the chosen subject, and realise personal potential (Purcell et al., 2008). Choice of institution and subject were perceived to be influenced by factors such as the university's reputation, its location, and the influence of family. The respondents' personal context also appeared to impact choice of institution, with parents who attended university having a more substantial influence on choice of university than parents who had not. Approximately 34% of second generation students reported that parents influenced their choice of university, compared with only 24% of first generation students. Findings indicated that social class may play a role in where and what young people would study. Higher social class applicants were more likely to select courses based on interest in the

subject, while lower social class applicants prioritised courses seen as leading to specific professions or better employment opportunities. At *Stage 3* during the final year of study respondents were asked which job attributes were important in the jobs that they applied for (Atfield & Purcell, 2010). Respondents identified key job attributes such as opportunities for promotion, work-life balance flexibility, and long-term job security as the most crucial features. Interestingly, age and gender were associated with preference for certain job attributes, with younger individuals valuing flexibility for work-life balance and ethical organization more, while older individuals favoured opportunities for promotion and competitive salaries. Moreover, differences in gender were evident, with men giving more importance to a competitive salary and opportunities for an international career compared to women.

#### **2.2.2.2 Career development.**

Data from the participants when in their final year (*Stage 3*) revealed that just over half (50.6%) had initiated their employment search (Atfield & Purcell, 2010). The course being studied by the respondent appeared to play a role in employment search initiation. Students in vocational subjects tended to begin their job search earlier than others. Additionally, students hoping for a job unrelated to their course were slightly more inclined to start their job search (57%) compared to those seeking a related job (51%). Additionally, family context played a role. Respondents from families with some HE experience, and higher socio-economic backgrounds were more likely to have commenced their job search. Indeed, the Futuretrack research suggested that cultural and social capital of different student types appeared influential, impacting their job search approaches, access to job search knowledge, profession-specific job search methods, and long-term employment aspirations. Notably, there was no significant difference in job search initiation associated with age or gender. Where respondents had made job applications, around 51% of job seekers had applied for jobs that aligned with their long-term career plans. Students studying Engineering & Technologies and Business & Administration Studies were most likely to apply for jobs unrelated to their career plans, yet simultaneously demonstrated a high propensity to apply for (different) career-oriented jobs. Moreover, younger students were notably more inclined to apply for jobs unrelated to their long-term career plans than their older counterparts. While male and female students were equally likely to start looking for jobs during their final year of university, males were more prone to have actually applied for a job. In terms of job search methods, various formal and informal sources were used, with online resources and university career services being the most utilised.

### **2.2.2.3 Use and impact of career support.**

The Futuretrack research indicated that the quality and sufficiency of career guidance, support and information was variable (Atfield & Purcell, 2010; Purcell et al., 2008, 2009, 2012), This fits with findings from a number of other studies which are discussed in Section 2.2.4. Approximately half of participants in *Stage 1* felt they lacked adequate guidance on understanding the relationship between HE courses and employment or alternatives to HE (Purcell et al., 2008). Less than half received individual career guidance, with females from state schools more likely to report receiving inadequate information. State school students, especially females, reported insufficient or no classroom-based teaching on careers and career planning. Only 35% of school students found the career guidance they had received useful. However, applicants who received careers guidance or had access to more information were less likely to agree that they needed more help, indicating that careers guidance and information does help individuals in choosing courses. Students with parents holding degrees were less likely to state they needed help in choosing their course. Teachers and lecturers were deemed more helpful (62%) compared to the career guidance provided (35%). However, 31% reported needing more help and advice in choosing their course, highlighting a persistent need for better support systems in career guidance. Overall, findings indicated that there was a shortfall in the guidance provided by schools and while this may be less problematic for some, eg young people who have support parents who had been to university, for others this leaves them vulnerable to making ill-informed choices. Lack of quality guidance may mean that participants find that they do not have the necessary pre-requisite qualifications for university courses and later jobs they wanted (eg wanting to be a midwife but not having or undertaking a Level 3 Science qualification at the point of application to university).

The *Stage 2* survey revealed that, once at university, only 45% of respondents were aware of the career service at their institution but had not visited it, while 18% were not even aware of its existence (Purcell et al., 2009). Interestingly, awareness of these services was higher among male students, black students, and mature students. Notably, younger students were less likely than their mature counterparts to seek individual advice from the career service. Surprisingly, visiting the career service website seemed to have no influence on any changes that respondents made to their career plans. Furthermore, after a year in HE, around 16% of those who previously held a clear idea about their future occupation became less clear about their career goals. This change was more common among older, female, and black respondents who had

received career advice directly from an employer or work organisation representative. This suggests that input from vocational sources may be a powerful resource for individuals to think about further opportunities, but at this stage these ideas were as yet not fully formed or still competing with previous goals.

When searching for jobs during the final year of university (*Stage 3*), students reported using a diverse range of methods, encompassing both formal and informal sources (Atfield & Purcell, 2010). Among the formal avenues utilised were Institution Career Services, websites, press, specialist publications, and Job Centres, although some formal sources like the Job Centre were utilised less frequently and deemed less useful overall. The most commonly utilised sources were those easily accessible, primarily online platforms like employers' websites and graduate vacancy publications. Notably, a trend emerged where males tended to rely more on family and friends as a job-seeking resource compared to women, indicating a broader inclination among male students to utilise a wider range of job-seeking resources. One year after graduation, the *Stage 4* survey, asked how helpful respondents had found the career guidance and support that they had received, exploring variation between groups (Purcell et al., 2012). While there was no definitive correlation between visiting the Careers Service when in HE and securing graduate employment, there were distinctive differences in graduates' perceptions of the advice they received. Those who found the advice from their Careers Service very helpful were more likely to secure graduate employment and hold more optimistic long-term career prospects compared to those who did not find the advice beneficial. However, there was a paradoxical finding where graduates who hadn't visited the Careers Service were even more likely to be in graduate employment. This may indicate that they had clear understanding of what they wanted or need to do to achieve it, receiving this information earlier and or from other sources. Moreover, the sources of advice reported—primarily friends, family, and department teaching staff—highlighted the influence of social networks and their accessibility, especially for students from disadvantaged backgrounds. Students with access to networks offering suitable knowledge and experience were more likely to find relevant employment. Conversely, individuals from less traditional backgrounds often faced limitations in networking, hindering their access to resources and leading to a higher likelihood of non-graduate employment, thus missing out on the social and economic benefits of higher education. Moreover, graduates in non-graduate occupations were less likely to approach family and friends for careers advice and perceived the advice received as less helpful

compared to those in roles more aligned with their qualifications. This emphasises the critical role of effective guidance and support networks in graduates' career trajectories.

### **2.2.3 Job aspirations**

Understanding what young people want from the future in terms of their jobs may be important for several reasons. It may provide some information about the job that the young person actually does in the future, or at least tell us about relevant preferences. For example, Croll (2008) found that approximately half of young people in the UK end up in jobs similar to those they aspired to at 15, however, data from the Office for National Statistics (2018b) indicates teaching was the only dream job ranked in the top five by 16 to 21-year-olds between 2011 and 2012 in which 22 to 29-year-olds found employment during 2017. However, it is not apparent why such a large number do not end up in their aspired-to job. Additionally understanding aspirations may give us valuable information about the interplay between individual beliefs and the social structures in young people's lives, and how this may play out among different groups (Archer et al., 2014). This is important because aspirations are deeply embedded in education policy in terms of reducing inequality for the most vulnerable groups (Harrison & Waller, 2018).

There have been several pieces of longitudinal research which provide information on young people's aspirations. However, due to the rapidly changing landscape here I will summarise four of the most recent, large-scale studies. The *UK Household Longitudinal Study* (Office for National Statistics, 2018b) interviewed 16-21 year olds, from approximately 40000 households asking them about their aspired to job and what influenced their choices. The *Aspires Project* (Archer et al., 2014) as part of a larger scale study, explored what jobs young people in England aspired to and what the main influences were on this. Over 9000 10-11 year olds (Year 6) were surveyed and 92 took part in a further interview and 5634 13-14 year olds were surveyed (Year 8) with a further 85 taking part in interviews. The *Millenium Cohort Study*, a longitudinal study following the lives of approximately 20000 children, born in the UK since birth, surveyed approximately 8000 14 year olds about their occupational aspirations (Platt & Parsons, 2017). Also included is data from the *OECD Programme for International Student Assessment* (PISA). PISA is a survey that takes place every three years, however, the latest was delayed from 2021 to 2022 with data due to be published in December 2023. In its 2018 survey of young people's educational experiences PISA collected data from over half a million 15 year olds in 79 countries, on the educational aspirations of young people and what shapes them (Mann et al., 2020). The assessment asked young people

what occupation they expected to be working in by the time they were 30 years of age. Several other studies have sought the views of primary aged children (eg, Chambers et al., 2018; Moulton et al., 2018), however, as this current research aims to explore adolescent views, they are viewed as outside the scope of this thesis.

*The Aspires Project* found that, in England, careers in sports, teaching, medicine and the arts were among the most popular aspirations in Year 6 and Year 8, with business also emerging as highly popular in Year 8. Furthermore, individuals demonstrated high aspirations overall, e.g. managerial or professional and the majority also aspired to make lots of money. There were some differences between groups. In terms of gender, girls were more likely to aspire to careers in the Arts than boys (64% of year 8 girls compared with 27% of Year boys), whereas boys were more likely to express interest in engineering (45% boys v 11% girls). In terms of socioeconomic status, the most privileged group of children were more than twice as likely to aspire to a career in medicine than those from the least privileged group. However, this pattern was reversed for minority ethnic groups for example 60% of Asian children indicated that they wanted to work as a doctor compared with 30% of white children.

*The Millenium Cohort Study* reported that the most popular jobs in the UK for boys were as sportsmen (12%), software developers 6%, engineer (6%), Armed forces (4%), and secondary school teachers (4%). For girls the most popular were medical roles (dentist, doctor but not nurse or midwife; 8%), secondary school teachers (8%), singers (6%), legal professionals (5%), vet (5%) and nurses (4%). Girls were more likely to want to work in female-dominated careers and boys in male-dominated careers. Over a third of young people aspired to professional or managerial jobs but this was much higher for girls (41%) than boys (31%). However, despite this, the jobs girls aspired to were lower paid on average than those that boys hoped for. Additionally, the research explored the aspirations of young people from different ethnic groups (Platt & Parsons, 2018). They found that children from ethnic minority backgrounds have higher occupational aspirations (aspirations for well-paid jobs) compared to White children of the same sex. The gap seen between girls from minority groups and White girls is marked at the age of 14. However, when compared to existing data on the jobs that young people have at 25 years of age, they do not appear to be achieving their hoped-for levels of success.

The Household Longitudinal study found that the top five aspired jobs for 16-21 year olds were: artistic, literacy and media (e.g. actor or writer), teaching and education, health professional (not nursing), protective services (eg police or firefighter), and

nursing and midwifery. Half of those surveyed indicated that they thought they would go into HE in 2017.

Internationally, PISA found that the most popular jobs for 15-year-olds were; were doctors (9.4%), teachers (8.2%), business managers (5.2%), police officers (3.9%) and lawyers (3.5%) with more than 32% of people choosing from the top five jobs. There were some differences in gender with the most popular jobs for girls being doctors (15%), teachers (9%), business managers (5%), lawyers 4.6% and nursing 4.5%. For girls, their aspired jobs were even more concentrated into fewer choices, with 44% coming from the top 5 jobs. For boys, engineer was the most popular job (7.7%), followed by business manager (6.7), doctor (6%), ICT professional (5.5%) and sportsperson (4.9%). Young people from the most disadvantaged backgrounds were reported to aspire to a similar range of jobs; with the top five being; doctor (9.4%), teacher (8.2%), business manager (5.2%), police role (3.9%) and lawyer (3.5%).

In addition to exploring what young people aspire to, some studies also explored what young people perceived to be the main influences on their career aspirations. The UK Household Longitudinal Study considered what was important in the job of choice asking young people to indicate how important factors such as income and job interest were when thinking about an occupation. Results indicated that the most important influence was how interesting the job was, followed by job security, time for family, helping others, income, contribution to society and lots of leisure time. The Aspires project looked more broadly at what shapes aspirations, children who took part in interviews were asked about “the reasons for their interest, how these ideas developed and what had influenced their ideas” (p. 68). They also asked, “if they already knew anyone working in this, or similar, lines of work ... and whether they engaged in any related activities” (p. 68). The project reported that young people perceived family and school to be the main influences, followed by TV and income. Interestingly the authors note that career education featured minimally in young people’s accounts. It is important to highlight that these were factors that young people perceived to be influential on their career aspirations, but the findings do not take into account the complexity of experience and context that are likely to have had an impact on aspirations over time, nor do findings provide an understanding of the mechanisms of influence.

Overall, the research indicates that young people have a range of career aspirations, with careers in medicine, teaching, business and law among the most popular. Additionally, business-related careers appear to be more popular with older students and there were strongly gendered patterns of interest in careers related to



science and engineering and the healthcare professions. The research points to some key group differences, suggesting that gender, socioeconomic status and ethnicity are all influential on the aspirations of young people. This indicates that certain groups may need more support to consider different career options and pathways to employment.

### **2.2.3.1 Aspirations and social mobility.**

Inequality persists, even in Western societies, with individuals from disadvantaged backgrounds experiencing poorer life outcomes. According to the OECD, in Europe, people from the lowest socio-economic backgrounds earn approximately 20% less than their more advantaged peers (Clarke et al., 2022). Additionally, only half of 15 year olds from low SES households are expected to complete HE (Clark & Thévenon, 2022). Achieving social mobility, the process of improving an individual's socio-economic situation is linked to equality of opportunity and is not easily achieved (OECD, 2018). Indeed a recent report from the Institute of Fiscal Studies (Erve & Krutikova, 2023) indicates that social mobility is currently at its lowest since the 1960s.

Unequal opportunities are not only a moral concern, but they also undermine economic and social prosperity. Increased equality of opportunity and improved social mobility have been consistent aims of the UK government for over 20 years, across successive Labour, Coalition and Conservative administrations (Harrison & Waller, 2018). The concept of 'raising aspirations' has been at the heart of government strategy to overcome these disparities. This concept gained prominence as an explanation for the lower levels of access to HE as well as educational outcomes, implying that young people from lower socio-economic groups have lower ambitions for their future careers (DBIS, 2014). In its 2016 White Paper on HE, the DfE outlined plans to double the proportion of people from disadvantaged backgrounds entering university by 2020, citing the need to raise aspirations for this to happen. The idea of aspiration appears to be the main goal of the government's plans to level up and improve social mobility. The underlying premise of the strategy is that individuals must aim higher to improve life outcomes. Moreover, while the Social Mobility Commission (2022) points to the need to remove barriers, they also state that an individual's 'choices and effort should determine where we end up' (p. 29), although they fall short of discussing the idea of raising aspirations.

There are, however, several potential problems with this strategy. Firstly, this approach asserts that inequality and social mobility are simple problems with simple solutions, where in fact, they are widely understood as *wicked problems*, problems that are complex with "no immediate and no ultimate test of a solution" (Rittel & Webber,

1973, p. 163). Education is often seen in the UK as a cure-all for inequality, with the idea that it is the vehicle which will allow individuals from lower socioeconomic backgrounds to “compete more effectively for elite jobs” (Keep & Mayhew, 2014, p. 764). However, in reality, it appears that access to opportunity increases for all groups, effectively widening the gap between the lowest and highest socioeconomic groups. For example, the Sutton Trust (Milburn, 2019) reports that for individuals born in the early 1980s, there was an increase in numbers graduating from university. However, while the number of the poorest 20% who graduated increased from 4 to 9%, the number of the most affluent increased from 20% to 47%.

Additionally, several commentators contend that the raising aspiration discourse is a deficit view, one which locates the ‘problem’ within the individual rather than the wider context of society (Allen & Hollingworth, 2013; Baker, 2017; Mendick et al., 2018). Indeed Harrison and Waller (2018), strongly challenge this discourse around *aspiration*, indicating that this situates the problem firmly within the young person and their families, rather than within the wider environment and context within which they find themselves. Certainly, some individuals will be emboldened by raising aspirations, however, others will find it a heavy load to bear (Spohrer et al., 2018). There is little evidence to suggest that lower uptake of HE is the result of low aspirations of more disadvantaged young people. Indeed, Baker et al. (2014) reported that in a study of 14 year olds from highly disadvantaged backgrounds, the majority held high aspirations for studying further academic qualifications. Research indicates that educational and occupational aspirations are complex. A longitudinal study of young people in England found that although individuals from higher socio-economic groups were more likely to aspire to HE, the aspirations of those in lower economic groups were still higher than the levels of participation (Croll & Attwood, 2013). Indeed often aspirations are in excess of what a young person’s academic attainment would permit (St. Clair et al., 2013). This suggests that although socio-economic and cultural factors play a role, it may only be a modest one.

The discourse around the aspiration raising may seem to be down to semantics around what the term actually means, but interpretation and clarity of the term matters. While the Collins English Dictionary (Collins, n.d.) defines it as the “strong desire to achieve something, such as success”, Rainford (2023) argues that there are “diverse interpretations and operationalisations in practice” (p. 423) for the term *raising aspirations*, which may mean that settings have widely differing approaches to defining and meeting their aims, and as such questions the endurance of the idea in policy.

Certainly, the term aspiration can appear vague, offering a notion of unspecified future outcomes, which may include not only hopes and dreams but also expectations for the future (Hardgrove et al., 2015).

Focussing on expectations rather than aspirations may offer an alternative, more nuanced way of understanding decision-making for future plans, one that takes into account ideas of certainty and difficulty. Indeed Khattab (2015) found limited correlation between aspirations and expectations and Boxer et al. (2011) also found that disadvantaged young people actually tend to have considerably higher aspirations than expectations. In semi-structured interviews, Hardgrove et al. (2015) asked 18-25 year olds about the kind of work they would like to do in the future, what they thought their lives might be like in five years and the plans they had made towards this future. They found that experience and exposure to kinds of work and pathways to achieve jobs were important elements in the formation of these young men's PFSs, concluding that their PFSs in the work force were not merely in their imaginations but entwined with their lived experience.

Markus and Nurius (1986) argue that having a positive view or hope for one's future self is a powerful driver for decision-making, in terms of the ability to conceptualise PFSs, situations and ways of being and fits with the notion of aspiration. Leondari (1998) found that the level of elaboration of future selves was positively associated with persistence and attainment. Furthermore, those with highly elaborated future selves were also more likely to see achievement as a result of hard work rather than luck. However, as discussed earlier, an aspiration or view of the future, that is not clearly defined, vivid, easily brought to mind and most of all seen as possible may not be useful. If it is merely a dream it will do little to guide or motivate. This view suggests that there is an expectation of progressing to HE, from both parents and school, for young people from higher socio-economic backgrounds. Whereas parents and schools may want young people to succeed through education but, having not had experience of it themselves, do not necessarily expect this to be the case (Winterton & Irwin, 2012). Archer (2014) suggests that parents are generally supportive of children's aspirations but those from higher socioeconomic status are more likely to have the skills and experience to be able to offer practical advice, role modelling and enrichment. An additional problem around the idea of raising aspirations is that it is predicated on the requirement of becoming middle class to succeed, along with the assumption that working class beliefs and attitudes are inherently inferior (Rainford, 2023; Spohrer et al., 2018).

This research suggests that focusing on the nuance of the PFS and encouraging the individual to reflect on their values and identity (including socio-cultural context) and how these fit with their current skills may help develop more elaborated, salient PFSs. Such an approach is likely to support young people in increasing their certainty and expectations for the future and may be more impactful on social mobility than the current focus on raising aspirations.

#### **2.2.4 Career information and guidance (CIAG) provision in England**

The advice, support and guidance that young people receive over the course of their time in school can help to shape their decision-making, their actions and who they become (Hooley & Dodd, 2015). Good careers provision is associated with lower unemployment and greater career readiness among young people, it also has the capacity to help individuals achieve their potential by finding the route best suited to them (Hughes et al., 2016) Young people need skills and knowledge to navigate their options the options available to them, however, over the last decade there have been criticisms of patchy provision (Hochlaf & Dromey, 2019; Holt-White et al., 2022; Stewart, 2021).

##### **2.2.4.1 Historical landscape of CIAG in England.**

The development of career guidance in England can be traced back to the early 20th century, with the passing of the 1909 Labour Exchanges Act and the 1910 Education (Choice of Employment) Act leading to the establishment of public employment exchanges aimed at reducing unemployment and facilitating a better job match for workers and employers. Newly created Local Education Authorities (LEAs) began offering comprehensive Juvenile Employment Services, re-titled in 1948 as the Youth Employment Service. Initially, the service visited schools, offering conferences (interviews) to young people in their final year of school (Peck, 2004). A shift in the economy along with an increase in the school-leaving age (1944 Education Act), led to an evolution of the service, and in 1973 the newly branded Careers Service became mandatory. The service, now operating universally under LEAs, and acting independently from schools, with specifically qualified staff, aimed to provide client-led guidance that would facilitate young people's vocational thinking (Peck, 2004).

While in the 1970s, approximately 70% of young people left education and entered the workforce at 16, by the early 1990s this was less than 10%, leading to the need for more guidance around careers and next steps than merely information and support to obtain employment. This era was marked by a broader change in educational policy-making brought into effect by the 1988 Education Reform Act, which aimed to

introduce a wider range of service providers and market processes into service delivery. The government now shifted the provision of career guidance away from LEAs and potential providers were required to bid for contracts to deliver career guidance services. This resulted in a situation where career guidance policy could now shift with every change of government. (Watts, Hughes, & Wood, 2005).

New Labour came into power in 1997, and the Connexions service was introduced following the Learning and Skills Act 2000. Connexions aimed to provide support services for young people aged between 13 and 19 years of age (up to 25 for young people with additional needs), with a specific remit to deliver effective CIAG (Joyce, White, and Franses, 2003). In terms of CIAG, schools were also expected, at this time, to offer a curriculum-based programme of careers education (NAO, 2004). Over its lifespan, Connexions also had a remit to reduce the number of young people not in education or training (NEET). However, an increased emphasis on this over time, resulted in resources being diverted away from schools leading to a diluted offer for many secondary school pupils (Maragkou, 2021). Furthermore, the complex difficulties experienced by many of the NEET individuals, made it unrealistic for Connexions to have a significant impact on numbers (Roberts, 2013). This along with a drive to reduce spending (House of Commons Education Committee, 2011) resulted in the service being defunded in 2010. Connexions, and responsibility for CIAG was placed back with schools and colleges (Long et al., 2021).

The Coalition government sought to give career guidance a role in developing a system for demand-led skills, with the Department for Business, Innovation and Skills strategy document (DBIS, 2010) arguing that the state should be giving individuals “the support and information they need to make the right choices for the future” (DBIS, 2010, p. 5). The Education Act 2011 gave schools statutory responsibility to ensure young people in Years 9 to 11 were provided with impartial CIAG, however, this was without any associated funding. This duty was extended to include young people in Years 8–13 (Department for Education, 2014). The Education Act appeared to indicate that schools must secure careers guidance from an external, independent, source. However, a DfE (2011) communication to schools indicated that where schools had already employed a career advisor, they could offer access to independent guidance that was external to the school which “might include web-based or telephone services, and/or face-to-face guidance from a specialist provider”. Additionally, the Act also rescinded the statutory requirement to provide a formal careers curriculum as part of a secondary education, with a focus moving more towards isolated activities, visits and information (DfE, 2012).

The DfE published statutory guidance for schools on their new duty in March 2012, outlining what they should consider when developing the most appropriate form of careers guidance for their pupils (DfE, 2012).

Additional careers support during this period, and continuing to date, came from the National Careers Service (n.d), funded jointly by the Department for Business, Innovation and Skills (BIS) and the DfE, launched in 2012. This service developed from the previously adult only Next Steps service, was now also available to young people over the age of 13. However, guidance for young people under 19 is limited to telephone, email, text and online support, with no access to face to face support and no intergration schools (House of commons Education Committee, 2013).

Work experience had been made mandatory for all Key Stage 4 pupils in 2004. However, following the publication of the Wolf Report (DBIS, 2011) on vocational education in March 2011, changes were made to the Education Act 2002 and this requirement was ended. The Wolf report outlined several justifications for this change, including the appropriateness of later work experience which aligned with the increased school participation age, the reluctance of employers to host 14- and 15-year-olds, and concerns over the cost and quality of work experience placements, resulting in, which ended this requirement. The Government also sought to grant schools greater autonomy in managing work-related learning activities.

In 2014 the Gatsby Benchmarks of good career guidance (Holman, 2014) were published. The benchmarks, based on international evidence of best practice, provided schools with a framework for supporting young people towards positive outcomes (see also Section 1.6 for further discussion on the Gatsby Benchmarks). Holman indicated that good provision could be characterised by eight benchmarks:

1. A stable careers programme
2. Learning from careers and labour market information
3. Assessing the needs of each pupil
4. Linking curriculum learning to careers
5. Encounters with employers and employees
6. Experiences of workplaces
7. Encounters with further and higher education
8. Personal guidance

Despite the removal of the mandatory requirement for work experience before the age of 16, the Gatsby Benchmark 6 (Holman, 2014), emphasises the importance of

young people engaging with workplaces. This benchmark advocates for at least one workplace experience by the age of 16, beyond any part-time employment, and another by 18. It also recommends that starting from age 11, students should have annual interactions with employers to gain insights into the workforce and learn what is required for success in their future careers (DBIS, 2011).

In December 2014, the government announced £5 million funding for a new careers and enterprise company (CEC), which would oversee the provision of careers education and advice for young people between the ages of 12 and 18 (DfE, 2014). The CEC was established in 2015 to support school careers leaders in planning and implementing their career guidance by providing information, training and resources. The CEC would have a role largely centred around advice and coordination. As well as advising schools and colleges on careers provision, it would support engagement between schools and employers and evaluate the extent to which young people were being prepared for work. The CEC set up Careers Hubs, which were groups of schools/colleges in an area working together to support each other in their delivery of CIAG.

The DfE's Careers Strategy (DfE, 2017) was introduced in 2017, laying out the expectation that schools and colleges work towards achieving the eight 'Gatsby benchmarks' outlined above. Schools were also expected to appoint a named careers leader who was tasked with developing and running careers programmes, managing budgets and staff, coordinating across the institution and networking with outsiders. Additionally, the Baker Clause forms an important part of a school or college's careers education, information, advice and guidance (CEIAG) programme. The Clause was an amendment made to the Technical and Further Education Act 2017, aiming to ensure that young people were aware of all options available to them for their next steps in education or training, in order for them to choose the right path for them to achieve their full potential. The Baker Clause stipulated that secondary schools must allow colleges and training providers access to every student in Years 8 to 13 to discuss non-academic routes and that schools need to impartially promote the full range of technical education qualifications and apprenticeships. By complying with the clause, schools would also be meeting the Gatsby Benchmarks which relate to students being introduced to the full range of pathways. These requirements were further tightened with the implementation of the Education (Careers Guidance in Schools) Act 2022, and current statutory guidance to schools (DfE, 2023). Since 1 January 2023 schools have been legally required to offer careers guidance to all pupils from Year 7 to Year 13. The legislation

also indicates that career guidance should be impartial and should promote the best interest of each individual student and that students must also be offered a minimum of six encounters with providers of apprenticeships or technical education qualifications (DfE, 2023). There is also a statutory requirement for schools to publish the details of their Careers Leader, Careers Programme, and Provider Access Policy. Additionally, schools must ensure access to advice from an appropriately trained and qualified careers development professional (DfE, 2023).

Although much of the strategy is not statutory, the Ofsted education inspection framework (Ofsted, 2022) now includes CIAG within its handbook, and as such, as part of its evaluation of school standards. Schools are assessed on the quality of their CIAG provision, their implementation of the (amended) Baker Clause, their use of the Gatsby benchmarks, and their provision of encounters with the world of work. However, while Ofsted states that they will report where schools fall short of requirements, there is no indication of the extent to which evaluations will impact overall school grading. The Careers and Enterprise Company (CEC), while undertaking a somewhat evaluatory role, on the other hand, does not overtly address inequalities between schools in the level and quality of CIAG, with it seemingly being implicit that following the strategies will level up (Regan & Bhattacharya, 2022).

#### **2.2.4.2 What is the quality and impact of CIAG provision?**

It is difficult to qualify and demonstrate the quality and impacts of careers guidance. Judgment is likely to be reliant on tracking of outcomes over time, and to be valid would also require isolation of factors of interest from other possible attributing factors. There is an assumption that this will lead to good outcomes for young people, but it is not clear what these outcomes might be. This is further complicated by the number of changes that have been implemented in CIAG over the last decade. One very simplistic marker would be to look at a number of young people who are NEET; another would be to look at whether legislation, statutory guidance and guidance such as the Gatsby benchmarks are being met (Ofsted, 2022). However, it must be acknowledged that we cannot be sure that having access to information and guidance will mean that all young people can access the same opportunities and allow them to fulfil their potential and longitudinal tracking and controls would need to be in place to isolate the intervention of interest from other possible attributing factors.

It is not clear that what is espoused as good quality CIAG does lead to better outcomes in reality. However, there is some evidence to suggest there are links between outcomes and career programmes (Hughes et al., 2016; Kashefpakdel & Percy, 2017;



Mann et al., 2018). Research by the CEC (Percy & Tanner, 2021) shows that there is an association between the number of Gatsby benchmarks met by schools and the number of students who go on to additional education, employment and training, with this association being maintained even when controlling for student and school demographics. The CEC estimates that schools that meet all eight benchmarks reduce their number of NEETs by between 0.7 and 1.4% which in turn may save £150 million a year in public spending (Percy & Tanner, 2021).

Although evidence suggests that there has been a gradual improvement from the early to mid-2000s (Boys & Hooley, 2017), most research has focused on the impact of career guidance on post-16 and post-18 educational choices, and its impact on career readiness. Research undertaken by Moote and Archer (2018) contends that CIAG was too heavily focused on subject choice and that young people often had to wait until the age of 16 to receive substantial guidance, by which time it might be too late for young people to make appropriate decisions and actions towards their preferred career. In addition, they indicated that often the groups that needed the advice the most (working class, ethnic minorities, females) did not have adequate access to it.

More recent research on the quality and impact of career guidance demonstrates a mixed picture. While there have been improvements, the availability of careers guidance in schools is inconsistent, with disadvantaged schools, with students who are arguably in greatest need of support, having the worst provision (Holt-White et al., 2022). Further research by the Institute for Public Policy Research (Hochlaf & Dromey, 2019) investigated the effectiveness of the implementation of the Baker Clause

The study, which gathered data from teachers and secondary school students, indicated that only 38% of schools were compliant in implementing it, with many education providers indicating that they either had no access to students or were limited to meeting only certain student groups. However, some recent research paints a more positive picture. A longitudinal study (Stewart, 2021) which surveyed a cohort of young people from the age of 13-14 (in 2013) to 18-19 years old in 2018 found that on the whole they did receive careers guidance, and of those who identified a source of formal provision (such as from teachers or government provided careers guidance) as the most useful CIAG they received, a large majority said that the amount of CIAG given was about right (86%), that it was given at about the right time (84%), with 95% indicating that the guidance they received was “suitable for their needs”. The research, however, indicated some concerning failings in the guidance provision. Firstly, young people who reported not having post-16 CIAG were more likely to be; from state schools, eligible for

free school meals, care experienced or have special educational needs and disabilities (SEND). Furthermore, of those that received CIAG only 64% reported being given information about apprenticeships, and 34% about vocational programmes.

Research by the CEC (Careers and Enterprise Company, 2020) suggests that the number of benchmarks achieved by settings has increased (from an average of 1.9 in 2016 to 3.7 in 2020, with schools and colleges that are part of a Careers Hub reporting the best performance. The CEC use this evidence to indicate that CIAG is improving in schools. However, all benchmarks are not equally likely to be met; for example, while 75% of settings that were part of Career Hubs achieve “encounters with employers and employees” and 65% achieve *experiences of work places*, only 47% achieved *encounters with further and higher education*.

Despite indications of improvement, there are still issues that persist. Schools in deprived areas are less likely to have access to a specialist careers adviser (Stewart, 2021) and students in state schools are less likely to be told about universities and more likely to be told about apprenticeships (Holt-White et al., 2022). The Youth Voice Census Report for 2021 (Youth Employment UK, 2021), surveyed 12-24-year-olds across the UK and indicated that only 43% of pupils reported having access to a career advisor with even fewer (33%) expressing that they understood what skills employers looked for. Furthermore, while 86% of respondents had been told about apprenticeships, only 27% had been given information about T-levels, and in the majority of cases, this was only discussed once.

Not only do we need to consider the quality of CIAG provision *per se*, at least in terms of meeting benchmarks, but it is also important to consider what young people actually want from career guidance, how they experience what is provided, as well as the extent to which it meets their needs. Regan and Bhattacharya (2022) explored what young people want from their CIAG and the extent to which it meets their needs. They report that personalisation of guidance and the opportunity to develop a sustained relationship with an adviser were valued by young people. However, the service received was variable with some obtaining infrequent, and or, group support whereas for others their support was regular and personalised. Furthermore, the message from school staff and family members remained; that university was the default next step. Indeed, in some schools, there was an expectation that everyone should make university applications and details of apprenticeships had to be requested. Other key views highlighted in this research, were that people had more trust in (potentially anecdotal) information gained through conversations and visits rather than impersonal

information such as that provided by websites. Regan & Bhattacharya (2022) contend that there is a mismatch between the espoused purpose of CIAG and what is actually being delivered. They argue that while career policy aims to support young people in building up skills and self knowledge, that they can use over their lifetime, however, young people view CIAG as a way of getting help with their next step in education or employment. Such a view from young people may indicate that students may not understand or value CIAG that is provided earlier in their school career (although this assumes that high quality CIAG is provided).

#### **2.2.4.3 How is career policy guided by research?**

While it is important to explore the extent to which individual practice meets the aims set out in career guidance policy, it is also crucial that we consider the key assumptions that career guidance policy is grounded in. It could be argued that English policy somewhat naively assumes that social mobility can be achieved through education and employment. This perspective offers a rather disembodied view of the individual, suggesting that everyone just needs to be given access to resources and information (Houghton et al., 2021). The 2018 statutory guidance states that “Good careers guidance ... raises aspirations... [and] supports social mobility by improving opportunities ... especially [for] those from disadvantaged backgrounds” (DfE, 2018, p. 12). However, it is unlikely that even the best career guidance provision could make up for the complexity of contextual factors which influence young people’s lives and lead to a less than level playing field. This idea lacks an acknowledgement of the wider impact of inequality and socio-economic barriers (Shaw, 2013). Indeed, research suggests that even when initial barriers are overcome the longer term outcomes for disadvantaged young people may not be in line with their more advantaged counterparts. For example, young people from lower socioeconomic backgrounds who go into HE are still more likely to end up in lower paid jobs (Office for National Statistics, 2018a).

Holman’s (2014) *Good Career Guidance report*, the basis for the Gatsby Benchmarks, attempts to justify the importance of good career guidance in levelling up inequality. The report cites research which indicates that children from families who have ‘science capital’ are more likely to aspire to work in science and technology than those whose families do not. While this may be an important factor to address it does not mean that this capital can be adequately replaced through (good) careers education. He goes on to state that “once you find out what a ‘scientist’ actually does or discover all of the different ways in which you can be a scientist, you may find it easier to imagine

yourself into that role” (p. 13). This sounds sensible, but there is no evidence signposting the validity of this statement and no explanation as to why that might be, or indeed how a young person might be supported to position themselves into the role. How can young people be helped to step into that role and try it on for size? Holman’s assertion that being given information will lead to a shift in thinking about careers is rather simplistic, and certainly does not address the deeper disadvantage of some groups of young people, and as previously discussed, the many other factors may influence the ability to think this way. Understanding the mechanisms through which young people might imagine themselves within a job role, may help educators to provide pupils with more more targeted support.

### **2.2.5 Understanding career development and support through theory**

Career and broader psychological theory could be used to understand and inform the development of career guidance in a number of ways. For example, career theories can be used to understand how young people develop career-related skills and knowledge, and how such skills and knowledge might be supported and nurtured. Specific career theories can also be used to understand how young people make decisions about their careers and how they navigate the transition from education to work. Using psychological theory relating to motivation, fulfilment, and the interaction between the individual and the environment may help provide a broader understanding.

The Gatsby Benchmarks (Holman, 2014) and resultant career guidance policy, although they purport to draw from a range of research and evidence, appear to do so only lightly. The development of the Gatsby Benchmarks claims to be informed by a review of the existing research and evidence on how young people can be better prepared for the world of work. Holman (2014) indicates that his definitions of what constitutes good practice in career guidance have been developed through professional judgment of consultations with stakeholders and the existing research evidence base, of which one example is given (p.16). This is not to say that the Gatsby benchmarks do not align with a number of key concepts and principles from career theory, including the idea that young people need to develop a range of skills and attributes in order to be successful in their careers, and that career development is a continuous process that involves exploration, decision-making, and learning. However, Holman indicates that he used robust approaches to ensure that there was no cherry-picking of the countries he visited during his initial research into best practice, and therefore by default the key information taken away, but it is not really clear the extent to which he was successful in

doing so. The benchmarks do not appear to have any theoretical underpinnings and there is no signposting to a robust evidence base.

There are several key theories that could be used to understand career development (and planning for a positive future more generally) and help support young people in taking their next steps. A fundamental consideration, however, might be to first reflect on the overarching reasons why people actually work at all, and also the individual's perceptions of -and perhaps motivations for - work, i.e. is the requirement to work purely a financial need to support oneself, to be able to meet one's basic needs or does it also include meeting the higher order psychological needs such as fulfilment, personal growth and even self-actualisation (Lent & Brown, 2021). These needs are not mutually exclusive and may change over time but are a key consideration for those who support young people in career planning. Indeed, Gregory and Atkinson (2023) explored the impact of a post-16 planning process based on self determination theory with two vulnerable students from an alternative provision setting (Ryan & Deci, 2000). Self determination theory (SDT) suggests that when three psychological needs are met (connection, autonomy and competence) a state of self determination is met. Furthermore, SDT contends that when intrinsic sources of motivation are aligned with values positive outcomes are more likely (Ryan & Deci, 2000, 2020). Post intervention feedback from both students and staff identified key themes consistent with autonomy and relatedness (but not competence), leading them to conclude that SDT may provide a useful framework for post-16 planning by facilitating the exploration of goals and aspirations.

Whatever the reasons ascribed to work (or occupations e.g. training) it is clear that it is integral to many people's lives, and may have a considerable impact on overall quality of life (Lent & Brown, 2021). It is important to acknowledge that some people do not have the freedom to choose the work they do, for example, they may not be able to gain the necessary qualifications or experience, due to finances, health or family expectations. Furthermore, some of the relative importance of the need to provide for basic needs is wrapped up in prior experience and current economic status (Houghton et al., 2021; Shildrick & Rucell, 2015). This consideration of motivations illuminates the importance of educators in understanding the individual's perspectives, backgrounds and experience and the impact that they have on agency when providing career guidance. As discussed above, the career framework (DfE, 2017) gives much credence to the provision of good information, but what does key career theory tell us about career development and how might this inform support for young people?

There are several key theories that might help us understand how a young person might make occupational decisions and plan for a future career, some of which are related to more general development and motivation; Bronfenbrenner's Ecological Systems theory (1977), Self determination theory and Erikson's stages of psychosocial development may be particularly useful examples to consider in the context of adolescents planning for the future. There are also theories more explicitly related to career development that might be used to frame guidance eg Holland's theory of vocational personalities and work environments, Super's theory of career development, Social cognitive career theory and Career construction theory and Gottfredson's (2002) theory of circumscription and compromise in career guidance Table 2.2 summarises these theories.

**Table 2.2**

*Summary of Theories Relating to Career Development*

<b>Theory</b>	<b>Explanation</b>
Ecological systems theory (Bronfenbrenner, 1977)	Explores human development through a multi-level framework. It posits that individuals are influenced by a series of interconnected systems, including the microsystem (immediate environment), mesosystem (interactions between microsystems), exosystem (indirect external factors), and macrosystem (cultural and societal context). This theory emphasises the interplay between these systems in shaping an individual's development.
Self-determination theory (Ryan & Deci, 2000, 2020)	This theory proposes that people are more motivated when they feel that they have the psychological needs of autonomy, competence, and relatedness met. When these are met a state of 'self determination' is created. The theory suggests that positive outcomes are more likely (goal attainment and wellbeing) if intrinsic sources of motivation are aligned with the individual's values.
Erickson's stages of psychosocial development (Erikson, 1968)	Individuals go through eight life stages, Each life stage, infancy to old age, involves a unique crisis that must be resolved for healthy development and identity formation. Indicates that personal and social factors play key role in shaping an individual's life journey and self-concept. Adolescents face the "Identity vs. Role Confusion" crisis, as they explore their identities through various experiences, such as relationships, career aspirations, and personal beliefs, as they work towards establishing a sense of self and direction in life.
Vocational personalities and work environments (Holland, 1985)	This theory proposes that people are more satisfied and productive in careers that match their personal interests and the characteristics of the work environment.

Theory	Explanation
Super's theory of career development (Super, 1963)	Career development is a lifelong process, where individuals go through various stages, including growth (childhood), exploration (adolescence), establishment (early adulthood), maintenance (mid-career), and decline (late career). Highlights the importance of self-concept and self-identity in shaping career choices. Career development influences by external factors - education, work experiences, and other life experiences, as well as internal- their values, goals, and personality.
Social cognitive career theory (Lent et al., 1994)	Career choices and development are influenced by individual personal beliefs, goals, and self-efficacy, as well as by the opportunities and constraints they encounter. Emphasises the importance of self-regulation and the role of observational learning in shaping one's career development.
Career construction theory (Savickas, 2002)	People actively construct their careers through the stories they tell about their experiences and the meaning they give to them. It also suggests that people's ability to adapt to changing career circumstances is a key factor in their career success as well as the value of reconceptualizing one's career story over time to align with evolving life circumstances and goals.
Theory of circumscription and compromise (Gottfredson, 2002)	Career choices are based on self-concept and social roles, with an emphasis on gender and social class. Career eliminations and compromises are influenced by social roles, leading to the selection of careers that align with available options societal norms and available opportunities. As individuals grow older, they may further compromise their career choices to align with practical considerations, leading to the selection of careers that align with their circumscribed options.



### 2.2.5.1 Career construction theory and career development

As discussed previously, adolescence can be a difficult life stage to navigate, with significant brain maturation occurring as well as considerable social, emotional and other biological development. Alongside this, adolescents are going through other forms of transitions and undertaking high stakes testing. Young people are expected to make decisions about and manage their career paths, making it important to understand what motivates individuals to engage pro-actively in career behaviours such as seeking information, advice or experience of work (Strauss & Kelly, 2016). This is a process which requires individuals to prioritise future outcomes over short-term benefits, a challenging undertaking for many but one that may be particularly tricky for adolescents who are undergoing rapid and significant developmental changes.

The career construction theory of adaptation (Savickas, 2013) is a useful way of understanding the interpersonal processes through which individuals construct themselves, impose direction on their vocational behaviour and make meaning of their careers. The theory provides an overview of the processes involved in thinking about and planning for a career, which although they may occur at any time in life are particularly pertinent to the adolescent life stage. The theory takes into consideration the personal identity and self-concept, emphasising the interpretive and interpersonal processes through their careers by imposing meaning and direction on what they do in work, with this *meaning* helping them to live out their life themes. The notion of the life theme describes the recurring narrative pattern in an individual's life story that reflects their core values, interests, and overarching sense of purpose, contributing to the formation of their unique career (Savickas & Porfeli, 2012).

The career construction theory addresses how individuals build careers through both personal constructivism (an individual builds their own system of knowledge) and social constructionism (the social process through which constructs emerge), outlining how from early childhood individuals construct themselves through language and social interaction, direct their vocational behaviour and give their work meaning (Savickas, 2013). The theory highlights the importance of 'career adaptability', an individual's readiness and resources for coping with vocational development tasks, occupational transitions and personal traumas (Savickas, 2002). It suggests that adapting to these challenges results in optimal success, satisfaction and well-being (Savickas et al., 2018).

The career construction theory of adaptation specifies four dimensions which form an optimal sequence for dealing with occupational transitions and challenges, including the initial transition into work (Savickas, 2013). The first dimension consists of

'adaptive readiness', which denotes an individual's willingness to meet vocational challenges, transitions and trauma. This is often aligned with personality traits such as openness to experience and conscientiousness. Along with 'adaptive readiness', individuals require the resources with which to make appropriate choices. Thus, the second dimension in the model is 'adaptability resources', which denotes the psychosocial strengths which condition self-regulation for dealing with change and are usually measured in terms of concern, control, curiosity and confidence. These 'adaptability resources' condition 'adapting responses', the third dimension. 'Adapting responses' refers to the performance of actual behaviours that address changing career conditions and making occupational choices, for example, career planning and related research and exploration as well as making decisions and committing to a planned career. Savickas developed the Student Career Construction Inventory (SCCI; Savickas et al., 2018) as a measure for adapting responses (this is outlined in the measures section within the Methodology chapter (Chapter 3). The adaptation model proposes that the fourth dimension 'adaptation results' is the outcome of 'adaptive readiness' which mobilises 'adaptability resources' that shape 'adapting responses'. Adapting responses have been defined through constructs including satisfaction, happiness and success (Johnston, 2018; Savickas et al., 2018). The career construction theory posits that people with greater career adaptability have increased psychological resources and enhanced capability in transitions.

Savickas points out that along with life themes and vocational (career related) personality, career adaptability is particularly important in current economic conditions. In a climate where individuals are likely to have several occupations over their lifetime, individuals must manage their careers effectively (Savickas, 1997; Savickas et al., 2018). The theory posits that individuals differ in the extent to which they are prepared and able to adapt, to develop their beliefs and resources and to manage change in response to changing environmental conditions. As a result of these variations, they become more or less integrated into their career and life roles over time. Furthermore, the theory explains career construction as a series of attempts to implement a self-concept in social roles focusing attention on adaptation to a series of transitions from school to work, from job to job, and from occupation to occupation.

Individuals vary in the extent to which they are willing (adaptivity) and able (adaptability resources) to develop beliefs and as well as show behaviours (adapting responses) that address changing environmental work conditions and lead to a positive fit with their work role (adaptation results) (Savickas, 2013; Savickas & Porfeli, 2015).

Adapting responses may include behaviours such as career exploration and planning as well as career-related beliefs and assumptions about career self-efficacy beliefs and career decision-making difficulties (Hirschi et al., 2015).

Career adaptability plays an important role in successful career transition during adolescence and emerging adulthood. High levels of adaptability increase adapting behaviours which impact study satisfaction and engagement, rather than study performance, which is better explained by personality traits and cognitive abilities (Savickas 2013). Adolescents are likely to benefit from support in developing their career adaptability, Šverko and Babarović (2018) suggest that using a narrative approach to career counselling to foster career control and concern in high school would improve the chances of a successful career transition. This is at odds with the more passive approach to CIAG which often relies on information giving. Furthermore, Savickas contends that it is important that this type of career support is made available first, to students who are identified as having low career adaptability, thus suggesting that for this approach to be successful within an organisation, there needs to be an adequate way of assessing and identifying levels of career adaptability, or a clear understanding of the factors that may have an impact. Savickas (2012) suggests that career guidance should be about more than just making occupational choices but about 'life designing', helping an individual understand their experience of career and work in their life as a whole, in essence integrating career beliefs into the identity rather than keeping them as separate entities.

Adolescents are required to make many vocational transitions as they navigate through their education into the world of work. The career construction theory suggests that adapting responses mediate the relationship between adaptability resources and adaption results. It also highlights the various elements that are important in career development and emphasises the need to go beyond merely giving factual information about careers, to look at available resources and capacity for development. As such it is important that educationalists and interested adults understand how young people perform the career construction tasks of planning, exploring, deciding and implementing an occupational choice, in order to best support them on their journey. Assessing the extent to which young people have engaged in adapting responses, would be beneficial in order to evaluate existing career guidance support and in developing practical strategies as interventions for groups as well as individuals. This study will use the SCCI to investigate how these adapting responses (behaviours such as thinking, planning, and exploring) are associated with other factors, including age, educational stage, SES

and exposure to work, as well as imagined future self, career decision self-efficacy and implicit theory of career.

## **3 Methodology**

### **3.1 Introduction**

The following chapter includes a consideration of the philosophical positioning of the research, research design, recruitment of participants, use of surveys in data collection, preparation of the data for analysis, ethical issues, and ethical and methodological limitations.

### **3.2 Philosophical Orientation**

The philosophical positioning of a researcher has an impact on the decisions they make relating to the research process, including choices of overarching methodology and specific methods adopted (Crotty, 1998). My approach to this current research is influenced by a critical realism perspective.

Critical realism (CR) is a theoretical paradigm, initially developed by Bhaskar (1978), that combines realist ontology with epistemological relativism. CR aims to transcend the polarising assumptions of positivism and constructivism (Archer et al., 2013; Zachariadis et al., 2013). The ontological foundation of CR spans three domains: the real, which encompasses mechanisms and structures generating actual events; the actual, representing events generated by these mechanisms; and the empirical, consisting of experiences and observations of events (Archer et al., 2013; McEvoy & Richards, 2006). Critical realists contend that reality is socially determined and influenced by interactions between social structures, mechanisms, and human agency (McEvoy & Richards, 2006). In contrast to positivism, CR rejects the notion that humans can fully understand or measure reality, acknowledging the fallible, socially influenced, and subjective nature of observed evidence (Bhaskar, 1978). Similarly, CR challenges the constructivist assumption equating human perceptions with reality, positing that reality exists independently of the human mind (Gorski, 2013).

In taking a critical realist perspective, I acknowledge the significance of individual perspectives while also recognising that objective reality persists independently, unaffected by individual beliefs or perceptions. For example, while an individual's belief about the impact of education on GCSE attainment reflects a subjective interpretation, the actual qualifications they gain remain independent of personal beliefs. CR emphasises the centrality of the research question and asserts that the choice of research methods should align with the nature of the research question. By adopting a critical realist lens, I sought to explore the real world complexities of adolescent's aspirations, beliefs and behaviours relating to their possible future self. In this research I aimed to explore more objective factors such as young people's aspired to job (while

there may be some variation, we largely have a shared understanding of what a nurse is, the role may also be operationalised in terms of SES, salary etc), aspects of demographic context and gender. However, in line with a CR perspective, I did not aim to make positivist interpretations but rather use qualitative data to look for patterns and explore comparisons between groups. The data collected were a means to explore the complex and interacting factors that might play a role in individual beliefs and behaviours relating to the individual's PFS.

### **3.3 Research Design**

#### **3.3.1 Methodological Approach.**

The methodological approach was aligned to the study's specific research questions and the underlying CR philosophy. Quantitative data collection strategies were used to collect self-reported, quantifiable data, in order to address explanatory research questions (eg those which seek to describe behaviours and characteristics, make comparisons between groups, or examine relationships) (Barroga & Matanguihan, 2022). A non- experimental design was used (written survey), which allows for comparisons and correlations to be made (Mertens, 2014). In order to address exploratory research questions, that is to explore individual beliefs in context, qualitative strategies with inductive reasoning were required. (Breakwell et al., 2012; Leppink, 2017).

Exploratory and explanatory research questions were addressed as part of the same written survey, thus data were collected concurrently. Although interviews are the dominant method for collecting qualitative data, research indicates that surveys can be compatible with qualitative research paradigms and Braun et al. (2021) contend that data gathered through written surveys can offer "richness and depth, when viewed in their entirety, even if individual responses might themselves be brief" (p. 642). This is explored further in Section 3.4.3 (Possible Future Selves Narratives and Measures). A written survey was chosen due to its flexibility to address the research questions with a large group of participants and to collect different types of data. Other practical advantages are outlined in Section 3.3.2 (Written Survey).

#### **3.3.2 Written Survey**

A written survey (Appendix A) was used to gather data from students in Year 11 and Year 13, and from final year undergraduate or postgraduate students about how they thought about their PFSs and planned for their futures. Items included demographic information, as well as a range of qualitative and quantitative items related to hoped-for

and expected future occupations, and behaviours and beliefs related to future occupations. A combination of pre-existing measures and those developed specifically for this research were used to collect data relating to educational and career beliefs and behaviours and perceptions of the future self. The questionnaire was administered using the online Qualtrics software. Qualtrics is a programme that has been used widely in research and allows a professional looking questionnaire to be developed which can include a range of different types of response types to suit the data (eg multiple options, Likert scales and open responses). The survey employed both quantitative methods and qualitative analytical approaches. For example, the survey gathered participant perspectives on their PFSs using both qualitative and quantitative methods. Participant narratives of their PFSs were inherently qualitative (see Section 3.4.3: Possible Future Selves Narratives and Measures), but the survey also elicited quantitative data from self-reports relating to the narratives they had described. I chose to collect both quantitative and qualitative data as this allows participants to have a voice and it enables data to be explored in different ways, providing richer evidence which allows specific research questions to be addressed (Shorten & Smith, 2017).

There are a number of advantages to using an online survey tool such as Qualtrics, including increased accessibility to the target population, as well as ease of delivery and reduced cost, by providing an electronic link in comparison with producing paper copies (Wright, 2005). Electronic surveys allow participants, as long as they have internet access, to easily access the survey on any electronic device, including a mobile phone or tablet. This overcomes potential logistical and financial disadvantages of printing out and posting or transporting questionnaires to individuals or educational settings. However, Qualtrics surveys can also be exported and printed off. In this study, an option of providing printed hard copies was given to the gatekeepers within schools. Where a school requested hard copies of the survey, these were provided by post. Data from returned paper copies were then transferred into the online programme. Qualtrics has further practical advantages in that it records participant responses anonymously and can be used to provide brief, simple data analyses eg number of overall responses, it also collects data in a form that can be exported to other programmes for analysis e.g. Excel. The anonymity of participant responses is particularly important in terms of confidentiality and data protection and also in reassuring participants of anonymity they may be more likely to be honest in their responses and therefore social desirability biases may be reduced (Bryman, 2016). Furthermore, while a downside of this approach is the lack of opportunity to prompt participants to expand on particular points, the

written survey does have the benefit of reducing the variability of the research experience, ensuring that items are standard to all participants (Braun, 2021).

It should be noted that there may be some disadvantages to a purely online survey, for example, it may exclude individuals who do not have access to appropriate electronic devices or the internet. A further disadvantage of using an online tool is that having sent out links it was not possible to know which schools or individuals had or had not responded while maintaining confidentiality. Furthermore, requests for participants were made through initial gatekeepers (eg Headteachers, or university staff), for all sample groups, which meant that selection was potentially limited by gatekeepers. For example, gatekeepers who were either not interested in the research themselves or felt too busy may have made a unilateral decision to not pass on the survey to potential participants, which may have limited the sample pool and resulted in possible bias (Payne & Barnfather, 2012; Wright, 2005). Overall, however, using the online survey with the option of a paper copy was felt to be a sufficiently robust and efficient method for collecting data from a large population. Limitations are addressed in more detail in Section 3.8 (Methodological limitations).

### **3.3.3 Participant information and recruitment.**

The aim was to recruit students at key vocational decision points; Year 11 (16 year olds), Year 13 (17- 18 year olds) and final year undergraduate or postgraduate students (limited to students aged 24 and under). Although Year 11 students can be 15 or 16 years of age, only 16 year olds were included in our sample. At the time the survey was administered (late in the academic year) the majority of the year group would have been 16 and 16-year-olds and above were considered as being able to give fully informed consent (see section 3.7: Ethics, for details relating to participant consent). These groups were chosen as they represented the range of ages considered to be in the late adolescence life stage (Sawyer et al., 2018), in full-time education, as well as preparing for and taking high-stakes qualifications (e.g. Level 2/GCSE, Level 3/A Levels/ BTECs, undergraduate/postgraduate degrees). Due to their educational stage, they were all considered to be at key decision points relating to next steps in education, training and or career. It was intended that samples would have an even distribution of females and males.

### **3.3.4 Sampling.**

Determining an appropriate sample size was not straightforward. The full target populations of Year 11 students, Year 13 students and final-year university students



were estimated using DfE and UCAS data to be approximately 1.2 million. A sample size calculator indicated that, with a 95% confidence level and a 5% margin of error, a sample of 384 would be suitable. However, as there were also 3 distinct year groups it was important to have a good representation from each group. I therefore aimed to gain as large a sample as possible (>384) within the recruitment time frame (April -June 2019). To gain as large and representative a sample as possible, the sampling frame included all state schools (non-independent schools), Further Education colleges and universities in the County of Yorkshire in England. Only state schools were used as it was considered that the information relating to careers education and socioeconomic status was likely to be skewed if data from fee paying school students was included. A link to information sheets, consent forms and the questionnaire were circulated by email to all eligible educational establishments.

On the whole, it is unknown which establishments took part, as the survey was largely completed online and did not ask for school or institution data. However, three schools did request paper copies of the survey, which made them identifiable. We received 735 responses in total but, following the removal of responses that only included demographic information, our final sample consisted of 610 participants. 61% of our sample identified as female, 35% as male, 1.3% as other and the remaining 2.1% preferred not to say. The sample comprised; 39% Year 11 students, 34% Year 13 students and 27% final year HE students.

### **3.4 Measures**

The questionnaire collected demographic and contextual information on the participants' year group as well as information on parental education and occupation. Participants were not directly asked to specify their gender, but were given the statement "I am.." and then asked to indicate, "Female", "Male", "other, please specify \_\_\_\_\_" or "Prefer not to say". As such, from here on, this information will be referred to as *gender* rather than *sex* due to the assumption that the responses involved self-identification. However, it should be acknowledged that some participants may have reported their biological sex which may not be in line with their gender. The survey collected data on participants' occupational (career and education) hopes and expectations, including free-response items relating to PFSs. The survey also used self report measures to collect data on PFS narratives; difficulty and certainty of achieving PFSs and salience of PFSs. In addition to this, quantitative items measuring student career construction behaviours, self-efficacy for the future and sense of control were also included.

### **3.4.1 Demographic and Contextual information.**

Since gender (Poole & Cooney, 1987; Solantaus, 1987; Trommsdorff et al., 1982) and socio-economic status (Nurmi, 1987) have been shown to influence adolescents' thinking about the future, they were included in the present study. In addition to the participant's gender and year group, as described above, we collected data on parental jobs and education as an indicator of participant socioeconomic status (SES), to provide further context to participant experiences and environment.

#### **3.4.1.1 Socio-Economic Status.**

There is no single accurate instrument for measuring socioeconomic status, however, the UK government's Measuring Socio-economic Background in your Workforce guide (Thornton, 2018) recommends using both highest parental occupation and education, as they are both accurate and accessible measures. Additionally, research points to the link between an individual's outcomes and their parent's qualifications and occupation (Cattan et al., 2022).

In this current study, as recommended by the State of the Nation reports from the Social Mobility Commission (Social Mobility Commission, 2022), parental occupation and qualifications are presented as individual indicators of SES, rather than a composite measure.

#### **3.4.1.2 Parental occupational data.**

Parental occupational data were collected and classified as one indicator of participant SES but also to analyse the influence of parental job type on participant ideal jobs. The SOC 2020 and NS-SEC were used to classify occupational data systems.

#### **3.4.1.3 SOC 2020.**

The SOC 2020 is the Office for National Statistics occupation coding tool (Office for National Statistics, n.d.) which groups jobs by their skill level and the amount of time, training and qualifications needed to become competent in the job and "skill specialisation"; the field of knowledge required for competency and efficiency in the performing tasks. The current version is the SOC2020 and is comprised of four tiers:

- Major group: this offers a broad definition of the occupation (provides the first digit of the SOC2020 code.)
- Sub-major group: this is the second-level definition of the occupation (provides second digit of SOC 2020 code).
- Minor group: this is the third-level definition (provides third digit of SOC code).
- Unit group: detailed definition of the occupation (provides last digit of SOC code).

Table 3.1 shows an example of how a job in horticultural management would be grouped according to the SOC2020.

**Table 3.1**

*Hierarchical Structure of SOC 2020 Tiers*

Major group	Sub-major group	Minor group	Unit group	Group definition
1				Managers, Directors and Senior Officials
	12			Other managers and proprietors
		121		Managers and proprietors in agriculture related services
			1211	Managers and proprietors in agriculture and horticulture

#### **3.4.1.4 The National Statistics Socio-economic classification (NS-SEC)**

The National Statistics Socio-economic classification (NS-SEC) measures employment relations and conditions of occupations in the UK. The classification is considered to be conceptually clear, well validated, and a good predictor of outcomes including health and education (ONS, n.d.). NS-SEC is occupation coded to the unit groups (UG) of the Standard Occupational Classification 2020 (SOC 2020), as outlined in the SOC 2020 section above. Within the NS-SEC conceptual model, it is possible to have eight, five and three class versions. Figure 3.1 shows the nested relationship between the different versions of the NS-SEC model.

**Figure 3.1**

*Eight-, Five-, and Three-, Class Versions of NS-SEC*

eight classes	five classes	three classes
1. Higher managerial, administrative and professional occupations 1.1 Large employers and higher managerial and administrative occupations 1.2 Higher professional occupations 2. Lower managerial, administrative and professional occupations	1. Higher managerial, administrative and professional occupations	1. Higher managerial, administrative and professional occupations
3. Intermediate occupations	2. Intermediate occupations	2. Intermediate occupations
4. Small employers and own account workers	3. Small employers and own account workers	
5. Lower supervisory and technical occupations	4. Lower supervisory and technical occupations	3. Routine and manual occupations
6. Semi-routine occupations	5. Semi-routine and routine occupations	
7. Routine occupations		
8. Never worked and long-term unemployed	*Never worked and long-term unemployed	*Never worked and long-term unemployed

Reproduced from the NS-SEC (ONS, n.d.)

**3.4.1.5 Deriving the SOC 2020 and NS-SEC Codes for Occupational Data.**

The Office for National Statistics occupation coding tool (ONS, n.d.) was used to find both the SOC 2020 unit group code (full four digit code) and NS-SEC 1-8 classification for all data related to jobs provided by participants (parental/carer jobs, participant ideal jobs). As an indicator of SES, where participants had two parents or carers with jobs of differing NS-SEC classifications, the participant was ascribed the highest level of the two.

For example, Figure 3.2 shows the information provided by the ONS coding tool for a parental occupation of ‘secondary school teacher’. In this case, the four digit code for the unit group was recorded (2314), as it would be later possible to recode this as minor group (231), submajor group (23) or major group (2). The NS-SEC analytic class (2) was also recorded.

### Figure 3.2

Information Provided by ONS Occupational Coding Tool for Secondary School Teacher

#### 2314: SECONDARY EDUCATION TEACHING PROFESSIONALS

##### This unit group is part of:

- Minor Group 231: TEACHING AND EDUCATIONAL PROFESSIONALS
- Sub-Major Group 23: TEACHING AND EDUCATIONAL PROFESSIONALS
- Major Group 2: PROFESSIONAL OCCUPATIONS

##### NS-SEC categorisations:

The simplified NS-SEC analytic class for this code is 2

The simplified NS-SEC operational category for this code is 4.1

NS-SEC data were coded in the 1-8 classification initially, however as there appeared to be a skew towards the higher classifications, the data were recoded using the 1-3 classification. All data relating to jobs were coded by members of the GOALS research team and reliability checks were carried out by the author (1 in 20 were recoded). Disagreements were resolved through discussion amongst the group.

Participant SES in terms of NS-SEC parental job is outlined in Table 3.2 below. Further information about how these data were used for specific research questions can be found in Chapters 4 (Section 4.1) and 5 (section 5.1).

**Table 3.2**

*Highest Parental NS-SEC Classification*

Highest Parental NS-SEC Class	Frequency of full sample (n=575)	Percentage		
		Year 11 (n=224)	Year 13 (n=201)	HE (n=150)
Class 1	379 (65%)	58	75	66
Class 2	107 (19%)	22	15	18
Class 3	86 (15%)	19	9	16
Unemployed	3 (<1%)	1	<1%	0

**Note.** National statistics socio-economic classification (NS-SEC) measures employment relations and conditions of occupations in the UK; Class 1 is the highest SES classification (managerial & professional occupations), Class 2 is intermediate (intermediate occupations) and Class 3, the lowest (routine and manual occupations).

### 3.4.1.5 SES using Highest Parental Education.

As a further measure of SES participants were asked to indicate their parent or carers highest level of education. This ranged from 'did not complete secondary school' to 'Doctorate (PhD)', there was also an option for 'Do not know'. An outline of the highest education level achieved by either parent is provided in Table 3.3.

**Table 3.3**

#### *Highest Parental Education*

Highest Parental education	Frequency ( <i>n</i> =525)	Percentage Year 11 ( <i>n</i> =177)	Percentage Year 13 ( <i>n</i> =191)	Percentage HE ( <i>n</i> =157)
PhD Level 8	26 (5%)	11 (6%)	11 (6%)	4 (3%)
Postgrad Level 7	132 (25%)	38 (21%)	56 (29%)	38 (24%)
Undergrad Level 4	135 (26%)	34 (19%)	50 (26%)	51 (32%)
Level 3/A Level	107 (20%)	48 (27%)	32 (17%)	27 (17%)
Level 2/GCSE	111 (21%)	43 (24%)	40 (21%)	28 (18%)
Below Level 2	14 (3%)	3 (2%)	2 (1%)	9 (6%)

The majority (76%) of participants had parents who were qualified to at least Level 3, 56% of students who responded to this item having at least one parent who had achieved a Level 4 qualification or above and 66% having at least one parent in the highest NS-SEC classification (ONS, 2020).

### 3.4.1.6 Work Experience.

We also gathered data on the amount of work experience undertaken by participants (Table 3.4). Almost a quarter of our sample had gained no work experience; however, this varied with educational stage. Almost half of Year 11 students had no experience of work in comparison with only nine per cent of HE students who had no experience of work. Furthermore, 61% of HE students had had over one year of work experience in comparison with 23% of year 11s.

**Table 3.4***Amount of Work Experience*

Length of Work Experience	Frequency of sample (n=605)	Frequency Year 11 (n=238)	Frequency Year 13 (n=207)	Frequency HE (n=160)
None	141 (23%)	106 (45%)	21 (10%)	14 (9%)
1 week or less	25 (4%)	13 (5%)	10 (5%)	2 (1%)
>1 week -1 month	50 (8%)	15 (6%)	29 (14%)	6 (4%)
>1 month-1 year	120 (20%)	49 (21%)	31 (15%)	40 (25%)
>1 year	269 (45%)	55 (23%)	116 (56%)	98 (61%)

*Note.* Work experience includes paid or unpaid work.

### **3.4.3 Possible Future Selves Narratives and Measures.**

Individuals may have a repertoire of PFSs which may include the ideal self they wish to become (successful, a parent), as well as the self they fear they will become (ill health, poverty). PFSs have been variously described as hopes and fears for the future, expectations and aspirations. As discussed in the literature review (Chapter 2, Section 2.1.10) there are two main ways that PFSs can be conceptualised, either as collections of selves (for example, teacher, mother, partner, homeowner, happy) or as narratives (stories providing a more holistic, view of self (Hoyle & Sherrill, 2006)). This current study uses a largely narrative approach, to identify the main goals, purposes and values contained within written PFSs or activated by thinking about that PFS.

Narratives can be defined as the “accounts people tell to describe experiences and offer interpretation” (Overcash, 2003, p. 179). Eliciting and collecting narratives, followed by the analysis of these narratives, can provide insight into unique experiences and perceptions related to culture and humanity (Stefen, 1997). In the current research, participants are prompted to write a story of their future self. Interviews have typically been used to elicit detailed, individual narratives; however, such an approach practically limits the size of the population addressed. Shkedi (2004) contends that, although using a narrative survey with larger populations may yield relatively short qualitative responses, these responses often present clear and focused descriptions that can help elicit valuable information. While the responses to the narrative prompts in the current research were relatively short, collecting qualitative data through written surveys can yield “rich and complex accounts of participants’ subjective experiences, narratives,

practices, positionings, and discourses” (Braun et al., p. 641) and it is more important to focus on the richness of the dataset as a whole (Braun et al. 2021).

Using a narrative approach is appropriate for this current research because it allows a richer portrait of an individual’s life goals, expectations and fears for the future to be gathered than would be afforded by questionnaire measures of these constructs (Whitty, 2002). Narrative responses may offer insight into the salience, detail and motivations behind aspirations, fears and expectations for the future in a way that a list of PFSs cannot. It may also overcome some of the limitations associated with asking to self-report on outcomes alone (Adler et al., 2016). Pursuing and progressing on important goals is associated with enhanced psychological well-being (e.g., Little et al., 2017), it is not surprising therefore that evidence indicates a strong relationship between the salience of PFSs and subjective wellbeing.

Research carried out by King and colleagues (e.g., King et al., 2015; King & Raspin, 2004) investigates the relationship between elaboration and salience of written narratives and psychological wellbeing, however, this is focused on alternative or lost future selves (e.g. my future if I had been straight not gay or did not get divorced) rather than futures that are still possible and only included adults. Overall, results indicate that happiness is best predicted by investment in current goals and the capacity to relinquish goals that are not available, relinquishing one’s previous sources of meaning and embracing new ones. However, this involves a reflection of what might have been which is particularly important for those later in life, perhaps less so for those in adolescence who are making choices for their future with more limited experience.

In this study I make the distinction between *possible selves* and PFSs, making transparent that this research will focus on the story of what one might yet become in the future rather than what might have been possible if goals had not been “lost or forsaken” (King & Hicks, 2015, p.122). Furthermore, I view the PFS construct through a personological/phenomenological lens and as being multi-dimensional. That is to say that an individual’s PFS may include all and any of their cognitions and beliefs related to their future. This study aims to use qualitative open items to elicit a more holistic adolescent PFS (in comparison with lists or collections of PFSs), which includes the most salient aspects of the PFS rather than prompting participants to look at specific aspects.

The survey gathered participant perspectives on their PFSs using both qualitative and quantitative items. Participants’ narrations of their PFSs were inherently qualitative,



but the survey also elicited quantitative data from self-reports relating to the narratives they had described.

Qualitative narrative data were analysed both qualitatively and quantitatively. In the following section, I aim to justify the measures used and the methods of interpreting and or coding the content. To ensure that participant voices and perspectives were explored and heard, an exploratory content analysis was undertaken (Guest et al., 2011). This is particularly important where there is a lack of existing research in the area. In qualitative research, validity is established through transparency of the process, producing findings that reflect participants' lived experience offers credibility and representation of participant voices provides authenticity (Syed & Nelson, 2015). PFSs were also analysed using a quantitative approach, for example, a quantitative content analysis was carried out to explore self perceived influence of ideal job choice. This approach is useful when prior research can be applied to the data. Such quantitative approaches to analysing narrative data involve establishing a reliable coding system. The development of the coding system is described in Study 1 (section 4: Coding and Analysis). PFSs were explored through several open and closed items which are described below.

### **3.4.2 Ideal job.**

To elicit PFS narratives participants were given several prompts. Participants were first asked to "*mentally time travel into the future and imagine your future self: Tell us what your perfect/ideal job would be*". This was a free response item. The jobs identified by participants were classified using the ONS Occupation coding tool (ONS, n.d.) to give the SOC 2020 4 digit unit group code. The coding tool was also used to find the simplified 1-8 version of the NS-SEC analytic class for the participant's ideal job, this was recoded to give the 1-3 version of the NS-SEC analytic class. See the section on socioeconomic status and occupational data section above for details of the rationale and process. Further details of how these data were further recoded for specific research questions can be found in Chapter 5 (Study 2).

### **3.4.3 Self Perceived Influence on Ideal Job**

After stating their ideal job, participants were asked to 'tell us what sparked your interest in this job in as much detail as possible'. This was framed as an open question in order to allow participants to continue to tell a coherent story, one that links their past (what had gone on before that sparked their interest), present (current thoughts and feelings) and future (how they imagine their future). A mental representation of the future

(PFS/ideal job) is the first step towards the construction of a pathway to this future and developing a plan. Nurmi (1991) indicates that developing this pathway to the future self is a problem-solving process, one that involves looking for solutions and evaluating the extent to which these meet the need. Understanding what influences the ideal job may help better understand the individual's motivations and offer more targeted support.

#### **3.4.3.1 Coding of self perceived influence for aspired to job.**

A theoretically driven framework, based on Adler et al.'s (2016) organisational framework of narrative identity variables, was initially used to deductively code the data, in particular focusing on his motivational themes category, these include growth goals, autonomy, communion, crystallisation of desire, crystallisation of discontent, intimacy and experience. Adler et al. (2016) define the narrative identity motivational themes as; 'what the protagonist currently seeks, has sought in the past, or has achieved' (p.157), asserting that these constructs 'create purpose for specific important life events in the context of the larger lived life' (p. 161). This framework was used as it fits with the narrative, generative nature of the collected data. As Adler and colleagues (2016) argue, using phenomenological approaches enables meaning to be ascribed to an individual's experience which 'offers a unique and valuable perspective of the underlying personality' (p. 146). In order to maintain this the coding process was also open to the addition of inductive codes grounded in the data (Joffe, 2012). In this study further variables were added; non-specific desire and no codeworthy material. The full coding process and coding framework can be found in Study 2 (Section 5.3).

#### **3.4.3.2 PFS Narratives through lens of ideal job.**

Participants were asked to write about their PFSs. Following the items asking participants to identify their ideal job and what had sparked their interest in it, they were asked to: "Describe this future self and your daily life doing this ideal job". Please provide as much detail as possible". In the online survey the length of response was unrestricted and printed copies of surveys included additional pages if participants required extra room to continue their responses. To allow participants to identify the future self that is most salient to them, no particular time period was specified. This item was analysed both inductively, using an exploratory content analysis to explore central organising concepts, and also deductively to investigate the level of elaboration.

### **3.4.3.3 Inductive, exploratory content analysis of PFS narratives.**

An exploratory content analysis was carried out to explore the overarching categories presented in participant data, in terms of what is important and salient in young people's imaginations of the future. Research indicates that future occupation, education, family, leisure activities and self-actualization are often key aspects elicited when prompted to think about the future (Nurmi, 1987; Trommsdorff et al., 1982). However, as this research looked through the specific lens of an ideal future job, I planned to take an inductive approach. Details of the process are outlined in Chapter 4 (Study 1, Section 4.3).

### **3.4.3.4 Elaboration of Self within PFS Narrative.**

Elaboration of self, the vividness, detail and complexity of the narrative, King & Smith (2004). Previous research that explored elaboration within narratives was used to develop a coding protocol and framework for this study. For example, in their study of gay and straight possible selves, King and Smith (2004) measured the construct on a scale of 1-7. Following a discussion of definitions and examples of high and low levels of elaboration, the research team agreed on the following definition for elaboration of self; the vividness and detail of how the story (narrative) relates to self, and the inclusion of different elements of PFS, such as job and personal aspects. Elaboration was assessed as a single dimension and rated on a 5-point scale. Narratives were coded as high in elaboration if they covered a variety of different elements of the future self. Elements could focus exclusively on a person's working life or also take more general aspects into account. This is consistent with Rosenberg's conceptualisation of elaborate identities as being those with a larger and more diverse range of features (Rosenberg, 1997). Reliability checks were undertaken by members of the Goals research group, who coded 20% of the data. Intercoder reliability was calculated using Fleiss's Kappa. The development of the coding framework and the coding process are outlined in Chapter 4 (Study 1, Section 5.3).

### **3.4.3.5 PFS Word Count.**

Strauss and Kelly (2012) found that elaboration ratings were significantly related to the length of the narrative. This is consistent with previous content analyses of PFS narratives. King and colleagues (King & Raspin, 2004; King & Smith, 2004) similarly reported correlations of .51 to .70 between the length of PFS narratives and their content analytic measure of elaboration. Length of participants' PFS narratives were established.

### **3.4.4 Self-Reported Measures of PFS**

#### **3.4.4.1 Salience of PFS.**

The salience of the PFS refers to the extent to which it is an 'active part of the person's mental life' (King and Raspin, 2004, p. 605). It is, how easily, clearly and often, the image of one's future can be brought to mind. This is in contrast to the elaboration of the PFS, which as described above details the vividness, complexity and depth of the PFS.

After describing their PFS, participants were asked to keep this mental image in mind and rate the salience of the PFS that they imagined. A measure consisting of three items which assessed the salience of the imagined scenario was adapted from previously used measures of the construct (King & Patterson, 2000; King & Raspin, 2004; King & Smith, 2004), which consists of three items assessing the salience of the imagined scenario. King and colleagues report reliabilities ranging from .65 to .83 (Strauss et al., 2012). The items were "This future is easy for me to imagine", "The mental picture of this future is very clear", and "I often think of this future". The items were assessed on a 5-point scale with anchors ranging from 1 (strongly disagree) to 5 (strongly agree). This short scale has been found to be a reliable measure of salience ratings, with reported reliabilities ranging from .65 to .83 for salience ratings of currently held PFSs (King & Patterson, 2000; King & Raspin, 2004; King & Smith, 2004).

#### **3.4.4.2 Difficulty and Certainty of Achieving Ideal Job.**

Perceived difficulty and level of certainty about the future have been highlighted as factors that influence adolescents' thinking about the future, as well as being factors that impact current and future behaviours and outcomes (Oyserman et al., 2018; Strauss et al., 2012). Participants were asked to keep this PFS mental image in mind and asked how certain they felt that they would achieve this future and how easy they thought it would be. A 5-point scale was used for participants to rate how strongly they agreed with the statements (1= strongly disagree, to 5= strongly agree) relating to certainty and difficulty in achieving the ideal job.

#### **3.4.4.3 Academic Hopes and Expectations for the Future.**

Participants were asked to identify the highest level of education that they hoped to achieve (idealistic) and also expected to achieve (realistic), from the following options: GCSE Level 2, A Levels/Level 3, Undergraduate degree and Postgraduate degree.

### **3.4.5 Further quantitative measures relating to future-oriented behaviours and beliefs.**

#### **3.4.5.1 Student Career Construction Inventory (SCCI).**

Student career construction behaviours were measured using the SCCI (Savickas, 2018). The SCCI was designed as a reliable measure of the adapting dimension in Savickas' career construction model of adaptation (Savickas et al., 2018). The SCCI aims to place individuals along a continuum of career development during adolescence and emerging adulthood. The inventory includes 25 items across four scales: (1) Crystallizing a vocational self-concept, e.g. "Identifying people that I want to be like". (2) Exploring information about occupations, "Investigating occupations that might suit me (3) Deciding to commit to an occupational choice, e.g. "Selecting an occupation that will satisfy me" and (4) Preparing to implement that choice, e.g. "Qualifying for the job I like best". Items are rated on a 5-point Likert scale from "I have not yet thought much about it" to "I have already done this". Subscale scores are calculated by taking the mean of the responses to the items within each subscale, the composite score is calculated by taking the mean of the individual subscale scores.

The Student Career Construction Inventory (SCCI) has empirical support for its validity and reliability as a measure of career exploration behaviours and beliefs. Initial results confirm the SCCI's four-factor structure. The SCCI demonstrates reliability, with a Cronbach's alpha coefficient of 0.93 across all participant groups, indicating high internal consistency. This level of reliability is consistent across various educational stage, from high school to graduate student, and genders. Average alpha coefficients across these subscales were 0.88 for high school students, 0.84 for college students, and 0.83 for graduate students. The subscales; Crystallizing (0.84), Exploring (0.87), Deciding (0.94), and Preparing (0.89) also confirm the inventory's reliability.

In terms of validity, factor analyses indicate that the SCCI maintains configural and measurement invariance, and that factor structure is consistent and generalisable across educational stages. The SCCI also demonstrates cross cultural validity having been translated and validated in several different cultural contexts, including Turkey, Portugal, Croatia, and USA (eg Öztemel & Yildiz-Akyol, 2021; Soares, Taveira, Cardoso & Silva, 2022). The SCCI was considered a suitable and robust measure for this study as it was designed as a distinct and comprehensive measure of specific student adapting responses behaviours and beliefs exhibited by adolescents and young adults in the career construction process (Savickas, 2018).

As discussed in the literature review (Chapter 2, section 2.1), PFSs can be considered as an adaptive and evaluatory tool, one that encourages planning and action to achieve or avoid particular imagined futures. If this is the case, exploring the interrelationship between PFSs, planning and wellbeing may help us understand the best way in which to support young people in making decisions and developing a pathway between the present and future whilst promoting psychological. Planning may be considered a life management strategy which allows individuals to structure and manifest control in their lives (Prenda & Lachman, 2001). Those who adopt a future-oriented approach are more likely to be prepared for future tasks and to exert more control while completing a task, allowing individuals to focus on new opportunities to achieve goals (Prenda & Lachman, 2001). Although several prior studies have looked at an individual's propensity to plan for the future and found associations with psychological wellbeing (Azizli et al., 2015), this study aims to explore the extent to which individuals have a pathway to the future; the level of planning behaviour and action that has been taken, rather than an overall tendency to do so.

#### **3.4.5.2 Discussing Future Occupational Plans.**

This item asked whether participants had discussed their future study and career plans with any of the following: a family member of an adult they knew socially, a teacher, a careers advisor and a friend and if so how helpful they had found their discussion. Possible responses included, 'Yes- the discussion was very helpful', 'Yes- the discussion was somewhat helpful', 'Yes- the discussion was not helpful', 'No-I have not discussed future plans'.

#### **3.4.5.3 Confidence and Self-Efficacy for the Future.**

Adolescence can be a challenging period of development as individuals navigate the transition from dependent child to self-sufficient adult. Developing a sense of personal agency is one particular challenge encountered during this stage (Zimmerman & Cleary, 2006). This "is influenced by the belief in one's effectiveness in performing specific tasks, which is termed self-efficacy, as well as by one's actual skill" (Zimmerman & Cleary, 2006, p. 45). Self-efficacy beliefs refer to "people's judgements of their capabilities to organise and execute courses of action required to attain designated types of performances"(Bandura, 1986, p. 391).

Hackett and Betz (1981) proposed a career development model that explained individual differences in terms of self-efficacy expectations. If an individual has agency in the activities in which they will potentially engage, their confidence in their ability to perform the task will be a key factor in whether they will choose to engage with the

activity or not. The theory, however, also posits that outcome expectations, "the beliefs about the consequences or outcomes of performing particular behaviours" (Brown & Lent, 2006, p.204) are also crucial. Thus, an adolescent is unlikely to engage in an activity if they imagine the outcome to be negative, even if they have confidence in their ability to perform the task. Self-efficacy appears to be a factor in career development, this study aims to investigate how this construct relates to other factors, such as career construction behaviours, future self salience and implicit theories of interest, explored in this study.

#### **3.4.5.4 PLANS 2 Confidence for the Future Scale (Yerdelen et al., 2018).**

This measure of confidence for the future is taken from the 10-factor Student Experiences of Non-Shared Environment Scales (SENSES). This quantitative measure was originally developed using data from a qualitative hypothesis-generating study of pupil's non-shared experiences at the end of formal compulsory education. Non-shared environment is the term used to describe environmental effects "not shared by children growing up in the same family" (Plomin, 2011, p. 582) on an individual's phenotype. Exploratory factor analysis yielded a 10-factor solution which explained 63% of the variance in responses. The PLANS 2: self-confidence factor contains four items e.g. 'I am confident I can live up to what my parents expect of me' and uses a 5-point Likert response scale ranging from 1 = 'not at all true' to 5 = 'very true'. The overall confidence score is calculated as the mean of the individual scores. SENSES shows good internal consistency and convergent and divergent validity. Cronbachs alpha for PLANS 2: self-confidence factor, has been reported as .82 (Yerdelen et al., 2018).

#### **3.4.5.5 Sense of Control Scale.**

This scale by Lachman & Weaver (1998) measures sense of control which is a construct that refers to the extent to which participants generally feel in control of their lives. This scale is composed of two subscales, Mastery (4 items) and Perceived Constraints (8 items). Example items from each of these subscales are "I can do just about anything I set my mind to" (Mastery) and "I have little control over the things that happen to me" (Perceived Constraints). Each item was answered on a 5-point scale ranging from 'strongly disagree' to 'strongly agree'. The perceived constraint items were reverse coded such that high scores on the total scale corresponded to a higher sense of control. Lachman and Weaver (1998) found the subscales to have adequate internal consistency reliability (.70, .86 respectively). The overall sense of control score is calculated as the mean of the individual scores.

### **3.5 Procedure**

The survey, which took place from April to June 2019, was designed using Qualtrics software. A link to information sheets, consent forms and the survey was circulated by email to all eligible educational establishments (see Participants, above). Students were approached through a gatekeeper for the establishment. For Year 11 and Year 13 students, we approached the school's careers and guidance lead where this information was available or the most appropriate senior member of staff where this was not the case. For HE participants, departmental administrators were contacted. In the aim of recruiting systematically, science, social science and arts departments were contacted. Schools were offered the option of using paper, copies of the survey if they preferred. Prior testing indicated that the survey would not take any longer than 30 minutes, although participants were free to take as long as they wished. The survey was anonymous. Feedback from schools who replied to me following my initial recruitment email indicates that Year 11 and Year 13 students were mostly likely to have completed the survey during school time, whereas HE students almost certainly completed the survey individually and in their own time. Data from hard copies of the survey were inputted into the Qualtrics online survey. All the data were then exported into an Excel spreadsheet. Participant data were processed for research purposes under Article 6(1) (e) of the GDPR, responses were kept electronically and secured by password (Data Protection Act, 2018).

Data were further exported to NVivo for qualitative coding and analysis and SPSS for quantitative statistical analysis. Further details of coding and analysis procedures can be found in Study 1 (Chapter 4, Section 4.3), and Study 2 (Chapter 5, Section 5.3).

### **3.6 Pilot and Amendments**

The online survey was piloted with members of the GOALs group. The group have considerable experience of research and in working in education with the older adolescent age group. Participants were asked to work through the online survey imagining themselves in the role of an adolescent. They were asked to make notes on the pragmatic aspects of the survey (for example, was participant consent available and were they able to work through all of the survey items), and to also consider their understanding and interpretation of individual items. This was followed by group feedback and discussion. In addition to this, I also asked two personal contacts aged 16 to 19 to complete the survey and discussed their understanding and interpretation of each of the items. These responses were not included in the final dataset.



Cognitive testing defined as “methods which aim to capture people’s thought processes and understanding in responding to questions” (Scottish Government Social Research Group, 2017, p. 1), can be used to identify problems that individuals may have with answering survey items that may not be picked up in a traditional pilot study. The pilot study undertaken, as outlined above included some cognitive testing strategies (eg verbal probing), to capture the individual’s understanding of items and their thought processes, which were then used to amend the final survey tool. This was a pragmatic approach to providing insight into the survey’s functionality and user-friendliness. This approach took account of the use of predominantly pre-existing items, while also considering the expertise and diverse perspectives of the participant group, within the constraints (time and resources) inherent in PhD research. Overall, feedback indicated that the items were clear and that completing the survey was likely to take less than half an hour. However, several modifications were made to the survey, including the removal of duplicated items and the correction of typographical errors.

### **3.7 Ethics**

This research was guided by the British Psychological Society (BPS) Code of Human Research Ethics (Oates et al.,2021). Ethical approval was granted by the University of York Education Department Ethics Committee before participant recruitment or data collection began. Appendix B provides an overview of the ethics application procedure and timeline, and the ethics application and ethics approval documentation can be found in Appendix C. As the research involved young people, close consideration of key ethical guidance was required, particularly aspects relating to, informed consent, confidentiality, right to withdraw, and risk of harm.

#### **3.7.1 Informed consent, confidentiality and right to withdraw.**

It was important to ensure that participants who were selected to take part were fully informed of the nature of the research and their role in it. The student participants were provided with a participant information sheet (Appendix D) outlining the purpose of the study, what it would entail for participants, and how data would be stored and used. The information sheet also informed potential participants that involvement in the study was voluntary, and of their right to withdraw. This was followed by a consent form which included statements to check participants’ understanding of the research. In the online survey participants were unable to proceed before this was complete.

Participants were informed that all data collected for this study would be anonymous (no names or other identifying information would be asked for. However, it

should be noted that as participants were not asked for any details that could identify them, this meant that it would not be possible to withdraw specific data once it had been submitted. This was clarified on the consent form.

### **3.7.2 Gatekeepers, access and participant voice.**

In order to access and recruit a large number of participants systematically, educational settings were approached, and recruitment was through gatekeepers (Headteachers or senior leadership in schools and colleges, and administration teams in universities), who controlled access to the participants in the study. The ethical implications of gatekeepers in research primarily revolve around issues of access, autonomy, transparency, and fairness. Gatekeepers can influence who is included or excluded from research participation, potentially limiting diverse perspectives or marginalised voices (McFadyen & Rankin, 2016).

Gatekeepers control access to participants, raising concerns about potential unfairness. Gatekeepers may, for example, inadvertently or deliberately restrict certain groups from being studied, meaning that the researcher is unable to reach desired participants or information. Furthermore, it could also be argued that recruitment through gatekeepers situates the power within the (education) system rather than within the individual. However educational settings have a duty of care to their students. Indeed DfE (2022) guidance, states that “Pupils should be safe in school and when undertaking out of school activities. The risk management to keep them safe should be proportionate to the nature of the activities” (Section 1). As such educational gatekeepers have a duty to make decisions that minimise risk for students. There was also an assumption that settings know their students and as such are well placed to make initial gatekeeping decisions, particularly those related to education and careers, acting on their behalf and in their best interests. Indeed, one university gatekeeper, indicated that they would not pass on the research survey to students as they considered them to be too busy during the exam season. However, in most cases, settings did not provide feedback relating to whether they planned to pass the research or their reasoning.

### **3.7.3 Age and gaining consent.**

To be included in this research participants were all required to be in some form of education and to be at least 16 years of age. In discussion with my supervisor and in line with the stance of the University of York’s Education Department Ethics Committee, young people aged 16 and above were considered to be capable of providing informed

consent to participate (akin to adult research participants). As such there was no requirement for a parent to sign an informed consent form (Figure 3.3).

**Figure 3.3**

*University of York Education Ethics Committee Ethical Issues Audit form for Research Students, Question 26*

Who will be asked to sign an Informed Consent Form? Please select all that apply:

CATEGORY	
Adult research participants	<input checked="" type="checkbox"/>
Research participants under 16	<input type="checkbox"/>
Teachers	<input type="checkbox"/>
Parents (of U16s)	<input type="checkbox"/>
Head/Senior leadership team member	<input type="checkbox"/>
Other (please explain)	<input type="checkbox"/>

Additionally, guidance from the BPS indicates that “the age of 16 should be acceptable for sole consent on the part of the young person for low-risk research” (BPS, 2021, p. 16). Furthermore, where staff members judge the proposed research to “fall within the range of usual curriculum or other institutional activities”, the activity is assessed as having “no significant risks”, highlighting that participant consent alongside approval from a senior member of school staff “is considered sufficient” (p.17). See the section on limitations and reflection on research ethics below for further consideration (Section 3.8.1).

**3.7.4 Potential Harm.**

Potential risk of harm to the participants was considered as it is necessary to ensure that such risks are minimised. The research focus did not include areas that might be considered potentially distressing or sensitive. However, potential risks were that the participants might feel inconvenienced by doing the research. Although participants were informed that participation was voluntary, it may be that some felt a degree of obligation to continue with the survey once they started. Furthermore, participation may have evoked some negative evaluations about future education and career outcomes. Participants were advised that if they felt any distress at any point they

had the right to stop. The following information on where participants could find further support in the form of advice or someone to talk to was provided at the end of the study:

*In case you feel distressed, we recommend the NHS website Mental health helplines <https://www.nhs.uk/conditions/stress-anxiety-depression/mental-health-helplines/> Additionally, you can contact The Samaritans by calling 116-123 or email: [jo@samaritans.org](mailto:jo@samaritans.org) if you need someone to talk to.*

### **3.8 Methodological Limitations**

#### **3.8.1 Limitations and reflection on research ethics.**

Having carried out the research in 2019, some considerable time before writing up this thesis, I can reflect on some of the ethical considerations from some distance. Firstly, I reflect on the decision to not require parental consent for participants who were under 18. This research covers topics that are very pertinent to young people in education, areas that are likely to have been covered in school and such are unlikely to be considered sensitive. However, it is possible that some young people may have found the topic area troublesome, but if parents had been informed, they may have been able to act as a safety net, offering support or the option to not participate. Indeed, the BPS (2021) indicates that “It should be noted that minors under the age of 18 have a legal right to safeguarding” (p.15). As such if I were to repeat this research, I would consider this issue by piloting the survey with both 16 year olds and their parents to co-produce the informed consent strategy.

A further, consideration relates to the power differential in schools, which has the potential for students to feel an element of coercion in taking part in the survey. While the information sheet made it clear that participation was voluntary, the participants may not have felt this to be the case. Some students carried out the activity in school (for example, one school said that they would do this in form time) and it would likely have been led by a teacher (or other member of setting staff). Within most school settings the ethos is such that teacher-led activities are compulsory. Indeed, students may have felt compelled to complete the survey even if staff genuinely encouraged students to make an informed decision about taking part. Furthermore, as the researcher was not present, it is possible that school staff actively encouraged young people to take part, perhaps themselves misunderstanding the voluntary nature of the activity. Having reflected on this, it may have been preferable to have recruited schools with a view to facilitating the survey myself, ensuring participants fully understood the nature of the research and were given an alternative activity if they did not want to take part. Being present would also allow participants to more easily ask any questions or for further information, which

would also have promoted informed decision-making. Being present would also have promoted fidelity and consistency of implementation of the survey.

### **3.8.2 Further Methodological Limitations and Reflections.**

#### **3.8.2.1 Limitations in Sample Recruitment and Selection.**

Participants were all students in settings within the Yorkshire region and as such it may not be possible to generalise findings to the whole of the UK. Indeed, although all state-funded schools and colleges, in the region, were approached, there is no way of knowing which settings took part. As discussed in section 3.6, in an attempt to recruit large number of participants ethically and systematically, participants were approached through gatekeepers. However, this meant that the final sample may have been shaped by gatekeepers' decision-making regarding who is included or excluded from research participation, while this may significantly impact the representativeness of the final sample, its potential influence is hidden (McFadyen & Rankin, 2016).

It should be noted that there is limited heterogeneity in the older group of students, which may be a result of recruitment strategies. The three stages of education (Year 11, Year 13 and final year of HE), that the sample represents, relate to discrete age ranges (Year 11; 16, Y13; 17-18 and HE; 20-24 years of age); however, they are not necessarily representative of young people within those age ranges in England as a whole, or within Yorkshire. Firstly, all of the participants were in full-time education, rather than training or work, which does not fully reflect all young people, particularly those in the older age group. In England, all young people up to the age of 16 are required to be in full-time education. However, young people between the ages of 16 to 18 years of age must be in some form of education or training. The current sample for this research were all in education, either in a FE college or in school. Data indicates that in England approximately 84 % of 16-18 year old's are in education or training, with approximately 68,500 16-18-year-olds being in apprenticeships or traineeships (DfE, 2022). As such the sample does not reflect the views of two distinct groups, those who are NEET and potentially disengaged from systems that aim to support young people in achieving their potential and those in some form of training, who have potentially already taken significant steps on their career journey. Participants in the oldest group were all in HE, however, this also does not reflect the overall population of this age group as post-18 individuals are not required to stay in education (Education and Skills Act, 2008). Indeed, approximately only half of young people 18-30 attend university in England, with the remainder undertaking other forms of training or occupations, paid or otherwise (Bolton, 2020). As such, findings from this research cannot address the views

behaviours and beliefs of young people who have chosen not to or are unable to attend HE, including those in the workforce, training or unemployed.

Furthermore, the current sample contained a higher number of participants from higher SES backgrounds than might be expected in the general population. Data from the latest UK census (ONS, 2023) indicates that only 34% of the population of England has a level 4 qualification or above; 56% of the study participants had parents with a level 4 qualification or above and 66% had at least one parent with an NS-SEC class 1 occupation. This was most evident in the more homogenous HE group, 59% of whom were in the highest SES group by parental education as opposed to only 46% of Year 11's. A similar pattern was seen for SES by parental occupation; 66% of our sample came from the highest classification (HE; 66%, Year 11; 58%), whereas the ONS Annual Survey of Hours and Earnings (ONS, 2019) indicates that 33% of adults have jobs in the Class 1 classification.

The representativeness of the final sample may have been further impacted by self-selection bias, ie once passed on to the potential participant, it is not clear who chose not to participate. It is feasible that individuals may be more likely to participate if they have clear views about their future or demonstrate certain psychological characteristics such as conscientiousness or curiosity (Saliba & Ostojic, 2014).

There are some known issues which limit the representativeness of the final sample (eg representation of socio-economic groups, gender) however, there are other areas that are unknown (gatekeeper and self selection bias). As such it is important that sample and its representativeness – within Yorkshire and across England - are kept in mind when reviewing findings and considering generalisability. Demographic information is provided in order to offer transparency so that the reader may judge the transferability and or generalisability of findings to other contexts or participants.

### **3.8.2.2 Limitations of the Survey.**

In terms of using a written survey to gather data, there are both advantages and disadvantages. Sending out an electronic survey, allowed for a large number of participants to be approached, quickly. However, this also meant that although clear directions were given to schools, I was not able to be present to verify how exactly the survey was administered. Using a written survey to collect open qualitative data also means that there is a limit to the depth and context of potential responses and there is no opportunity to prompt and explore responses which may be important for understanding. Additionally, response bias may occur due to varying interpretations of

open-ended questions, and the absence of real-time engagement means there is no opportunity to build rapport. The open ended, narrative responses, may also raise some difficulties, in that they require an element of literacy, which could limit responses or potentially exclude some participants. It is important to acknowledge that the findings relating to PFS narratives may only tell us what comes to mind when prompted to think about an ideal job, and not necessarily what is important to young people now or in their future lives. Furthermore, some differences may be attributed to the willingness of participants to write down prompted thoughts. On average, younger and male students wrote less than female and older students. This may reflect an aversion to writing on the topic rather than a lack of reflexivity about the future.

However, while there are disadvantages to collecting qualitative data through a written survey, including strategies for eliciting both qualitative and quantitative data, supports a more comprehensive and nuanced understanding of the research topic, and allows the voice of the participant to be recognised even with a relatively large sample.

Additionally, it should be noted that data were collected prior to the Covid 19 pandemic, and the subsequent cost of living crisis, factors which may have impacted the way young people think about the future as well as their current behaviours had the data been collected post-pandemic.

### **3.9 Coding and Analysis**

Because coding and analysis differed significantly for Study 1 and Study 2 detailed descriptions of the processes are described in Chapters 4 and 5.

## **4 Study 1 How adolescents imagine PFSs through the lens of ideal job**

### **4.1 Study 1 aims and research questions**

#### **4.1.1 Aims.**

The way we think about the future affects our current lives, influencing our motivations, decisions, plans and psychological wellbeing (Harrison, 2018; Hoyle & Sherrill, 2006; Nurra & Oyserman, 2018; Strauss, Griffin, & Parker, 2012). Prospecption, or future thinking, allows us to fantasise about desired PFSs, and to conjure up images of feared PFSs that we may wish to avoid. Besides providing a focal point to navigate towards or away from, there is evidence to suggest that the act of narrating our future selves can improve our psychological health (Adler et al., 2016). PFSs act as an evaluative tool, allowing us to make subjective judgements about current selves and supporting decision-making, planning and action-taking (Oyserman, 2015). Therefore, the exploration of PFSs may be particularly pertinent to late adolescents as they navigate the developmental and practical challenges associated with the transition to adulthood.

This study aims to explore how young people conceptualise and narrate their PFSs through the lens of their ideal job. Ideal job is used as a cue for eliciting other aspects of identity, as occupational selves are the most commonly identified PFSs elicited in previous research (Oyserman, et al., 2011; Shepard & Marshall, 1999). In taking a qualitative, narrative perspective, the study aims to obtain a richer understanding of young people's PFS than previous research which has commonly used a quantitative approach.

Within this study, there is an exploration of how easily brought to mind (salience) and how detailed (elaboration) young people's narration of their future selves are, as well as a consideration of some of the factors that may influence the individual PFSs (gender, year group, SES and work experience).

#### **4.1.2 Research Questions (RQs)**

**RQ 1.1** How do young people narrate their PFSs when using ideal job as a cue? What is the content of young people's PFS narratives? Does PFS content differ with age, gender, and experience/demographic factors?

**RQ 1.2** How salient and elaborated are young people's PFS narratives?

**Hypothesis 1:** Students with greater experience of work will demonstrate higher levels of salience and elaboration of self within their PFS narratives.



## **4.2 Method**

### **4.2.1 Participants**

Participant selection and demographic details are outlined in Chapter 3 (Methodology, sections 3.3.3 *and* 3.3.4).

### **4.2.2 Measures**

Measures are described in full in Chapter 3 (Methodology, section 3.4).

### **4.2.3 Procedure**

Data collection and the design of the study have been described in detail in the methodology chapter (Chapter 3, section 3.3). As previously discussed, data were collected as part of a larger online survey. Qualitative data were coded, and an exploratory content analysis carried out as described below.

## **4.3 Coding and Analysis**

Demographic data were analysed using descriptive statistics (frequencies), and an exploratory content analysis of the PFS corpus was carried out. Elaboration of self was assessed using a content analysis and self reported salience was calculated as a composite of the three qualitative items that made up the measure. Details of coding and analyses can be found under specific RQ's below.

### **4.3.1 RQ 1.1 What is the content of young people's PFS narratives? Exploratory content analysis of PFS narratives.**

#### **4.3.1.1 Justification of approach.**

An exploratory content analysis was selected as the most appropriate method to capture the essence of the young people's narratives in a relatively large qualitative dataset (Guest et al., 2011). I initially planned to carry out a reflexive thematic analysis (Braun & Clarke, 2012) as participant texts were produced from open-ended questions and I was keen to stay within the participants' frame of reference. However, through the familiarisation process (the first step in all forms of both thematic analysis and content analysis) it became clear that although some responses were detailed and nuanced, many were brief but still covered several different aspects (eg "Enjoying the job, well paid, have free time for own interests" (Participant 93)). Furthermore, as the dataset contained over 600 responses, I also wished to present quantities and make my interpretations of the data. This approach uses a very similar approach to other thematic analyses, with data being coded for ideas and meaning rather than at the level of the word or sentence. More specifically Guest (2012) indicates that it is well suited to the

exploratory analysis of larger data sets where there may be limited nuance.

Furthermore, this approach indicates that for larger data sets using frequencies is useful, for example, in allowing comparisons of groups to be made, thus providing more meaning to themes identified. The aim of reporting of such quantifications from the current data was to make transparent my interpretations and highlight noteworthy aspects and patterns within the data rather than to make statistical inferences. Guest et al. (2012) indicate that it is reasonable to quantify and perform simple analyses on larger data sets. An inductive analysis was performed due to the limited existing literature in this area. Analysis was carried out predominantly at the semantic level, this is where the data are explored at a surface level, as I aimed to ensure that the analysis remained embedded within the participant's own words. Using a more latent analysis would involve exploring the more implicit meaning of participants' words, however, it should be noted that there is no clear delineation between these approaches, and an element of interpretation is always present even in semantic approaches (Boyatzis, 1998).

#### **4.3.1.2 Analysis procedure.**

All survey data were imported into NVivo 12 qualitative data analysis (QDA) software. Braun and Clarke (2012) suggest that QDA software can be useful in qualitative analysis as it is an efficient method for organising and visualising patterns, which is particularly important for large data sets. They also suggest that it enables an audit trail to be established allowing for greater transparency and sharing of the data.

The exploratory content analysis followed the five steps described by Bengtsson (2016) for planning and undertaking qualitative content analysis. Bengtsson (2016) describes these stages as, decontextualization (coding), recontextualization (check codes against original data), categorisation (grouping codes into themes), compilation (drawing conclusions, assembling the story) and report writing. Step one involves familiarisation with data, this was followed by discussing initial reflections with the wider research team (GOALs). Bengtsson (2016) calls this the de-contextualisation stage. The next stage was to carry out inductive, open coding of the data, identifying and labelling (coding) meaning units. A meaning unit is the smallest unit that contains information that the researcher needs, this may be a word, sentence or longer section of text. These codes are then used to "facilitate the identification of concepts around which the data can be assembled into blocks and patterns" (p.12). Bengtsson (2016), and Braun and Clarke (2012) point to the need to keep in mind the research question during coding and making decisions around themes.

Initial open coding of the dataset was undertaken. Data were systematically and rigorously coded, aiming to be initially, over, rather than under, inclusive, while keeping the research question in mind throughout. This was an evolving, iterative process and codes were checked to ensure they were distinct from each other before producing a codebook (Appendix E). The codebook which included code definitions and example quotations was produced for transparency, reliability checks and future research. All of the initial coding was carried out by the author. The definitions and example quotations, however, were discussed with the GOALs research team before the code book was finalised. The coding was rechecked by me once the codebook had been finalised to ensure that any changes had been reflected in the coding of the data. The initial codebook was made up of 40 codes. Reliability checks were carried out by a second member of the research team, who coded 20% of the data. Inter-coder reliability was calculated using Cohen's Kappa. The aim of carrying out this process was to increase the transparency of the process and highlight points for reflection and discussion within the team. Agreement for initial coding was  $k = .67-1.00$ . According to Altman (1999) the strength of the kappa coefficients is;  $<.2$  is poor;  $0.21-0.40$  fair;  $0.41-0.60$  moderate;  $0.61-0.80$  good;  $0.81-1.00$  very good. Details of the codes and inter-rater reliability can be found in Table 4.1.

A number of codes were collapsed or combined following the ICR process due to some overlap between definitions. Specifically, 'diet' and 'how I will look' were combined with 'health and fitness'; 'financial stability' with 'job security'; and 'level of stress' with 'psychological wellbeing', resulting in 35 final codes. Table 4.2 shows the final code frequency and distribution by gender and year group.

**Table 4.1***Code Frequencies and Intercoder Reliability for Initial Codes*

Code	Frequency	Kappa	SE	CI lower	CI Higher
Being successful in job	1	1	0	1	1
Belongings and possessions	1	0.655	0.3196	0.0288	1
Busy working hard	1	0.655	0.3196	0.0288	1
Challenging work	2	0.655	0.3196	0.0288	1
Connections outside of work	1	1	0	1	1
Diet	0	*	*	*	*
Driven to succeed	0	*	*	*	*
Family and love	12	1	0	1	1
Financial stability	5	1	0	1	1
Flexible working	1	1	0	1	1
Fulfilling career	0	*	*	*	*
Happy in job	5	0.875	0.1225	0.635	1
Happy, enjoying life	2	0.655	0.3196	0.0288	1
Health and fitness	1	1	0	1	1
Helping others	1	1	0	1	1
Hobbies & non-work activities	5	0.875	0.1225	0.635	1
Home environment	6	1	0	1	1
How I will look	0	*	*	*	*
I don't know	1	1	0	1	1
Independence	1	1	0	1	1
Job general area	14	0.9459	0.0533	0.8414	1
Job stability	0	*	*	*	*
Learn new skills	3	1	0	1	1
Level of stress	0	*	*	*	*
Location	6	1	0	1	1
Other attributes	2	1	0	1	1
Other	0	*	*	*	*
Pay	1	1	0	1	1
People I work with	5	0.8947	0.1034	0.6921	1
Person Job Fit	0	*	*	*	*
Pets and animals	4	1	0	1	1
Psych wellbeing	0	*	*	*	*
Power,status and fame	0	*	*	*	*
Spiritual	0	*	*	*	*
Structure of the working day	10	0.875	0.0855	0.7075	1
Travel	3	1	0	1	1
Variety	0	*	*	*	*
Wealth	1	1	0	1	1
Work hours	7	0.918	0.0807	0.7598	1
Work life balance	4	0.875	0.1225	0.635	1

Note: \*Kappa was not calculated as the code was not used in the reliability checking sample.

**Table 4.2***Frequency of Ideal PFS Codes*

Code	Total (n=585)	Female (n=361)	Male (n=204)	Y11 (n=229)	Y13 (n=201)	HE (n=155)
Being successful in job	36	27	8	12	14	10
Belongings & possessions	21	11	10	15	3	3
Busy, working hard	35	28	6	11	9	15
Challenging work	10	7	3	0	4	6
Connections outside work	14	9	5	3	2	9
Driven to succeed	10	6	4	3	2	5
Family	87	57	26	29	24	31
Financial stability	53	41	12	10	20	23
Flexible working	13	11	2	1	3	9
Fulfilling career	6	5	1	0	1	5
Happy in job	52	30	20	15	21	16
Happy, enjoying life	30	25	4	5	15	10
Health and fitness	19	10	8	9	4	6
Helping others	62	49	13	22	15	25
Hobbies, leisure activities	22	10	10	3	12	7
Home environment	29	14	13	15	9	4
I don't know	30	18	10	11	15	4
Independence	7	6	1	3	2	2
Job general area	179	122	53	54	56	69
Learn new skills	8	7	1	3	2	3
Location	99	74	22	31	35	33
Other Attributes	20	14	6	3	7	10
Pay	37	16	20	13	13	11
People I work with	50	33	16	8	21	21
Person Job Fit	9	6	3	9	0	0
Pets and animals	24	20	4	8	10	6
Power & status	5	3	2	0	3	2
Stress & wellbeing	12	5	7	2	5	5
Spiritual	3	1	2	2	0	1
Structure of working day	96	44	50	53	30	13
Travel	41	28	12	11	14	16
Variety	17	9	7	3	7	7
Wealth	4	1	3	1	1	2
Work hours	72	56	15	22	21	29
Work life balance	48	31	16	13	19	16

*Note.* Male and female frequencies do not add up to total frequency. Information from 20 'other' or 'prefer not to say' was not analysed separately due to low numbers. Codes do not add up to the number of participants, as participants may be assigned multiple codes.

Once coding was complete, initial codes were collated into broad categories (Bengtsson, 2016). A theme or category is an overall concept of an underlying meaning on an interpretive level and should be rooted in the data from which they arise. Bengtsson (2016) contends that categories should be “internally homogenous and externally heterogeneous” (p. 12), ensuring that all data is included in one group only. The individual categories and subcategories were discussed with the team and revisions made. In the final stage, each category was named, and their essence, scope, and boundaries defined. These organising concepts (themes) aim to tell a story that answers the research question (compilation stage).

#### **4.3.2 RQ1.2: How salient and elaborated are young people’s PFS narratives?**

##### **Coding and analysis of elaboration and salience variables**

###### **4.3.2.1 Developing a coding framework for the elaboration of self variable.**

The following steps were taken in order to establish an assessment framework that worked for the PFS narratives in this study. This process, which involved the author and two further members of the GOALs research team, was developed using narrative identity coding training from a visiting professor with expertise in this area, and the process outlined in Guidelines for Establishing Reliability when Coding Narrative Data (Syed and Nelson, 2015). This was an iterative process and recursive process, however, in sum the process for this involved:

###### **1. *Clearly define elaboration of self variable and define high and low levels.***

The literature was searched for studies which had previously used *elaboration of self* as a narrative identity variable. Where studies included a definition of the variable this was identified and extracted, along with any specific examples (eg quotations) or commentary relating to high or low levels of elaboration. In addition, methods for analysis and reliability checking were identified. The data extracted for each study is outlined in Tables 4.3 and 4.4. For example, in King & Smith’s (2004) study of gay and straight possible selves, *elaboration* (of self) was defined as; ‘elaboration, vividness, emotionality, and detail’, and they measured the construct on a scale of 1-7. Following discussion of the extracted definitions and examples of high and low levels of elaboration, with the research team, the following definition for elaboration of self was agreed upon; *the vividness and detail of how the story relates to self and the inclusion of one or more different elements of PFS, such as job and personal aspects.*

**2. Decide on missing data.** Nil responses and responses that did not relate to the question were left uncoded.

**3. Choose examples for coding manual.** The research group worked together, using examples from previous research to make an initial coding framework using a scale of 0 (no elaboration within presented data) to 4 (high elaboration), nil responses were not included in the scale (ie not coded as low elaboration). The author then chose initial examples from the data as exemplars for each level of the scale.

**4. Check coding manual and check reliability of coding.** The research team were given examples of data from the study and asked to individually code each one using the framework. Discrepancies were discussed and adjustments were made to the coding manual. The final coding framework can be found in Table 4.5. The coding team continued working through additional examples and agreed on 80% with the only differences related to high 3 or low 4 scores.

**Table 4.3***Examples of how Elaboration of Self has been Defined and Measured in the Literature*

Study	Definition/judgment of elaboration	Scale	Method
King and Smith (2004). Gay and Straight Possible Selves	Elaboration, vividness, emotionality, and detail	Rated on a 7 point scale. 1 (not at all) to 7 (very much)	Mean of two independent raters Interrater reliability 0.7 (straight), 0.9 (gay)
Strauss et al. (2012). Future work selves	High in elaboration if a variety of different elements of the future work self included. Elements could focus exclusively on a person's working life or wider focus eg type of job the future self will have or the type of person the future self will be—being rated as more elaborate.	Rated on a 5 point scale. 1 (not at all elaborate) to 5(very elaborate).	Raters blind to other variables 2 independent raters. Krippendorff's alpha = .82 Controlled for length of narrative.
King and Raspin (2004). Possible selves in divorced women.	Detail, vividness, and emotional depth of the possible self. The narrative richness of the self, as judged by an observer	Rated on a scale of 1-7. 1 (not at all) to 7 (very much).	Rated by two independent raters Blind ratings.
Lithopoulos et al. (2015). Elaboration of possible sport selves in middle-aged adults.	Number of 'meaning units' (segments of text that relate to possible sport selves were counted	Number of meaning units reported with higher number indicating more elaboration.	Two raters independently coded first 25 descriptions. Interclass correlation coefficient- .95)



**Table 4.4**

*Example Quotations Identified as High and Low in Elaboration in Previous Literature*

Study	Example quotations	
	High elaboration	Low elaboration
King & Smith (2004) Gay and Straight Possible Selves	<p><i>My partner and I will have bought our own home. . . . We will have at least one child. Our household is as big and noisy as I'd always dreamed. We have a lot of friends and our parents visit us often (as they do now). My partner's nieces come to visit us and know who we are and call us both "Aunt," love to come here and hang out, talking, watching soaps, and playing games. We always have animals around— dogs and cats. We live in an urban setting instead of a smaller town, but we have a great neighborhood with lots of different types of people.</i></p> <p><i>As I was growing up I envisioned my life to be like the lives of those I admired. Those lives were something to aspire to. I grew up in a small town. . . . My parents and their friends were involved in volunteer work, owned businesses, and were active in community politics. My dream was to be a veterinarian. I imagined that I was married (as that is what is supposed to happen). I dreamed that my wife would be the manager of the pet store we both owned . . . we would be active in the community. Small towns can be so much fun. . . . I would be well known as someone who is a good person and down to earth. . . . The business would be successful and eventually passed down to our children.</i></p>	<p><i>I hope my life is a success and I've achieved my goals, my gay lifestyle has worked well as my balanced and healthy relationship has helped me in staying focused in succeeding in my goals! I hope aswell I interact with all types of lifestyles straight, gay/lesbian and am comfortable with me. I hope my family will accept my lifestyle and that God will accept my lifestyle.</i></p> <p><i>As I am considered a handsome man, I imagine I would probably have a beautiful blonde wife to contrast to my own dark features. I probably would have concentrated more on education and not so much on partying. Therefore I'd have an executive type position, tidy house in the suburbs, and two kids.</i></p>
King and Raspin (2004).	<p><i>I imagined a deliriously happy "empty nest" syndrome. Neither of us likes to travel, but sports are a big priority. I figured we</i></p>	<p><i>I am a realist and never expect anything from life.</i></p>

Study	Example quotations	
	High elaboration	Low elaboration
Possible selves in divorced women.	<p><i>would exercise, go to see the Rangers/Mavericks/Cowboys, etc., together. I envisioned weddings with lots of family pictures. There would be grandchildren to baby-sit. Life would be calm, easy, and sweet.</i></p> <p><i>In my current or real life, I set goals and experience HARD work as I seek to attain them. I feel fortunate in a backhanded way to have experienced misfortune as a young woman. I feel it taught me humility, to be nonjudgmental, compassionate, and gave me the ability to regroup. Life is good but not lavish. It's hard work, and we have to give each other a hand once in awhile. I have changed my goals from material to spiritual. Forgiveness has been key. I have imagined college</i></p>	<p><i>My life has been ruined by this divorce. I no longer have a trusting partner to share dreams and goals with. Why even bother to have them? What good is anything without someone to share it with? My current goal is only to make enough money to make my monthly bills without withdrawing money from my savings account.</i></p>
Strauss et al. (2012). Future work selves	<p><i>I can see myself working in a research center doing investigation related to materials science. I am supervising several postgraduate students [ . . . ], but I am actually a really cool person to work with. My students get time, attention, advice and freedom to think and do. My research is going quite well, I have been publishing interesting results on a regular basis and presenting my work in international conferences that make me travel a lot [ . . . ]. I keep contact with research groups in different countries and develop good projects together. I am trying to build a prestigious career to keep a good image of scientists of my country. I have a fulfilling and well balanced life. I am happy! ...</i></p>	<p><i>I am looking forward to carry [ing] out my job when I have graduated from the University of [ . . . ] as an Environmental Hydrogeologist. And also I want to be at the top position of my Department (Director General).</i></p>

**Table 4.5***Coding Framework For Elaboration Of Self*

Code	Criteria	Example quotations from Study 1 data
No code	No data	-
0	No elaboration.	<i>Not sure, no idea</i>
1	Very low in elaboration- almost no discernible content about job or individual, no explanation of how it relates to self. Could be an abstract or discrete idea or a situational description	<i>Teacher</i> <i>Working with children</i>
2	Low elaboration- contains limited detail but content is general or vague about job or self. May not make explicit how relates to self. Limited cohesion, may be list like.	<i>Teacher. I enjoy working with children. I will mark books and teach lessons.</i>
3	Moderate elaboration. May contain reasonable elaboration of more than one aspect of future self or high elaboration of one aspect. Some cohesion in narrative. Some evidence of how it relates to self.	<i>Teacher. I really enjoy working with children. I will get up on a morning and after going to the gym I will go to work everyday and work with my year 5 class. I will go out with friends on a evening to the pub.</i>
4	High in elaboration. Covers a variety of different elements of the future self. Includes a person's working life and more general personal aspects into account. Clear evidence of how relates to self.	<i>I will move to London as this is the best place to train as an artist. I am very creative and have won prizes for my work but I am keen to learn different styles and want to be trained by the best people. I will work on my art daily on my own in my studio flat, but will go out to learn more at art college. this will be good as it will help me get a different perspective and understanding of what art means. I will also have fun with my friends, I don;t want to become isolated and it is important to me to have people to talk to . I will go home for holidays as I will miss my mum and dad and nieces and nephews. Eventually I would like to return home and buy a house in the town centre. I would also like to teach as I would like to give something back to my community. Eventually I may have children but I would still want to paint everyday or be creative in some way.</i>

#### **4.3.2.2 Coding elaboration of self data.**

The narratives in this current study were independently rated by two members of the research group, trained and supervised by me, with regard to their degree of elaboration using the previously described coding framework (Table 4.5). As described above, elaboration refers to the complexity of the PFS narrative. Elaboration was assessed as a single dimension and rated on a 5-point scale. Narratives were coded as high in elaboration if they covered a variety of different elements of the future self. Elements could focus exclusively on a person's working life or also take more general aspects into account. This is consistent with Rosenberg's conceptualisation of elaborate identities as being those with a larger and more diverse range of features (Rosenberg, 1988) and in line with Strauss et al's (2012) coding of the future work self. Reliability checks were undertaken by the author who coded 20% of the data. Intercoder reliability was calculated using Fleiss's Kappa.

Using this coding system each PFS narrative was coded for the extent to which they demonstrated elaboration of self (the vividness and detail of how the story relates to self and received a score of between 0 (no elaboration, e.g. 'not sure') and 4 (high in elaboration, where the response covered a variety of different elements of the future self with clear evidence of how imagined PFS relates to self).

This coding procedure took place at a different time to the content analysis and training and reliability checks were completed by different members of the GOALS research team, in order to minimise the influence of one coding process on the other.

Following the initial development of the framework and further training, the full data set was coded by a member of the GOALS research group. Reliability checks were carried out by the author and interrater reliability was found to be good (Fleiss Kappa = .845). Interpretations of magnitude follow guidelines presented in Cicchetti (1994). The coded data were analysed to draw as much information from the data as possible.

#### **4.3.3 Analysis of RQ 1.2 How salient and elaborated are young people's PFS narratives?**

***Hypothesis 1: Students with greater experience of work will demonstrate higher levels of salience and elaboration of self within their PFS narratives***

Before considering approaches to data analysis it was important to decide what type of data the elaboration of self and PFS salience represented. Both sets of data were derived from Likert scales, and as such considered to be ordinal. Furthermore, Kolmogorov-Smirnov tests suggested that elaboration scores ( $D(520) = 0.47, p < .005$ )

and salience scores ( $D(520) = 0.13, p < .005$ ) do not follow a normal distribution. As such non-parametric tests were used to analysis data.

**4.3.4.1 Elaboration of self and PFS salience.** As outlined in the measures section (section 3.4.4 Self-Reported Measures of PFS) the salience measure (King & Patterson, 2000; King & Raspin, 2004; King & Smith, 2004) was a composite of three items; "This future is easy for me to imagine", "The mental picture of this future is very clear," and "I often think of this future". The final salience score was derived by calculating the mean of the three individual item scores. Descriptive statistics were calculated for the elaboration of self and PFS salience variables. Following this, group differences in gender, year group, work experience and highest parental occupational class were analysed for each PFS variable. As the data were ordinal and non-normal, the assumptions of parametric testing were not met, therefore, Kruskal-Wallis and Mann Whitney U tests were used to explore differences in these groups. Further assumption testing relating to these tests is described in section 4.4.2.2.

Spearman rank correlations were calculated for elaboration of self and PFS salience against ordinal demographic variables, year group, work experience as well as PFS salience and PFS word count. Relationships between variables were further explored using ordinal logistic regression analysis.

## **4.4 Results**

### **4.4.1 Results for RQ 1.1 What is the content of young people's PFS narratives?**

#### **4.4.1.1 PFS Narratives.**

585 out of 610 participants responded to this item (361 Female, 204 Male, 20 'other' or 'prefer not to say'). Of these, 229 were in Year 11, 201 in Year 13 and 155 were final year HE students. The average word length of narratives was 38.57 words (range: 0 to 592). In terms of gender, there was a mean of 43.21 words for females, and 31.07 words for males, with those identifying as 'other' averaging 35.00 words and 'prefer not to say' 29.08 words ( $SD=42.95$ ). In terms of year group, Year 11 had a mean word count of 27.09, Year 13 36.00 words, and final year HE 58.89 words.

#### **4.4.1.2 Exploratory Content Analysis of PFS Narratives.**

The 35 final codes were organised into 5 main categories representing young people's narrations of how they imagine their futures in an ideal job role: (1) My work; (2) Why I do it; (3) My life outside work; (4) My values; and (5) How I feel. Table 4.6 shows how codes were clustered to form categories and sub-categories. For example, the category of My work is made up of two sub-categories What I do and Where and when I do my work, within which codes are clustered. The codes; 'job general area', 'structure of the

working day', 'person job fit', 'people I work' with and 'busy working hard' are represented by the 'What I do' sub-category.

**Table 4.6***Categories and Sub-categories Representing Young People's Ideal Future Self*

Category	Sub-category	Codes	Illustrative Quotes
My work	What I do	Job general area	<i>I want to create my own fashion line (Participant 234).</i>
		Structure of day	<i>I think I would be good for this job. I am very resilient and would not give up (Participant 27).</i>
		Person job fit	<i>I believe the job would be 9 to 5, I would be interacting with individuals and there [sic] families</i>
		People I work with	<i>and teachers. I would be running group activities, conducting assessments seeing what there</i>
		Busy	<i>diagnose [sic]could be (Participant 568).</i>
	Where and when I work	Location	<i>I would like to imagine that I live somewhere with lots of light and lots of interesting things to</i>
		Work hours	<i>do, probably a city by the coast. I want to work in a place that isn't a dreary office that looks</i>
		Work life balance	<i>like a call centre, maybe somewhere more like a studio or a fashionable space that feels like</i>
		Flexible working	<i>a chic house (Participant 596).</i>
			<i>Have time for myself and family and friends and pet.</i>
Why I do it	Expectations of work	Variety	<i>I would love going to work (Participant 27).</i>
		Happy in job	<i>A varied and challenging job, which involves problem solving (Participant 546).</i>
		Challenging work	<i>I hope to... do something that I really enjoy/find rewarding (Participant 366).</i>
		Successful in job	
		Fulfilling career	
	Money and security	Wealth	<i>I'll be in a dual-income household but likely the main breadwinner (Participant 575).</i>
		Pay	<i>I want to have enough money to support a family (Participant 174).</i>

Category	Sub-category	Codes	Illustrative Quotes
Life outside work	Connections	Financial stability	<i>I have several cats, each one has a really cool name like Ringo, Bradley, Catsby (like Gatsby) etc. (Participant 354). Happy with children and In a loving marriage (Participant 321). I also hope for a good amount of friends (Participant 312).</i>
		Pets and animals	
		Family and love	
	Activities	Non-work connections	<i>On Saturdays play cricket and go to the pub on a Saturday afternoon (Participant 474). I would like to travel around the world (Participant 39).</i>
		Hobbies and non work activities	
	What I have	Travel and holidays	<i>Big house nice cars luxurious lifestyle (Participant 244). A nice house in a nice place, enough money to provide a comfortable life for my family (Participant 335).</i>
		Belongings and Possessions	
	Values		Home environment
Driven to succeed			
Learn new skills			
Helping others			
Power and status			
Independent			
Happy in life			
How I feel		Other attributes	<i>Having just the right amount of stress within my job to keep it challenging and interesting but not overwhelming (Participant 345). Healthy mind and healthy body (Participant 153). I will finally achieve a healthy lifestyle, with my dream body as a bonus (Participant 705).</i>
		Spirituality	
		Stress and wellbeing	
		Health and Physical fitness	



## Category 1: *My Work*

*"I believe the job would be 9 to 5, I would be interacting with individuals and their families and teachers. I would be running group activities, conducting assessments seeing what there diagnose [sic] could be"* (Participant 568, female, HE).

This category tells us about the expectations that young people have of the work they would perform in their ideal job, and also the context within which they might carry out this role. It is made up of two sub-categories; ***what I do***, and ***where and when I work***.

This was the most commonly noted category within the narratives. It is perhaps unsurprising, considering the nature of the prompt, that many participants described the work that they expected to do in their ideal job with 179 (31%) offering an overview of the job they hoped to be doing eg *"working in a vet practice"* (Participant 265, female, Year 11), *"I want to create my own fashion line"* (Participant 96 female, Year 11). A number of responses gave an outline of the structure of the working day (16%,  $n=96$ ).

For example, participant 1 (female, Year 11) described how she might have *"two lectures a day, on Grecian perceptions of the Gods, then I research my PhD"*.

Participant 351 (Male, Year 13) described how he would,

*Get up at about 6, have breakfast and travel short distance to work/sleep on site - so can bike. Me and other co-workers clean out cages/averies and check animals are all in good health, ready for opening. Perform shows to the public with numerous different animals. Close park to public. Feed animals with co-workers. Spend one to one with some animals. Then makes sure everything is locked and secure and go home and have supper.*

Male participants were more likely to offer a structured and practical view of their future work routine than females (25% v 16%).

Some students gave us a more nuanced picture of their future working self and were able to describe their future in a way that went beyond just stating what job they would do. The 'people I work with' code, as exemplified by participant 232 (Male, Year 11), who described working *"with a professional sports team rehabilitating and improving sporting performance. I would manage a team of medics and physicians"*, was seen in 50 responses (9%) but appeared to be more important to the older, HE students, 14% of whom referred to this in their response. A relatively low number of young people described themselves in the future being 'busy' ( $n=35$ , 6%), eg *"Hard-working, some days with long hours. Always keeping myself busy"* (Participant 543, female, HE). Gender differences were evident in this, with 28 of the 35 narratives that highlighted being 'busy' coming from females. Older students were also more likely to reference

being 'busy' than younger students with 10% of HE students including this code, in comparison with only 5% of Year 11 students.

The ***where and when I work sub-category***, tells us that young people view their work location, hours and work-life balance as important factors in their future lives and that they were able to consider the impact that work would have on them. These findings did appear to vary somewhat with gender and year group. 'Location', eg "I live somewhere with lots of light and lots of interesting things to do, probably a city by the coast. I want to work in a place that isn't a dreary office that looks like a call centre, maybe somewhere more like a studio or a fashionable space that feels like a chic house" (Participant 596, female, HE), was the most common code within the sub-category, a feature of 99 (17%) narratives. The older group (HE students) were more likely to discuss 'location' than their younger counterparts, with 21% of HE narratives prioritising 'location' compared to 14% of students in Year 11. A number of young people ( $n=72$ , 12%) described the 'work hours' they expected from their future jobs. This seemed to become more important with age, 19% of HE responses discussed the hours they would work compared to 10% of Year 11.

A smaller number of participants ( $n=48$ , 8%) described how they expected or wished to balance their work and home life, expressing the wish to "have time for myself and family and friends and pet" (Participant 549, female, HE). A few participants ( $n=13$ , 2%) also described a desire for work that was flexible in terms of where and when they worked eg participant 536 (female, HE) who described having "*flexible working hours so I could focus on my family*". However, the majority ( $n=9$ ) of those 13 responses were from HE students. The where and when I work sub-category tells us that young people are capable of imagining a future that goes beyond work itself, drilling deeper into the requirements of their aspired-to job, with some considering how well aligned they are to those requirements.

Our findings indicate that while the work involved in undertaking the job role is important to students, they do not view it in a vacuum and that female and older students, in particular, imagined their future work as only part of their future lifestyle; often prioritising flexibility, having a life outside of work and a balance between the two for example, "*Enough free time to engage in activities outside of work (e.g. rugby, music, socialising)*" (Participant 335, male, Year 13). Young people's gender and year group did appear to be relevant to which specific aspects were highlighted in this category. Male and female students appeared to have somewhat different priorities about the future, with male narratives being more likely to concentrate on concrete features of the job,

such as the structure of the working day, whereas females were more likely to discuss how the job relates and is integrated into their life overall, for example in considering the flexibility of their work, job stability and their location. Participant year group also had an impact on the responses relating to this theme; older students were more likely to focus on other details relating to the job role and how it would be carried out, for example, the people they work with, work-life balance and the flexibility offered by their work. This may indicate that older students have a greater understanding of work and also of themselves in terms of what they want from their work in the future than younger students.

### **Category 2: Why I do it**

"I want to have enough money to support a family" (Participant 174, female, Year 11). This category moves away from more concrete descriptions of the work and how it might be carried out, focusing more on the potential value it might bring to the future self and why their ideal job was important to them. This category was subdivided into 'Expectations of the work' and 'Money and Security'.

A number of young people ( $n=52$ , 9%) were able to imagine being in a job that made them happy; "*Happy, interested in work*" (Participant 581, male, HE), "I would love going to work (Participant 27, male, Year 11). Some participants described wanting to be successful in their future work ( $n=36$ , 6%), "Join the navy and stay there for a while, work up the ladder" (Participant 79, female, Year 11), or to have variety in their work ( $n=17$ , 3%), "Everyday will be different and I will constantly be meeting new people" (Participant 346, female, Year 13), and a small number wished for work that provided challenge or fulfilment ( $n=16$ , 3%), "I hope to be well off enough to support my a family in a flourishing life but also to do something that I really enjoy/find rewarding" (Participant 543, female, HE ). While a number of respondents ( $n=37$ , 6%), predominantly males, highlighted salary, "Ideally I would like to have a high salary" (Participant 366, female, Year 13), it was interesting to note that a larger proportion of participants ( $n=53$ , 9%) emphasised the importance of financial stability, "I want to have enough money to support a family" (Participant 174, male, Year 11). Group differences were evident here, for example, females and older students were most likely to discuss financial stability (11% of females v 6% of males; and 15% of HE v 4% of Year 11). Relatively few responses discussed being wealthy ( $n=4$ , <1%), eg participant 120 (female, Year 11) who wanted to "be quite wealthy and have a Tesla".

This suggests that some young people have a clear view of what they want from a job and place value on factors beyond money and wealth, indicating that they believe

that their job will play an integral role in their future self and their satisfaction with their future lives. Some gender and age differences were evident in the narratives, with males being more likely to refer to their salary, whereas there was a greater emphasis on financial stability and job success in female responses. Older participants were generally more specific about what they want from their jobs, demonstrating an awareness of money not necessarily bringing happiness but suggesting that they might prefer to not need to worry about money. Our findings suggest that females and older students may ascribe a range of intrinsic values to their ideal job and indicate some factors that are life priorities. However, this may only tell us that our question was merely less likely to prompt some students to write about features outside of the concrete aspects of the job role, not necessarily that they had not thought about them.

### **Category 3: Life outside work**

*"On Saturdays play cricket and go to the pub"* (Participant 474, male, Year 13)

This category also departs from the initial prompt of the ideal job, focusing more on the personal life of the future self. This theme indicates how participants expect to spend their free time, who they will spend it with and their possessions, encompassing three sub-categories; 'Connections', 'Activities' and 'What I have'. 'Connections' was a theme found in many narratives, with 87 (15%) young people discussing family, children and romantic relationships, "Happy with children and In a loving marriage" (Participant 321, female, Year 13) and a further 14 (2%) friends or other relationships outside of work. *"I guess I'd like family and friends nearby"* (Participant 544, male, HE). These features were similar across genders; however, it was evident that the older students were more likely to highlight the importance of connections than younger students, with 20% ( $n=31$ ) of students in HE highlighting family and love in their narratives, in contrast with 13% of year 11 and 12% of Year 13. A similar pattern was also noted for other types of connections.

Some young people also told us what they might be doing outside of work; travel and holidays featured in 41 (7%) responses, "I would like to travel around the world" (Participant 39, female, Year 11), with 22 (4%) describing hobbies and activities that they imagined themselves doing "go out and do things I enjoy in my free time" (Participant, 563, female, HE ). Again, older students were more likely to include activities in their narratives than younger students. The home environment ( $n=50$ ) and possessions that they might own as part of their future lifestyle ( $n= 21$ ) featured in some responses; for example, Participant 335 (Male, Year 13) described having *"A nice house in a nice place... a comfortable life for my family"*. Interestingly 'possessions' were more

likely to feature in younger students' responses than their older counterparts, with 6% of Year 11 responses alluding to possessions and belongings compared with only two percent of both Year 13 and HE student responses. Overall, this indicates that even when thinking about their ideal job some young people did not view a future career in isolation but rather as integrated within their whole life. Furthermore, the 'Life outside work' category indicated that life satisfaction was important, with connections to others being a particularly strong feature; these did not appear to vary with gender but were more common in older student responses. Many features seen in the narratives, in particular from the older year group, align with those commonly associated with eudaimonic wellbeing.

#### **Category 4: My values**

*"Future self is happy and content in her life and where she is"* (Participant 354, female, Year 13).

This category tells us that some young people imagine the person they want to be and the values they expect to live their lives by when prompted to think about themselves doing their ideal job. This category moves further from the concrete aspect of the ideal job and delves deeper into the self they want or expect to be in the future. Participants described the type of person they want to be in the future, *"pushing myself and fulfilling my potential"* (Participant 344, female, Year 13) and highlighted the skills attributes and qualities they wished to have. Being happy and generally enjoying life was a feature of some responses ( $n=30$ , 5%), *"Future self is happy and content in her life and where she is"* (Participant 354, genderque, Year 13) but notably, a higher number of responses ( $n=62$ , 11%) indicated that helping others was a priority for them, *"I get to help people overcome their struggles and i really want them to be helped"* (Participant 40, female, Year 11). A range of other values, qualities and skills were also seen in young people's narratives of their future selves; a drive to succeed, learn new skills and be independent. For example, participant 583 (male, HE) discussed being *"relaxed, thoughtful, inventive and always striving for the better"*, and participant 549 (female, HE) described having *"more time for self-study (e.g. reading, piano)"*.

Discernible differences between the genders were evident in this category with both helping others and being happy more commonly featured in responses from females than males. This is perhaps in line with females being more likely to aspire to caring jobs and what existing research tells us about gender differences in values (Beutel & Marini, 1995). There were also some noticeable differences between year groups in this category. HE students were the most likely to highlight wanting or

expecting to help others, ( $n=5$ , 16%), as opposed to Year 13 where only 8% of responses from Year 13 focused on helping others ( $n=15$ ). While this may mean that these values are less of a priority than for some younger students, it may merely indicate that the prompt did not trigger thoughts of their values or that they are a foregone expectation of a life where they have their ideal job. For example, they may expect that having their ideal job automatically equates to having a happy life and thus requires no further explanation.

Several of the features seen in responses; being happy, independent and helping others are, again, values that are thought to relate to life satisfaction, perhaps demonstrating a level of maturity in some young people's understanding of what will bring them satisfaction and what will not. Indeed, it is perhaps noteworthy that only a very small number ( $n=2$ , <1%) indicated a desire for fame, power or status in their future lives.

#### **Category 5: How I feel**

*"...healthy mind and healthy body"* (Participant 468, male, Year 13).

The final category identified in the data relates to physical and psychological health. Being physically fit and psychologically healthy were features of a small number of narratives. A few participants ( $n=19$ , 3%) expressed that they wished to be healthy or keep fit, for example, *"I will finally achieve a healthy lifestyle, with my dream body as a bonus"* (Participant 705, female, HE). A small number ( $n=15$ , 3%) also showed an awareness of, or a wish to avoid, the potential stresses they may be exposed to even when doing their ideal work. For example, Participant 345 (female, Year 13) described, *"having just the right amount of stress within my job to keep it challenging and interesting but not overwhelming"*, with participant 312 (female, Y13) stating *"I don't want to feel stressed as much as I do now"*. This is a noteworthy category because, despite only a relatively small number of young people mentioning these themes, it was clear that being physically and psychologically robust was important enough to be elicited indirectly by a prompt focused on future work. This may indicate that health and wellbeing is something that is a current concern for young people, for example, Participant 621 (female, HE) said she hoped to *"deal with[my] psychological problems properly"*. It is noteworthy that 'stress and wellbeing' was a more common feature in the older student responses, and psychological wellbeing is known to decrease over the course of adolescence (DfE, 2019). Alternatively, it may indicate that they are increasingly alert to the risks and impact that either good or poor physical health can have on their lives.

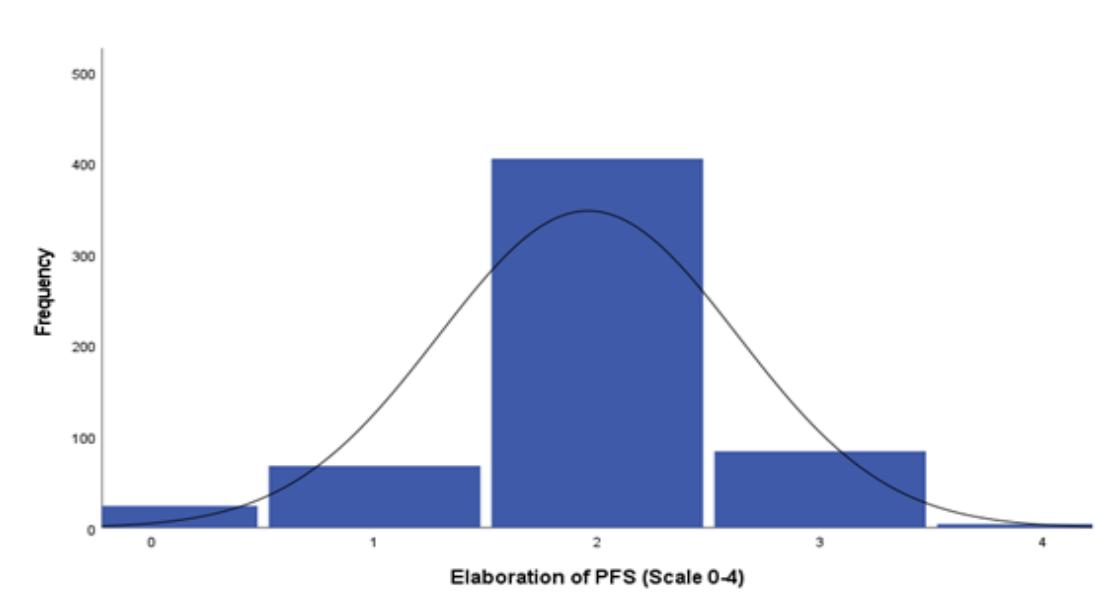
#### 4.4.2 Result for RQ 1.2 How salient and elaborated are young people’s PFS narratives?

**Hypothesis 1: Students with greater experience of work will demonstrate higher levels of salience and elaboration of self within their PFS narratives.**

The elaboration of self observed in participants’ narratives ranged from 0 (no elaboration) to 4 (high elaboration of self) with a median score of 2 (n=585). Figure 4.1 shows the distribution of the elaboration scores. I gathered 520 responses for the PFS salience items. The final PFS salience scores were derived from the average of participants’ three individual responses (see also Sections 3.4.4 and 4.3.4). Scores ranged from 1-5 with a median score of 4.00. Figure 4.2 shows the distribution of the composite PFS salience scores.

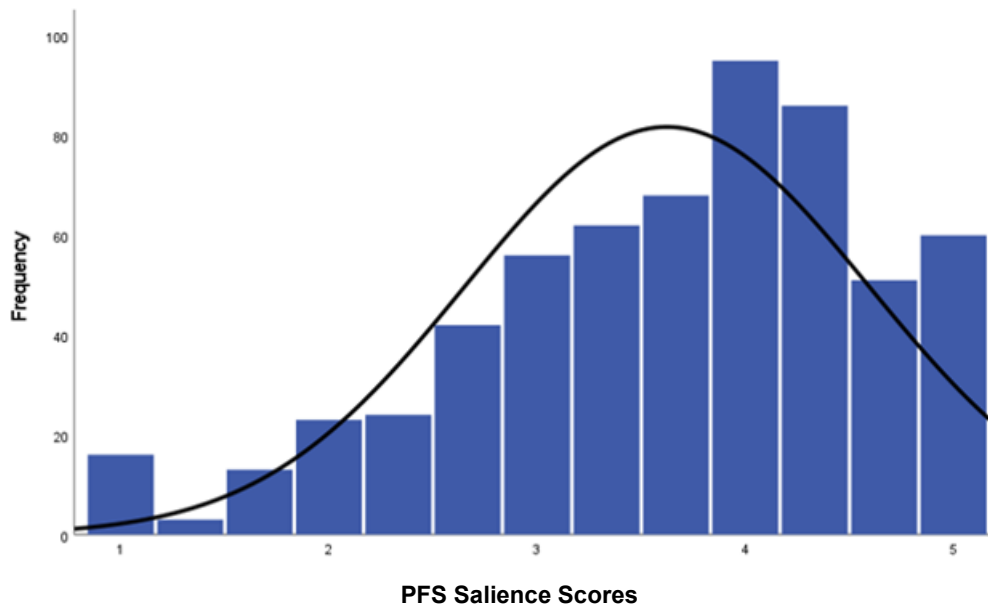
**Figure 4.1**

*Frequency of Elaboration Scores*



**Figure 4.2**

*Frequency of PFS Salience Scores*



**Note:** Salience scores were a composite score, calculated by averaging of three individual items, therefore, the continuous scores were within the range of 1-5

The elaboration of self and salience data were then investigated for group differences and relationships with other ordinal demographic and contextual variables.

#### **4.4.2.1 Group differences in elaboration of self and PFS salience.**

Table 4.7 shows differences in elaboration of self, and Table 4.8 differences in PFS salience in terms of year group, highest parental occupation, and gender. As the elaboration of self and PFS salience data were ordinal, non-parametric tests were used to analyse the data. As such, a Kruskal-Wallis test was considered as an alternative to explore differences in groups. The data were first checked to see if the assumptions of the Kruskal-Wallis were met, that is that there are at least two levels of the independent variable (IV), the dependent variable (DV) is at least ordinal, there is independence of observations and the distribution of scores for the DV are similar for all groups (Pallant, 2020). The data does not need to be normal and there are no assumptions relating to outliers for this test. The independent variables (highest parental SES, year group, and gender) each consist of at least three independent groups, the DVs (elaboration and salience) are ordinal and there is independence of observations. Distributions of scores of DVs were checked by visual inspection of the spread of data (Appendix F). These were judged to be similar for year group, and highest parental SES for both IVs, and as such a Kruskal-Wallis was deemed suitable. Gender distributions (for both DVs) were not similar for all groups. The distributions of females and males were broadly similar, however, 'other' and 'prefer not to say' groups differed in distribution. As such, and



because the majority of participants were from the male and female groups, differences between males and females were explored using a Mann-Whitney U test. The data met the assumptions of the Mann Whitney U test which are, that the data has one DV, which is continual or ordinal (salience and elaboration are ordinal), one IV which has two independent groups (male and female), there is independence of observations and similarity in distribution of scores (Appendix F).

**Table 4.7**

*Elaboration of Self by Group*

Characteristic	N	Minimum	Maximum	Median	Mean	SD
<b>Gender</b>						
Female	362	0	4	2	2.06	0.67
Male	204	0	3	2	1.83	0.63
Other	7	0	3	2	1.71	0.95
Prefer not to say	12	0	2	1	1.33	0.65
<b>Year Group</b>						
Year 11	229	0	4	2	1.95	0.67
Year 13	199	0	4	2	1.85	0.67
HE	157	0	4	2	2.11	0.64
<b>Highest parental NS-SEC</b>						
Class 1	370	0	4	2	2.00	0.64
Class 2	102	0	3	2	1.76	0.72
Class 3	78	1	4	2	2.14	0.55
Unemployed	3	1	3	2	2.00	1.00

**Table 4.8***PFS Salience by Group*

Characteristic	N	Min	Max	Median	Mean	SD
<b>Gender</b>						
Female	360	1.00	5.00	4.00	3.66	0.98
Male	213	1.00	5.00	3.67	3.68	0.96
Other	8	1.67	4.67	4.33	3.71	0.98
Prefer not say	12	1.16	5.00	3.17	3.17	1.17
<b>Year Group</b>						
Year 11	229	1	5	3.67	3.58	0.98
Year 13	199	1	5	4.00	3.63	0.99
HE	154	1	5	4.00	3.81	0.93
<b>Highest parental NS-SEC</b>						
Class 1	370	1	5	4.00	3.65	0.96
Class 2	102	1	5	3.67	3.60	1.00
Class 3	78	1	5	4.00	3.84	0.98
Unemployed	3	1	4.67	3.00	2.89	1.84

**Group differences in elaboration.** Statistically significant differences in PFS elaboration were found between year group, highest parental NS-SEC class, and gender.

Analysis indicated significant differences in the elaboration of self, according to year groups,  $X^2(2, n=585) = 16.29, p < .001$ , with a mean rank score of 292.87 for Year 11, 266.92 for Year 13 and 326.25 for HE students. Post hoc tests revealed that the elaboration shown by participants in HE ( $Mdn=2, M=2.11, SD=0.64$ ) was significantly higher than for both those in Year 11 ( $Mdn=2, M=1.95, SD=0.67, p=.019$ ), and Year 13 ( $Mdn=2, M=1.85, SD=0.67, p<.001$ ). The difference in elaboration of self between Year 11 and Year 13 was not found to be significant. This suggests that there is little difference between elaboration of self in Year 11 and Year 13 but that there is a significant increase as students move into HE, possibly reflecting a more homogeneous group.

There was also a statistically significant difference in elaboration of self between groups according to SES, as measured by highest parental occupation  $X^2(3, n=553)=13.77, p=.003$ , with a mean rank score of 281.36 for Class 1, 238.16 for Class 2, 307.03 for Class 3 and 278.67, for students whose parents were unemployed. Post hoc tests indicated that participants in the highest SES class (parents in Class 1 occupation) had a significantly ( $p=.003$ ) higher elaboration of self ( $Mdn=2, M=2.00, SD=0.64$ ) than individuals whose highest parental occupation was in Class 2 ( $Mdn=2,$

$M=1.76$ ,  $SD=0.72$ ). Furthermore, the elaboration shown by those with highest parental occupation in Class 2 was found to be significantly lower than for those in Class 3 ( $Mdn=2$ ,  $M=2.14$ ,  $SD=0.55$ ). It should be noted that there is a low sample size for Class 3, in comparison with other groups.

A Mann-Whitney U test indicated that there were significant differences between PFS elaboration scores for female ( $Mdn =2$ ,  $M$ , 2.06) and male participants ( $Mdn=2$ , 1.83),  $U =30564.50$ ,  $z =-.213$ ,  $p<.001$ , using an exact sampling distribution for U (Dineen & Blakesley, 1973). In terms of gender, only females produced narratives in the highest elaboration category.

#### **4.4.2.2 Group differences in salience.**

Table 4.8 shows group differences in PFS salience in terms of gender, year group and highest parental occupation. PFS salience was found to significantly differ only by year group,  $X^2(2)$ ,  $n= 599$ ) = 6.69,  $p=.035$ . As expected, post hoc comparison showed that PFS salience was significantly ( $p=.01$ ) higher for HE students ( $M= 3.81$ ) than Year 11 students ( $M = 3.54$ ). There were no significant differences observed between groups according to gender or SES as indicated by highest parental occupation.

#### **4.4.2.3 Correlation analyses of elaboration of self and PFS salience.**

Table 4.9 shows Spearman Rank correlations, testing for a relationship between elaboration of self, PFS salience, year of education, amount of work experience and word count. This type of analysis was chosen as elaboration and PFS salience were not normally distributed (see section 4.3.7.1) and other variables were ordinal.

**Table 4.9***Spearman Rank Correlation Co-efficient between Study Variables*

Variable	1	2	3	4	5
1.Year Group	-	.40**	.07	.11*	.29**
2.Work Exp	.40**	-	.08*	.12**	.13**
3.Elaboration	.07	.08*	-	.25**	.66**
4.Salience	.11**	.12**	.25**	-	.18**
5.Word Count	.29**	.13**	.66**	.18**	-

*Note.* \*\*. Correlation is significant at the 0.01 level (2-tailed), \*. correlation is significant at the 0.05 level (2-tailed)

Interpretations of correlations are made using Cohen's (1992) guidelines for the interpretation of a correlation coefficient; 0 to 0.3 Weak, 0.3 to 0.5 Moderate, 0.5 to 0.9 Strong and 0.9 to 1.0 Very strong.

Spearman's rank correlation ( $\rho=.08$ ,  $p=.046$ ) showed a significant but very small positive correlation between the amount of work experience and PFS elaboration. Word count and year group were also positively correlated ( $\rho=.287$ ,  $p=.001$ ), as were word count, and amount of work experience ( $\rho=.29$ ,  $p<.001$ ). No significant relationship was found between year group and PFS elaboration.

Word count of PFS showed; a strong positive correlation with the elaboration of self within the narrative ( $\rho=.66$ ,  $p<.001$ ), a weak correlation with year group ( $\rho=.29$ ,  $p<.001$ ) and a negligible correlation with work experience ( $\rho=.13$ ,  $p<.001$ ). Although this might indicate that word count is more important than elaboration of self. I argue that it is very difficult to separate the two factors. A very short PFS narrative description is unlikely to demonstrate high elaboration of self, although a longer item may not necessarily be particularly high in elaboration.

Findings indicated that there was a significant weak positive correlation between self reported salience of PFS and year group ( $\rho=.11$ ,  $p=.007$ ), work experience ( $\rho=.12$ ,  $p=.003$ ), word count of PFS ( $\rho=.18$ ,  $p<.001$ ) and elaboration of self ( $\rho=.25$ ,  $p<.001$ ). This indicates that the degree to which the individual has considered their PFS through the lens of their ideal job may increase with educational stage and therefore potentially age, but that other factors may play a role, such as work experience.

#### **4.4.2.4 Ordinal logistic regression.**

Possible predictor variables for PFS salience and elaboration were identified from the results of tests of difference and correlation. An ordinal linear regression was used to determine which independent variables might have a statistically significant effect on the dependent variables (salience and elaboration). This test was chosen, as the data met the first two assumptions of the test; the DVs were ordinal, and one or more of the IVs were continuous, ordinal, or categorical. Further checks in SPSS indicated that multicollinearity was not a concern, with tolerance values for elaboration ranging between .79 and .98 (collinearity statistics can be found in Appendix G), and tolerance values for salience ranging from .70 to .83 (Appendix G). The assumption of proportional odds was also met, as assessed by a full likelihood ratio test comparing the fit of the proportional odds model to a model with varying location parameters, elaboration,  $\chi^2(21) = 17.36$ ,  $p = .69$ , and salience  $\chi^2(33) = 35.16$ ,  $p = .37$ .

#### **4.4.2.5 Elaboration Ordinal Logistic Regression.**

A cumulative odds ordinal logistic regression with proportional odds was run to determine the effect of year group, work experience, parental SES, gender, and salience on elaboration. The assumption of proportional odds was met (see above). The deviance goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(1245) = 624.25$ ,  $p = 1.00$ . The final model statistically significantly predicted the dependent variable over and above the intercept-only model,  $\chi^2(7) = 52.41$ ,  $p < .001$ . Gender predicted elaboration of PFS, with the odds of females being in a higher category of elaboration being 2.15, (95% CI, 1.44-3.21) times that of males,  $\chi^2(1) = 13.92$ ,  $p < .001$ , a statistically significant effect.

An increase in salience was associated with an increase in the odds of higher elaboration scores, with an odds ratio of 1.44 (95% CI, 1.17- 1.78], Wald  $\chi^2(1) = 11.53$ ,  $p < .001$ . However, there was no significant association with increased work experience (Wald  $\chi^2(1) = .00$ ,  $p < .99$ ), parental SES (Wald  $\chi^2(1) = 1.30$ ,  $p < .72$ ), and year group (Wald  $\chi^2(1) = 1.48$ ,  $p < .22$ ).

#### **4.4.2.6 Ordinal Logistic Regression Salience.**

A cumulative odds ordinal logistic regression with proportional odds was run to determine the effect of year group, work experience, and elaboration, on the salience score. The assumption of proportional odds was met, as outlined above. The deviance goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(597) = 476.30$ ,  $p = 1.00$ . The final model statistically significantly predicted the dependent variable over and above the intercept-only model,  $\chi^2(3) = 30.94$ ,

$p < .001$ . An increase in elaboration score was associated with an increase in the odds of higher salience scores, with an odds ratio of 1.70 (95% CI, 1.36-2.1), Wald  $\chi^2(1) = 22.03$ ,  $p < .001$ . However, there was no significant association with work experience (Wald  $\chi^2(1) = 3.03$ ,  $p < .08$ ), or year group (Wald  $\chi^2(1) = 1.65$ ,  $p < .20$ ). Hypothesis 1: students with greater experience of work will demonstrate higher levels of future work self salience and elaboration.

Although both elaboration of self ( $\rho = .08$ ,  $p = .046$ ) and salience ( $\rho = .12$ ,  $p = .003$ ) showed a statistically significant positive correlation with previous work experience, the effect size was weak.

#### 4.5 Key Findings

*How do young people narrate their PFSs when using ideal job as a cue?*

**RQ 1.1 What is the content of young people's PFS narratives?**

*Does PFS content differ with age, gender and experience?*

- Findings indicate that young people can think about and imagine their PFSs. When prompted to think about their ideal future, they narrated futures that included five categories covering various aspects of self; **My work**, **Why I do it**, **Life outside work**, **My values** and **How I feel**.
- **My work**: This category included details pertaining directly to the job and contained two subcategories, *what I do* and *where and when I work*. This was the most commonly seen category, with 31% of narratives including an overview of the job they hoped to do and 17% including work location. Work-life balance was seen in some narratives (8%).
  - Gender and year group differences were apparent in this category. Male participants were the most likely to offer a structured and practical description of their future work routine, whereas females were more likely to write about being busy in their jobs. HE students were more likely to discuss location and work hours than younger students.
- **Why I do it**- Young people often wrote about the value that job would bring to their future self. This contains two subcategories, *expectations* and *money and security*. Having work that brought happiness, success, variety and fulfilment all featured in some narratives.
  - Some gender and age differences were evident in the narratives. Males were the most likely to refer to their salary when discussing their future job, whereas females placed a greater emphasis on financial stability and

job success in their responses. Older participants were more likely to highlight a desire to be in a position where they did not worry about money rather than a wish for a high salary *per se*.

- **Life outside work-** This category demonstrates that when young people think about their future ideal job they may also be prompted to think about how they will spend their free time outside of work, who they will spend it with and their possessions. This contains three subcategories; *connections, activities and what I have*. Several participants (15%) discussed their family, children and romantic relationships. Travel and holidays were components of a number of narratives (7%). Home and home environment were components of some narratives. Possessions were featured in only a small number of responses.
  - Older students were more likely to highlight the importance of connections than younger ones, but there were no obvious differences by gender. Younger students were the most likely to discuss possessions.
- **My values-** This category indicates that young people have an idea of the type of person they want to be in the future, the values that they expect to live their lives by, as well as the skills, attributes and qualities they wish to have. Helping others was seen in a number of narratives (11%). Being happy and enjoying life, and having independence were also seen in some responses. Very few responses indicated a desire for fame, power or status in their future lives. Females and older students were the most likely to value helping others.
- **How I feel-** Being physically fit and psychologically healthy were features of a small number of narratives. Although relatively few responses included being physically and psychologically robust, these components were important enough to some participants to be elicited by a prompt focused on future work. This may indicate that health and wellbeing are of current concern for some young people or that they are alert to the risks and impact that physical and psychological health can have on their lives.
- Findings suggest that young people do not view work in a vacuum but as part of their wider future life. They often have a clear view of what they want from a job and place value on factors beyond money and wealth, indicating that they believe that their job will play an integral role in their future self and their satisfaction with their future lives. Many narratives featured components associated with life satisfaction. For example, features such as helping others and fulfilment have been associated with eudemonic wellbeing, very few featured fame, wealth or

status, which is at odds with the hedonism that young people are commonly labelled with.

- Older students seemed to have a greater understanding of work and what they want from their future work. Females and older students appear to prioritise flexibility and work balance.

***RQ 1.2: How salient and elaborated are young people's PFS narratives?***

- **Salience** (the clarity with which young people imagine their PFS, how often they think about it and how easy it is to imagine). The composite PFS salience scores ranged from 1 to 5, with a median score of 4.00. This suggests that young people's future aspirations and goals are moderately salient in their narratives. Contextual and demographic factors may play a role in salience of PFS. Females demonstrated the highest levels of salience. Year group, work experience and elaboration of PFS were also positively correlated with salience. The more often one thinks about the future offers more opportunity to explore different aspects of the future self, however, this is only possible if they are available to the individual. Findings indicate that the elaboration of PFS score is predictive of salience, with higher levels of elaboration resulting in higher salience scores.
- **Elaboration of self.** the vividness and detail, including different aspects of self, within the PFS narrative. The elaboration of self in participants' narratives ranged from 0 to 4, with a median score of 2. In keeping with findings from the content analysis, gender, year group, SES and work experience were all found to play some role in the elaboration of self within the narratives.
  - Females, older students, and individuals with the most work experience demonstrated the highest levels of elaboration of self.
  - The difference in elaboration of self between Year 11 and Year 13 was not found to be significant. However, there was a significant increase in elaboration as students moved into higher education, possibly reflecting a more homogeneous group in higher education settings.
  - In terms of SES, individuals in the highest and lowest SES group (using parental occupation as an indicator) demonstrated the highest levels of PFS elaboration.
  - There was a weak positive correlation between work experience and elaboration of self. This suggests that individuals with greater work experience tended to demonstrate higher levels of self-elaboration in their PFS narratives.



- Greater experience and underlying knowledge, or high cognitive ability, all making it easier to explore potential futures and understand different job roles. SES may impact the way young people think about and write about their jobs differently according to which class they are in. It should be considered that elaboration is likely influenced by, ability and, or motivation, to express oneself in writing.
- Word count showed a strong significant correlation with elaboration, which is unsurprising; it would be difficult to express detail in short narratives and would be difficult to separate the two variables. There was only a weak correlation between word count and salience.
- Ordinal logistic regression suggests that gender is predictive of levels of PFS elaboration. Females were found to have higher odds of being in a higher category of elaboration compared to males, with a statistically significant effect. Findings indicate that the PFS salience score is predictive of elaboration, with higher levels of salience resulting in higher elaboration scores.
- There appears to be a bidirectional relationship between PFS salience and elaboration. However, there is a higher odds ratio for the impact of PFS elaboration on salience (odds ratio of 1.70), than salience on elaboration (odds ratio of 1.44).
- Older students and females were more likely to demonstrate aspects consistent with greater self-knowledge. Females, older students and those with more experience demonstrated the highest levels of elaboration of self and salience of PFS. Greater self knowledge was also linked with contextual factors such as SES and work experience.

These findings contribute to the existing knowledge of adolescent identity development. They also indicate that education professionals could use PFSs to help guide students to developing a coherent sense of self which could support career planning and increase wellbeing.

**Next Steps.** The following chapter will explore adolescents' occupational PFSs, in terms of the level of education and the type of jobs that they aspire to. There is also a consideration of how occupational PFSs relate to individual beliefs and behaviours. The same group of participants and data collection tool (written survey) were used for both Study 1 and Study 2.

## **5 Study 2 Occupational aspirations, beliefs and behaviours**

### **5.1 Study 2 aims and research questions**

#### **5.1.1 Aims**

Research suggests that a range of interacting individual and contextual factors are likely to influence future-oriented beliefs and behaviours, including developmental stage, demographic factors, experiences and environment. This study explored participants' educational and career aspirations, as well as the factors that might influence their occupational goals. Specifically, the study asks how actively engaged young people are in planning to meet their occupational goals, how certain they are about meeting them and how difficult they perceive it would be to achieve their ideal occupations. This study also explored more general beliefs about self and the future, considering the extent to which adolescents feel in control of their lives and their self-confidence for the future.

#### **5.1.2 Study 2 Research Questions (RQs)**

##### ***RQ 2.1 What are young people's academic aspirations and expectations?***

- What level of education do young people hope to achieve and how do these differ from their expectations?
- How are differences in expected and aspired level of education related to demographic factors (gender, year group and SES)?

##### ***RQ 2.2 What are young people's career aspirations and what are the main influences on these?***

- What type of careers do young people aspire to?
- How are participant demographics (gender, year group and SES) related to career aspirations?
- What do young people perceive to be the main influences on their career aspirations?

##### ***RQ 2.3. What beliefs and behaviours do young people exhibit with regard to their occupational future selves?***

- How active are young people in planning and preparing for their careers?
- To what extent do young people demonstrate a sense of agency over their occupational futures?

How are future-oriented beliefs, behaviours, and demographics related?

#### **RQ 2.4. What is the relationship between PFSs prompted by ideal job and future-orientated beliefs and behaviours?**

- How are qualitative measures of PFSs (elaboration of self and salience) related to; aspired to job (SES and occupational field), confidence for the future, sense of control, career planning behaviour.

### **5.2 Method**

**Participants.** Participant selection and demographic details are outlined in Chapter 3 (section 3.2.1)

**Procedure.** Data collection and the design of the study have been described in detail in Section 3.3. As previously discussed, data were collected as part of a larger online survey. Data were downloaded and coded, where necessary, in Excel. Analysis was carried out using SPSS.

### **5.3 Coding and Analysis**

#### **5.3.1 RQ 2.1 What are young people's academic aspirations and expectations?**

- What level of education do young people hope to achieve and how do these differ from their expectations?
- How are differences in expected and aspired level of education related to demographic factors (gender, year group and SES)?

##### **5.3.1.1 Socio-economic status.**

As discussed in Chapter 3 (section 3.4.1) the ONS Occupational coding tool was used to establish the National Statistics Socio-Economic Classification (NS-SEC) simplified analytic class for parent/carer jobs. This coding tool was also used to establish the NS-SEC simplified analytic class for parent/carer jobs. In this study the 3-category system; where Class 1 is the highest socioeconomic class, and Class 3 the lowest, was used. Highest parental qualification was also used as a further proxy for socio-economic class.

##### **5.3.1.2 Academic aspirations and expectations.**

Participants were asked to identify the highest level of education that they hoped to achieve (idealistic) and also expected to achieve (realistic), from the following options: GCSE/Level 2, A Levels/Level 3, Undergraduate degree and Postgraduate degree. Frequencies and descriptive statistics were calculated to represent the data.

Differences and relationships were explored using non-parametric tests, for ordinal data. Spearman rank correlations were used to test relationships where the data were measured on an ordinal scale, variables represented pairs of data and relationships were monotonic. Mann Whitney U, tests were run to test for difference, where dependent

variables were ordinal, with an independent variable that consisted of two independent, categorical groups. Wilcoxon- signed rank tests were used for ordinal dependent variables, with two categorical related groups.

### 5.3.2 **RQ 2.2 What are young people’s career aspirations and what are the main influences on these?**

- What type of careers do young people aspire to?
- How are participant demographics (gender, year group and SES) related to career aspirations?
- What do young people perceive to be the main influences on their career aspirations?

#### **5.3.2.1 Ideal Job.**

Participants were asked to write a free response to the following item: ‘mentally travel into the future and imagine your future self. Tell us what your perfect/ideal job would be’.

#### **5.3.2.2 SOC 2020.**

As described in Chapter 3, the SOC 2020, 4-digit unit group was initially used to classify the occupational data. However, this resulted in a larger range of categories than was deemed to be useful (over 90 categories of job were identified with numerous categories containing data from only one participant) and the data were therefore recoded to the sub-major group level, which is a two-digit classification (resulting in 23 different sub-categories of job). For example, a secondary school teacher would have a four-digit code of 2314, but the two-digit code would be 23, for teaching and educational professionals. The sub-major group classification still provides an indication of the skills and qualifications required by the job, as well as information about the general job area.

#### **5.3.2.3 Occupational field.**

These data were then re-organised according to the broader, general area of the job, rather than taking into account the skills or qualifications required. For example, according to the SOC 2020 (sub-major group) classification a General Practitioner (physician) would be coded as Health Professional (22), and a nurse as Health and Social Care Associate professional (32), denoting the higher level of training and qualifications required by the General Practitioner. However, when categorised by occupational field, both would be classed as being jobs within Health and Social Care. Classification of occupational field and how it relates to the SOC2020 classification can be found in Table 5.1. Frequencies and percentages of each group were calculated. Where appropriate group differences were explored

using Chi square tests of association.

**Table 5.1**

*Occupations Classified by SOC 2020 Sub-major Groups and Corresponding Occupational Field*

SOC-20 Sub-major Group Code and Description	Occupational Field Category
11 Corporate Managers and Directors	Managers
12 Other Managers and Proprietors	Managers
21 Science, Research, Engineering and Tech Professionals	Science & tech
22 Health Professionals	Health & social care
23 Teaching and Other Educational Professionals	Education
<i>24 Business, Media and Public Service Professionals</i>	<i>Business and public service</i>
31 Science, Engineering and Technology Associate Professionals	Science and tech
32 Health and Social Care Associate Professionals	Health and social care
33 Protective Service Occupations	Protective services
34 Culture, Media and Sports Occupations	Culture media & sport
35 Business and Public Service Associate Professionals	Business and public service
41 Administrative Occupations	Admin
42 Secretarial and Related Occupations	Admin
51 Skilled Agricultural and Related Trades	Trades
52 Skilled Metal, Electrical and Electronic Trades	Trades
53 Skilled Construction and Building Trades	Trades
54 Textiles, Printing and Other Skilled Trades	Trades
61 Caring Personal Service Occupations	Health and social care
62 Leisure, Travel and Related Personal Service Occupations	Leisure and travel
71 Sales Occupations	Sales
82 Transport and Mobile Machine Drivers and Operatives	Transport
91 Elementary Trades and Related Occupations	Trade

### **5.3.3 Content analysis of self perceived influences on ideal job choice.**

After stating their ideal job, participants were asked to '*tell us what sparked their interest in this job in as much detail as possible*'. These qualitative data were explored using a content analysis.

#### **5.3.3.1 Coding framework for self perceived influence.**

Following the initial familiarisation stage and discussion with the GOALS research group it was agreed that Adler's (2015) narrative identity motivation framework was suitable for a content analysis of these data. The first 100 responses were coded by the author, using the initial framework (see Table 5.2). Following further discussion with the research group, it was agreed that for all the data to be included in one category, three additional codes should be included ('non specific desire' and 'experience' and 'no code worthy material'). Additionally, to avoid ambiguity, Adler's 'intimacy' code was renamed 'personal relationships'. The definitions were fine tuned to suit the context of the data, and examples were added to the code book.

#### **5.3.3.2 Content analysis.**

The narrative data from this item were imported into Excel. This was chosen as a tool, as responses to this item were generally short, which meant it was easy to navigate and the data was being coded into a relatively simple framework which used the finalised coding framework based on narrative identity motivational themes). Each response was coded as an individual meaning unit and given one code from the framework. Where more than one influence or motivation was observed in the data, this was discussed among the research team and the most prominent code was given. Where a more prominent influence was not evident the first influence identified was coded.

All responses were initially coded by the author and, after training, 20% of responses were coded by a second researcher to establish intercoder reliability. Cohen's Kappa was used to statistically assess the inter-rater reliability for each individual code. Details of intercoder reliability for each code can be found in Table 5.3. There have been several suggestions for interpretation of the Cohen's Kappa statistic; however even using (McHugh, 2012) more conservative interpretation all codes showed at least moderate agreement with the majority showing strong or almost perfect agreement.

**Table 5.2**

*Narrative Identity Framework for Self Perceived Influence on Ideal Job*

<b>Code</b>	<b>Definition of variable and additional comments</b>	<b>Examples</b>
<b>No code worthy material*</b>	No answer or I don't know	<i>I don't know</i> <i>Left blank</i>
<b>Non-specific desire*</b>	Non- specific desire to do the job, There is no obvious underlying meaning. Narratives are generic.	<i>I just always wanted to this</i> <i>I'd love to teach</i>
<b>Growth goals</b> <b>Intrinsic</b> <b>Extrinsic</b>	The protagonist makes intentional efforts to guide his or her self-development in a personally meaningful direction oriented toward personal growth. Striving for achievement and towards a goal (this is taking control).  <b>Intrinsic-</b> personal growth and eudemonistic happiness, meaningful relationships eg feel low pressure and <b>extrinsic-</b> money, status, power	<i>Because (this job will give me or allow me to be) what I want.</i>  <i>To have a nice house.</i>  <i>To earn lots of money.</i>
<b>Autonomy</b>	The protagonist views the self as unique or different from others, often reflected by self-assertion, independence, mastery, or being better or worse than others. The need to feel as though one is a causal agent with respect to one's own actions.	<i>I am good at Science</i> <i>I will reach my goal</i> <i>I always do what I set out to</i> <i>I will be independent</i> <i>I am a person who is...</i>
<b>Communion</b>	The protagonist aims to have a sense of togetherness and harmony with other people or their environment, to dialogue, share, help, connect to, and care for others.	<i>I want to help others</i> <i>I want to make a difference</i>
<b>Crystallisation of desire</b>	The protagonist decides to make a life change for the purpose of wanting to move towards something desirable in the future.	<i>I have a passion for cooking and this job means I can create fantastic food every day</i>
<b>Crystallisation of discontent</b>	The protagonist decides to make a life change for the purpose of escaping a bad situation in the past.	<i>I do not want to end up working in an office</i>
<b>Personal relationships**</b>	The narrative contains discussion of a relationship that produced positive affect or reciprocal dialogue	<i>My mum is a teacher</i> <i>I had brilliant teachers</i> <i>The doctors that look after me are amazing</i>
<b>Experience</b>	The protagonist decides to make a life change due to an experience or event rather than the future purpose. Could be active – protagonist has tried out aspects of the job or passive- have seen or read about the job.	<i>I did work experience in a lab</i> <i>I was inspired by watching true crime documentaries.</i>

*Note:* \*codes added following initial coding (not existing NI themes). \*\*Named 'Intimacy' in original NI framework.

**Table 5.3***Intercoder Reliability of Self-Perceived Influences on Ideal Job*

Code	Frequency	Kappa	SE	Lower CI	Higher CI
Non-specific desire (nsd)	23	0.77	0.07	0.62	0.92
Crystallisation of desire (cdes)	24	0.85	0.06	0.73	0.97
Crystallisation of discontent (cdis)	1	1	0	1	1
Growth goals (gg)	13	0.91	0.007	0.78	1
Autonomy (aut)	2	0.66	0.32	0.04	1
Communion (com)	18	0.83	0.07	0.69	0.98
Personal relationships (pr)	9	1	0	1	1
Experience (exp)	38	0.92	0.04	0.85	1
No code worthy material	12	0.95	0.04	0.87	1

**5.3.4 Analysis of quantitative data**

A Pearson Chi Square analysis was used to explore differences group differences in self perceived influence were explored, in terms of gender, educational stage and participant socioeconomic status. This test was used as the data met the assumptions of the test, that variables should be ordinal or nominal and each variable should consist of two or more categorical, independent groups. Where analysis indicated that a higher number of cells with an expected count of less than 5, Chi Squared tests were repeated after cells with low expected values were removed. Fischer's exact tests could not be undertaken due to large size of contingency tables. To identify group differences in specific job types, individual, follow up Chi square tests were undertaken. Spearman's rank correlations were undertaken to calculate the relationship between ordinal variables. The ONS indicates that the socioeconomic status of jobs, as classified using NS-SEC 1-3 classification, can be considered ordinal, the 1-8 classification cannot. As such NS-SEC 1-3 classification data was used in both correlational analysis and tests of association.



**5.3.4.1 RQ 2.3. What beliefs and behaviours do young people exhibit with regard to their occupational future selves?**

- How active are young people in planning and preparing for their careers?
- To what extent do young people demonstrate a sense of agency over their occupational futures?
- How are future-oriented beliefs and behaviours, and demographics related?

SCCI, perceived control, and confidence for the future scales were calculated by taking the mean of the individual subscales. Descriptive statistics were calculated for the following measures: SCCI (and sub-scales), PLANS 2 confidence for the future, sense of control (and subscales), certainty of achieving ideal job and difficulty in achieving ideal job. Frequencies and percentages of responses relating to whom participants had talked to about their career plans were also calculated. Descriptive statistics were calculated and as data were considered ordinal rather than interval, non-parametric tests were used to analyse the data. Spearman rank correlations were used to explore relationships between variables where data were measured on an ordinal scale, variables represented pairs of data, and relationships were monotonic. Kruskal-Wallis tests were conducted to explore how differences in future-orientated beliefs and behaviours (career development and the amount of work experience and beliefs; perceptions of control, self-confidence for the future, certainty of achieving ideal job and ease of attaining the ideal job) differ by gender, year group and socioeconomic status. Relationships between variables were further explored using ordinal logistic regression analysis. Assumptions testing relevant to the tests used can be found in the results section (5.4).

**5.3.4.2 RQ 2.4. What is the relationship between PFSs prompted by ideal job and future-oriented beliefs and behaviours?**

- How are qualitative measures of PFSs (elaboration of self and salience) related to; aspired to job (SES and occupational field), confidence for the future, sense of control, career planning behaviour.

All measures had been previously coded and descriptive statistics calculated where applicable (See Chapter 3 and 4). Spearman rank correlations were used to explore relationships. Potential predictor variables, identified from initial correlations, were analysed using ordinal logistic regression analysis.

## 5.4 Results

### 5.4.1 RQ 2.1 What are young people's academic aspirations and expectations?

#### *What level of education do young people hope to achieve, and how do these differ from their expectations?*

Participants were asked to indicate which level of education they hoped to achieve and also which level they expected to achieve. Overall, participants demonstrated high aspirations and expectations in terms of their educational outcomes. Figure 5.1 shows that 80% hoped to achieve an undergraduate degree or higher and 73% expected to do so. A Wilcoxon signed-rank test showed that participants' educational aspirations ( $Mdn=4.00$ ,  $M=3.27$ ) were significantly higher than their expectations ( $Mdn=3.00$ ,  $M=3.00$ ),  $Z = -10.89$ ,  $p < .001$ , with a medium effect size ( $r = .32$ ).

#### **5.4.1.1 Highest Level of Education Hoped and Expected to Achieve.**

While more than half (51%) of our sample hoped to achieve a post graduate qualification, considerably fewer expected to do so (30%). Findings also suggest that very few participants hoped, or expected, that Level 2 would be their highest qualification. However, as approximately two-thirds of the sample were already studying in further or higher education, and, as such were likely to have already achieved a higher level of educational outcome, it is important to interpret the findings for the full sample with some caution. Data from each year group has therefore been analysed independently (Table 5.4).

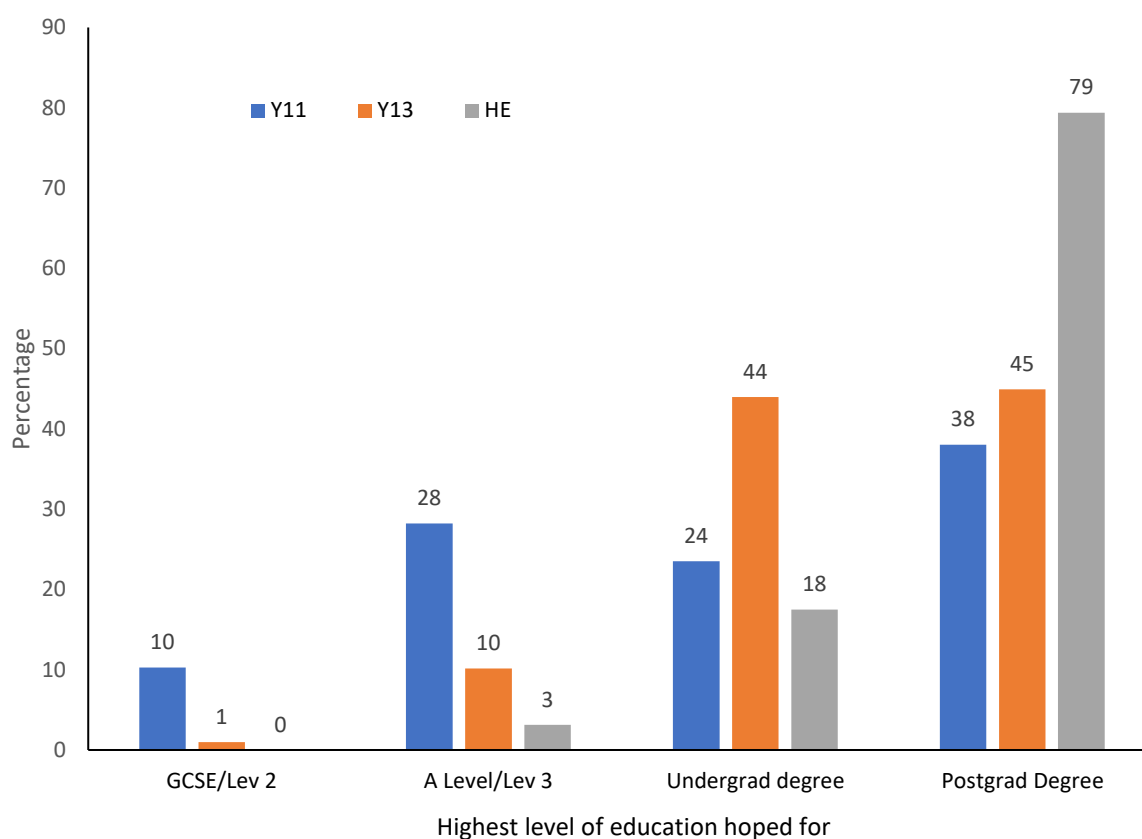
**Table 5.4***Level of Expected and Hoped for Education by Group*

Group	Education	Level of education of expected or hoped for (% of group)			
		GCSE/Lev 2	A Level/ Lev 3	Undergrad degree	Postgrad Degree
Y11	Hope	10	28	24	38
	Expect	16	32	38	14
Y13	Hope	1	10	44	45
	Expect	2	15	59	25
HE	Hope	0	3	18	79
	Expect	0	1	36	63
Female	Hope	2	10	32	56
	Expect	4	12	49	35
Male	Hope	8	26	24	42
	Expect	12	27	37	25

Figure 5.1 shows the hoped for level of education by year group. Of the Year 11 participants, those who were yet to achieve any qualifications, 62% hoped to achieve an undergraduate degree or higher. For year 13 students, this increased to 89%, and 79% of final year HE students hoped to achieve a postgraduate qualification.

**Figure 5.1**

*Highest Level of Education Hoped for by Year Group*



Further analysis of the potential impact of year group can be found below.

**5.4.1.2 How are differences in expected and aspired to level of education related to demographic factors (year group, SES and gender)?**

**5.4.1.3 Year group.**

As previously discussed in RQ1a, in order to take into account the stage of education already reached by participants, the aspired to and expected educational level were analysed separately for each year group. Table 5.5 shows descriptive statistics for educational hopes and expectations for each year group. As might be expected, due to some level of previous academic success, students in older year groups demonstrated

higher hopes and expectations for their education than those in lower year groups. A Wilcoxon signed rank test demonstrated educational aspirations were significantly greater than the level of expectations for all year groups. However, the size of the effect decreased with year group. Year 11 showed a medium size effect ( $r=.38$ ), as did Year 13( $r=.30$ ) and HE students a small effect ( $r=.20$ ).

**Table 5.5**

*Differences in Hoped for and Expected Level by Group*

Group	Level of education	Mdn	Wilcoxon sign test		
			Z	p	r
Year 11	Hoped	3.00	-8.00	<.001	.38
	Expected	3.00			
Year 13	Hoped	3.00	-6.70	<.001	.30
	Expected	3.00			
HE	Hoped	4.00	-3.49	<.001	.20
	Expected	4.00			
SES 1	Hoped	4.00	-8.383	<.001	.31
	Expected	3.00			
SES 2	Hoped	4.00	-5.734	<.001	.37
	Expected	3.00			
SES 3	Hoped	3.00	-4.536	<.001	.35
	Expected	3.00			
Female	Hoped	4.00	-9.006	<.001	.33
	Expected	3.00			
Male	Hoped	3.00	-5.821	<.001	.29
	Expected	3.00			

Spearman's rank coefficient was used to assess the relationship between educational stage, and both expected level of education and hoped-for level of education. There was a significant, positive relationship between educational stage and level of expected educational outcome ( $\rho(590)=.51, p<.001$ ) and also between educational stage and hoped-for educational level ( $\rho(599)=.51, p<.001$ ). In both cases the effect size was moderate. However, it should be noted that this may only be meaningful for individuals in lower year groups as for example those in HE would usually already have Level 2 and Level 3 qualifications.

#### 5.4.1.3 Participant SES.

Wilcoxon signed rank tests indicated that hoped-for educational level was significantly higher than expected educational level for participants in all socio-economic groups, with a moderate effect size (Table 5.5).

Spearman rank correlations showed a weak positive relationship between young people's expected level of education and socioeconomic level,  $\rho(560) = .19, p<.001$ , and also their hoped-for level of education and socioeconomic level,  $\rho(569) = .12, p=.003$  (Table 5.6). This suggests that educational hopes and expectations increase somewhat in line with SES. Participants in the highest socioeconomic (Class 1) demonstrated similar educational expectations ( $Mdn= 3$ ) to those in Class 3 ( $Mdn= 3$ ), but the educational hopes of those in Class 1 ( $Mdn=4$ ) were higher than for those in Class 3, ( $Mdn= 3$ ).

**Table 5.6**

*Correlations for Hoped for and Expected Level Education with Year Group and SES*

	1	2	3	4
1. Year Group	-	.38**	.51**	-.10*
2. Hoped Education	.38**	-	.74**	-.12**
3. Expected Education	.51**	.74**	-	-.19
4. SES	.10*	.12**	.19**	-

*Note.* \*\* Correlation is significant at the 0.01 level (2-tailed). \* Correlation is significant at the 0.05 level (2-tailed). Spearman correlations calculated.

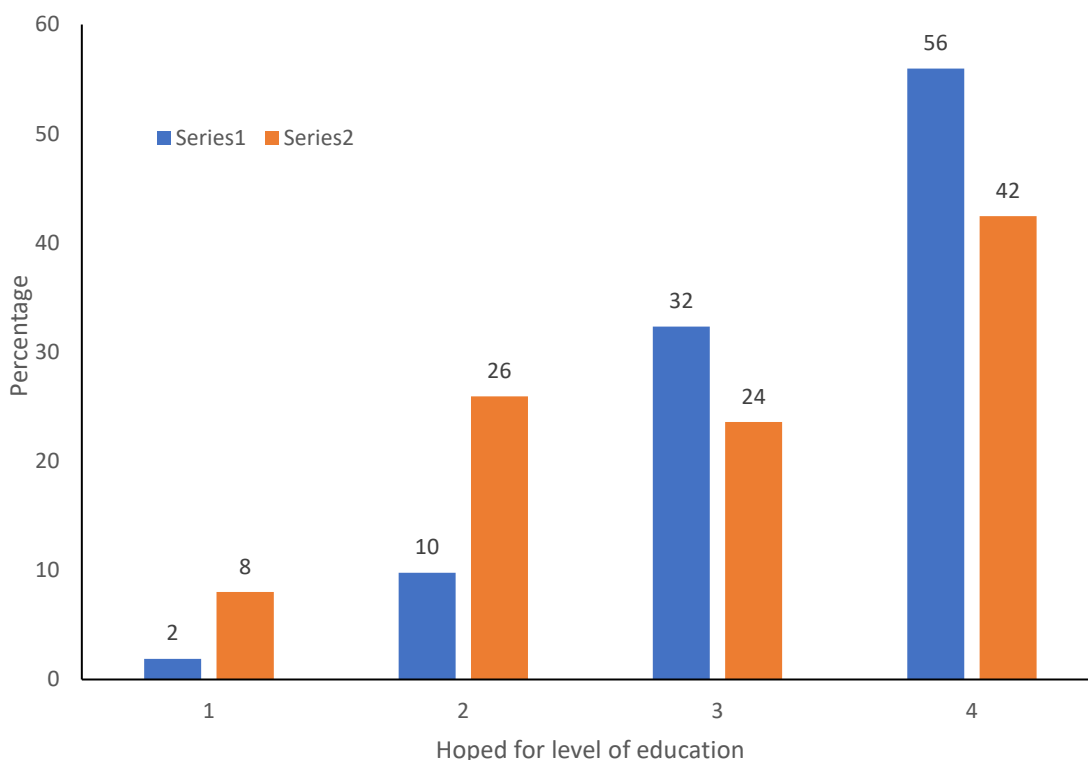
**5.4.1.4 Gender.** A Mann-Whitney U test was indicated that female participants reported significantly higher hoped for levels of education ( $M=3.42, Mdn= 4.00, n=368$ )

than males ( $M= 3.00$ ,  $Mdn=3.00$ ,  $n=212$ ),  $U= 30409.50$ ,  $z=-4.83$ ,  $p<.001$ , with a small effect size,  $r= .20$ . Female participants also reported significantly higher expected levels of education ( $M=3.15$ ,  $Mdn=3.00$ ,  $n=368$ ) than males ( $M=3.00$ ,  $Mdn=3.00$ ,  $n=212$ ),  $U= 28790.00$ ,  $z= -5.10$ ,  $p<.001$ , with a small effect size,  $r=.21$  Figure 5.2 shows that females were more likely to hope for an undergraduate level of education (88%) or above than males (66%). Similar findings were seen for expected level of education with 84% of females expected to gain an undergraduate degree or higher in comparison with only 62% of males expecting the same level (Figure 5.3).

Wilcoxon signed rank tests (Table 5.5) indicated that female participants have significantly higher hoped-for levels of education than expected levels, with a moderate effect size. Similarly male participants also reported significantly higher hoped from levels of education than expected with a small effect size.

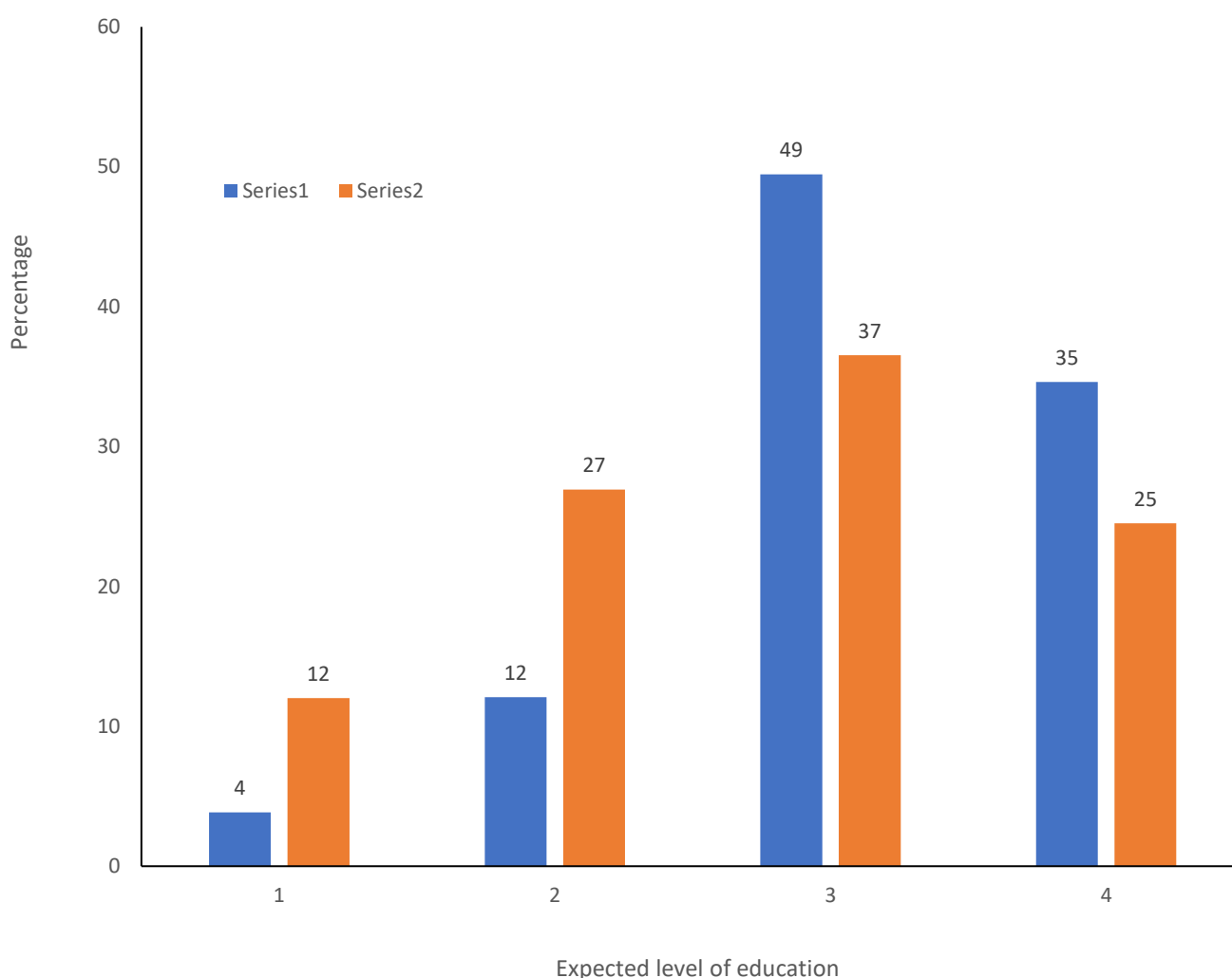
**Figure 5.2**

*Hoped for Level of Education by Gender*



**Figure 5.3**

*Expected Level of Education by Gender*



**5.4.2 RQ 2.2 What are young people’s career aspirations and what are the main influences on these?**

In response to the item ‘*mentally travel into the future and imagine your future self. Tell us what your perfect/ideal job would be*’, 610 participants provided an answer. Of these responses, 549 (90%) gave a clearly identifiable job; one to which it was possible to assign a SOC 2020 code (e.g. teacher). Of the remaining 61 (10%), 27 (4%)



gave answers which were unclear (e.g. rich, work with children) and a further 34 (6%) told us they did not know or were unsure. There were no significant differences across genders or year groups in terms of the type of responses given. These results suggest that the majority of young people have given some thought to their future work and have an occupation that they aspired to at the time they participated in the study.

#### **5.4.2.1 What type of careers or occupations do young people aspire to?**

What occupational field do young people aspire to work in? Data on individual job choices was first coded using the SOC 2020 classification, this gives an indication of occupational area, skills and qualifications and therefore, also an indication of the socioeconomic level of the job. The job data was also coded to indicate the broader occupational field only (Table 5.1).

#### **5.4.2.2 Ideal job by SOC 2020 classification.**

Table 5.7 shows the percentage of participants' ideal job choices classified by SOC 2020 coding. Overall, professional roles were the most hoped-for occupations, with trades and unskilled roles being the least popular. In particular *Health Professional* roles were the most popular choice of ideal job role, accounting for 20% of career aspirations, followed by *Science, Research and Technology Professional* (16%), *Culture Media and Sports* (14%), *Business, Media and Public Service Professionals* (11%), *Managers and Proprietors* (9%) and *Teaching and Other Educational Professionals* (7%). Trades and unskilled jobs were the least popular choice of jobs; for example, less than 1% of participants aspired to *Elementary Administration* and *Service Occupations*.

#### **5.4.2.3 Ideal job by occupational field.**

Figure 5.4 shows the distribution of hoped-for jobs in terms of occupational field, ie where ideal job data had been re-categorized to reflect only industrial area, regardless of socioeconomic level. Findings indicate that jobs in the field of Health and Social Care were the most commonly aspired to, with over one-fifth of young people hoping for a job in this field. Other popular occupational areas included science and technology (16%), culture, business and sport (14%), management (9%) and education (7%).

#### **5.4.2.4 Socio-economic level of ideal job.**

Figure 5.5 shows the percentage of participants' ideal jobs, as categorised by NS-SEC 1-3 class. Here we see that the vast majority of participants (74%) aspired to jobs considered to be in the highest socioeconomic class (Class 1) with 11% in Class 2 and only 5% in Class 3. Findings indicate that most young people have high aspirations with regard to the socio-economic level of the job they hope for.

**Table 5.7***Ideal Job Classified by SOC 2020 Sub-Major Group*

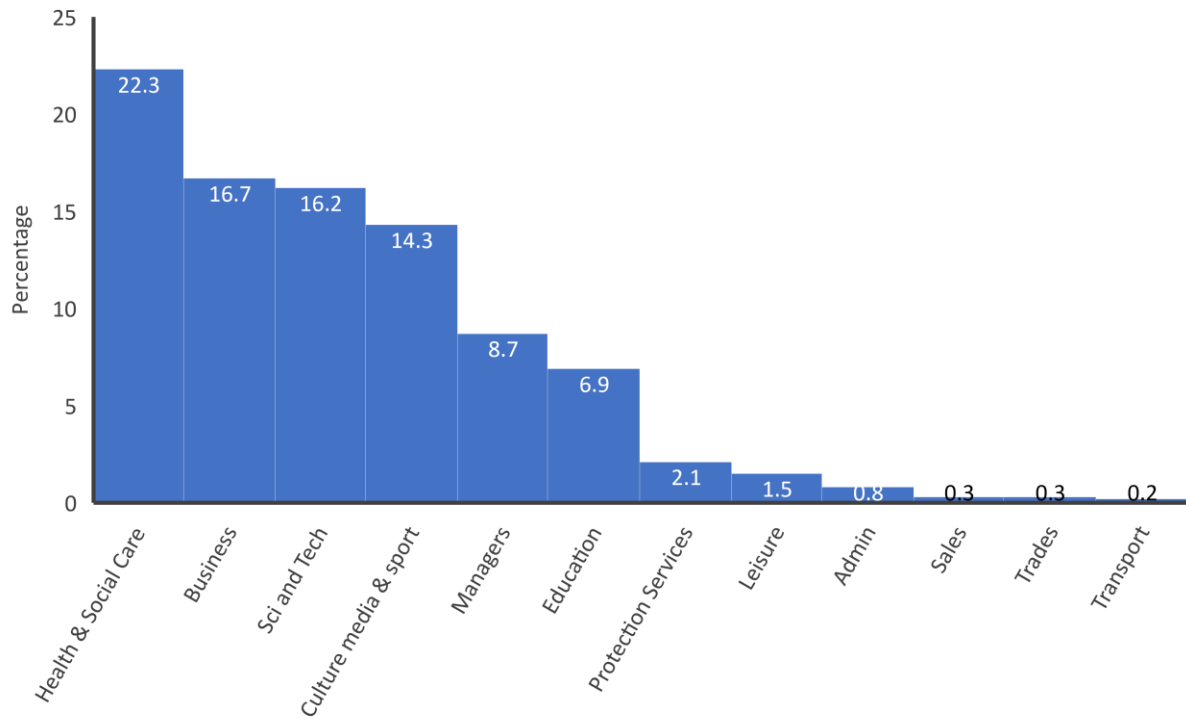
Submajor Group	Sub-major Group Description	Percentage of participant groups								
		Full sample	Females	Males	Year 11	Year 13	HE	ONS 1	ONS 2	ONS 3
11	Corporate Managers & Directors	7	5	11	7	8	6	7	8	56
12	Other Managers & Proprietors	2	2	1	3	1	<1	2	2	2.
21	Science, Research, Eng & Tech Profs.	16	14	17	11	19	17	18	10	13
22	Health Profs.	20	26	7	17	15	29	20	20	15
23	Teaching, Other Educ Profs.	7	10	3	6	4	12	7	5	9
24	Business, Media & Pub Serv. Profs.	11	10	10	12	13	5	12	9	7
31	Sci, Eng & Tech Associate Profs.	<1	<1	<1	<1	0	1	<1	2	0
32	Health & Social Care Associate Profs.	1	2	0	<1	2	<1	1	<1	1
33	Protective Service Occupations	2	2	3	3	1	2	1	2	7
34	Culture, Media & Sports Occupations	14	13	15	16	18	7	15	15	12
35	Bus & Public Service Associate Profs	2	1	5	2	3	1	3	<1	2.
41	Administrative Occupations	<1	<1	0	1	1	0	<1	<1	2
42	Secretarial & Related Occupations	0	0	0	0	0	0	0	0	0

**Percentage of participant groups**

Submajor Group	Sub-major Group Description	Percentage of participant groups								
		Full sample	Females	Males	Year 11	Year 13	HE	ONS 1	ONS 2	ONS 3
51	Skilled Agricultural & Related Trades	<1	<1	0	<1	<1	0	<1	0	0
52	Skilled Metal, Electrical & Electronic Trades	1	<1	4	1	<1	2	<1	2	4
53	Skilled Construction & Building Trades	1	<1	4	3	0	0	1	2	1
54	Textiles, Printing And Other Skilled Trades	<1	<1	1	<1	<1	<1	<1	0	1
61	Caring Personal Service Occupations	2	2	0	2	1	<1	1	0	5
62	Leisure, Travel, Personal Serv Occupations	2	2	<1	2	1	<1	1	3	2
71	Sales Occupations	<1	<1	<1	<1	0	<1	<1	<1	0
82	Transport & Machine Drivers/ Operatives	<1	<1	<1	<1	0	0	0	<1	0
91	Elementary Trades & Related Occupations	0	0	0	0	0	0	0	0	0
92	Elementary Administration & Service	<1	<1	1	1	<1	0	<1	<1	1
z	Uncodeable	10	8	13	7	10	14	8	15	9

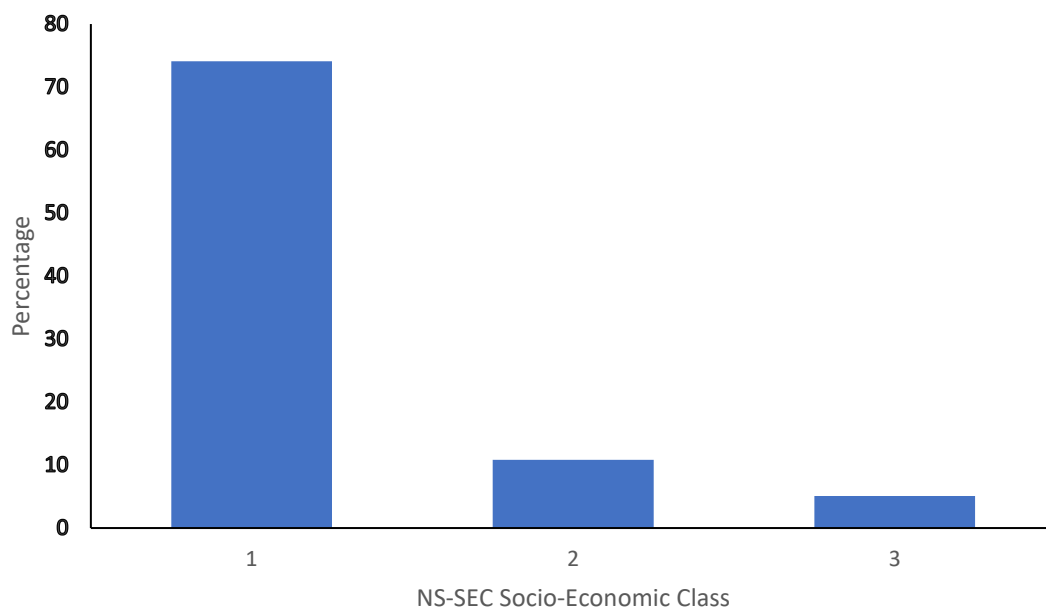
**Figure 5.4**

*Percentage of Participants Aspiring to each Occupational Field*



**Figure 5.5**

*Ideal Job by Socio-Economic Classification (1-3 Classification)*



**5.4.2.5 To what extent are career aspirations associated with; gender, educational stage and participant socio-economic status**

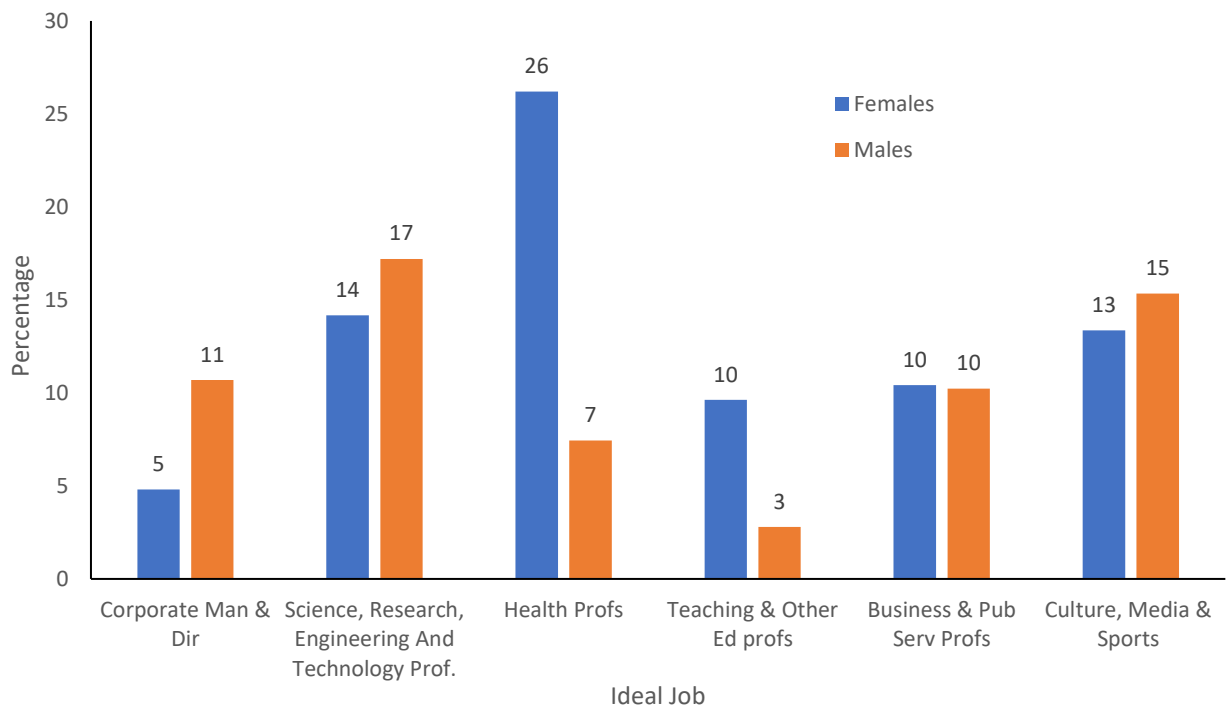
The impact of gender, educational stage and participant SES on career aspirations were investigated.

**5.4.2.6 Gender differences in career aspirations.**

**Soc 2020.** Overall, females and males differed in their ideal job choice in terms of SOC 20 classification (SOC 20 categories plus and ‘uncodeable’ category see Table 5.7);  $\chi^2 (21) = 105.84, p < .001$  (Table 5.7, Figure 5.6). Females were more likely to identify jobs in the health professions than males (26% v 7%), and education (10% v 3%). However, females were less likely to aspire to work in a corporate role than males (5% v 11%), science and technology (14%v 17%) and the trades (<1% v 9%) than male students.

**Figure 5.6**

*Most Popular Ideal Job Choices Classified According to SOC 2020 by Gender*



**5.4.2.7 Occupational field.**

Results also pointed to gender differences in the occupational field (12 occupational fields indicated in Table 5.8 plus an additional ‘uncoded’ category) of ideal job;  $\chi^2 (12) = 86.35, p < .001$  (Table 5.8). In particular, females were more than four times more likely (30.5%) to aspire to a job in the field of health and social care than males

(7.4%) and more than 3 times more likely to identify a role in education (9.6% v 2.8%) as their ideal job. Males were almost twice as likely to identify a role in management than females (6.7% v 12.1%). Although overall, relatively small numbers of young people identified an ideal job in more traditional trades; of those that did, over 10 times as many were males (8.8%) as females (0.8%).

**Table 5.8**

*Group Differences in Ideal Occupation Field*

Industry	Percentage of group							
	Fe- males	Males	Year 11	Year 13	HE	NS- Sec 1	NS- Sec 2	NS- Sec 3
Managers	7	12	10	9	6	8	9	8
Leisure and travel	2	<1	2	1	1	1	3	2
Sales	0	<1	0	0	1	0	1	0
Transport	0	<1	0	0	0	0	1	0
Sci & Tech	15	18	12	19	18	18	12	13
Health and Social	31	7	20	18	30	23	21	21
Education	10	3	6	4	12	7	5	9
Bus & Pub Serv	12	16	16	16	6	15	11	10
Pers. Serv	2	3	3	1	2	1	2	7
Cult. Med Sport	13	15	16	18	7	15	15	12
Admin	<1	1	1	1	0	1	1	2
Trades	<1	9	6	1	3	3	5	6

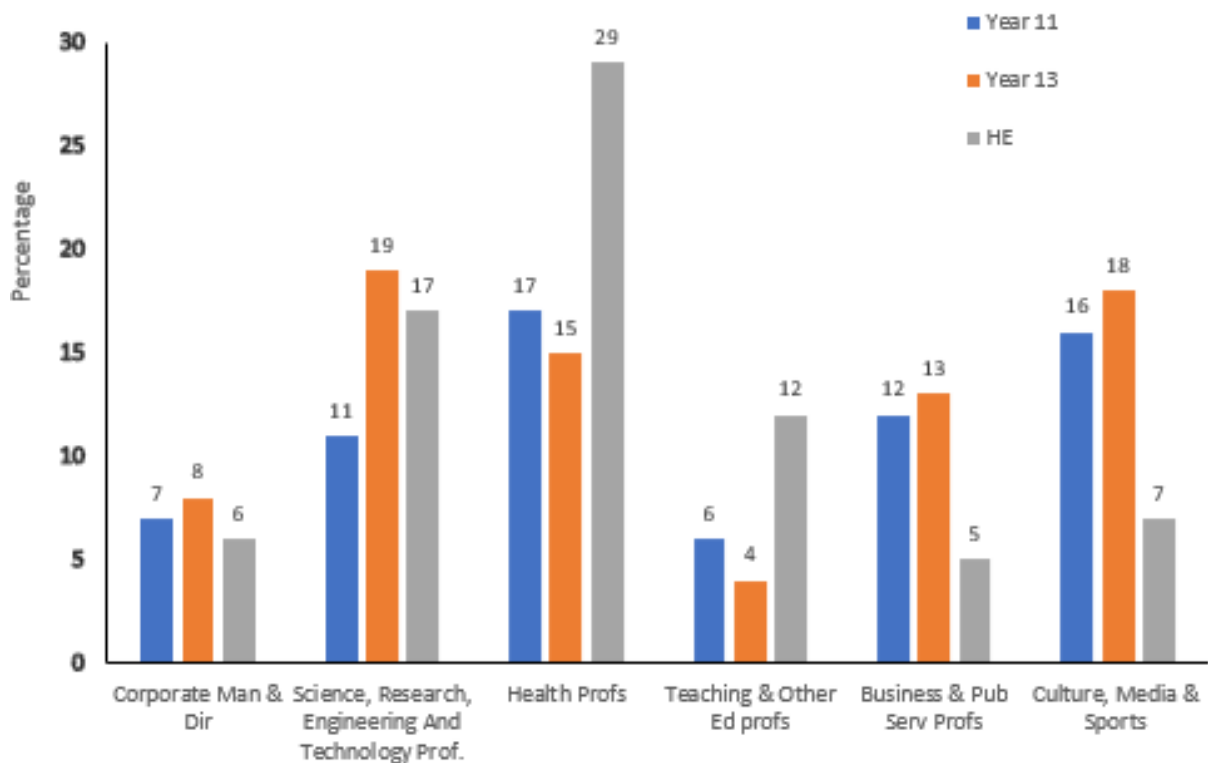
**5.4.2.8 Ideal job differences by year group**

**SES of ideal job.** The SES (Class 1-3, plus unemployed) of the ideal job identified by participants differed between year groups,  $\chi^2(6)=34.40$   $p<.001$ . In particular, significant differences were found between Year 11 and 13,  $\chi^2(3)=16.93$ ,  $p<.001$ , and between year 11 and HE,  $\chi^2(3)=24.49$ ,  $p<.001$ ; 26% of year 11 aspired to a job in the lowest 2 socio-economic classes compared with only 11% of year 13 and 8% of HE students. However, there were no significant differences between the socioeconomic level of jobs aspired to by year 13 and HE students,  $\chi^2(3)=4.95$ ,  $p=.18$ .

**SOC 2020 occupational group.** Findings also indicated year group differences in the Soc 2020 classification of ideal jobs identified,  $\chi^2(42)=56.62, p=.04$ . Figure 5.7 shows year group differences in the 6 most popular occupational groups identified by participants. HE students were approximately twice as likely to aspire to work in the health professions and teaching as those in lower year groups. However, HE students were less likely to aspire to jobs in business or in culture, media and sport.

**Figure 5.7**

*Soc 2020 Classification of Ideal Job by Year Group*



#### **5.4.2.9 Occupational field.**

Findings indicated differences in the occupational field of the ideal job by year group;  $\chi^2(22)=55.21, p<.001$ . However, only differences between students in HE and Y11,  $\chi^2(12)=39.60, p<.001$ , and HE and Year 13,  $\chi^2(11)=39.02, p<.001$ . In particular, 30% of HE students identified ideal jobs in the field of health and social care, in comparison with 20% of Year 11 students and 18% of Year 13. HE students were also more likely to aspire to jobs in the field of education (12%) than younger year groups (Year 11= 6% and Year 13= 4%). HE students, however, were less likely to identify jobs

in business and public service, only 6% of HE students identified jobs in this category compared with 16% of both Y11 and Y13 students). Similar year group differences were seen in culture, media and sport; 7% of HE students identified ideal jobs in this field compared with 16% of Year 11 and 18% of Year 13.

#### **5.4.2.10 Differences in ideal job by participant socioeconomic background**

**SES of ideal job.** There were small but significant correlations between the NS-Sec socio-economic classification of ideal job and participant socio-economic group according to the highest parental NS-Sec job classification ( $\rho=.16$ ,  $p<.001$ ), and the highest level of parental education and the socioeconomic group of the ideal job ( $\rho=.142$ ,  $p=.003$ ).

#### **5.4.2.11 SOC 2020 classification of ideal job.**

The type of ideal job as classified by SOC 2020 differed according to the participant socio-economic status as recorded by highest parental job;  $\chi^2(42)=59.61$   $p=.04$  (Figure 5.8). In particular, there were significant differences between participants in the highest socioeconomic class (Class 1) and those in the lowest (Class 3);  $\chi^2(20)=33.70$ ,  $p=.03$ . However, there were no significant differences between the ideal jobs identified by participants in Class 1, and Class 2 or between those in Class 2 and 3. Participants in the highest socio-economic group were more likely than those in the lowest group to aspire to jobs in science and technology, the health professions and business and public services, but less likely to aspire to a job in education.

#### **5.4.2.12 Occupational field of ideal job.**

When analysed in terms of occupational field, no statistical differences were found by participant socioeconomic level. This may indicate that it is only the socio-economic aspect of the ideal job that is related to participant SES level rather than the general area of the work.

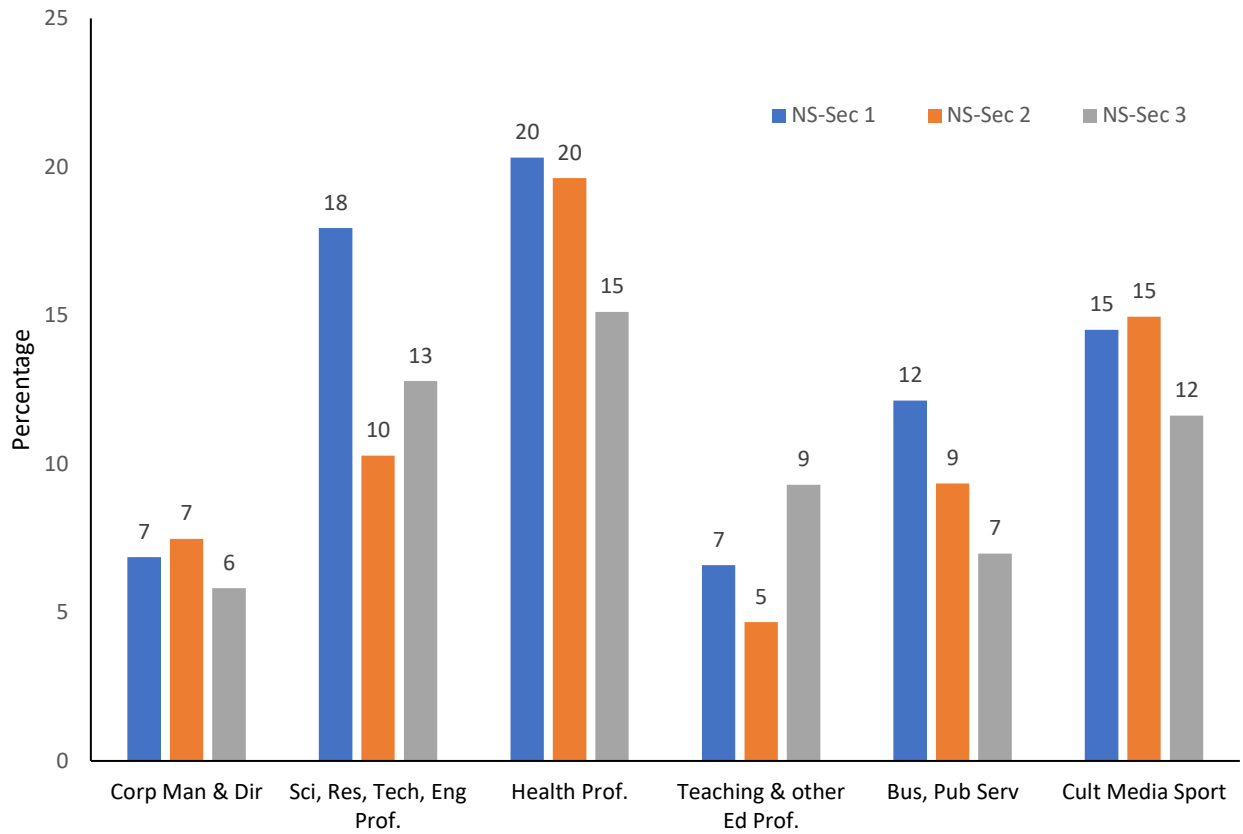
#### **5.4.2.13 Hoped for and expected level of education.**

Spearman's rho correlations indicated that there were moderate, positive relationships between the socioeconomic classification of the job they hoped for; and their aspired level of education,  $\rho=.33$ ,  $p<.001$  and also with the level of education they expected to achieve  $\rho=.36$ ,  $p<.001$ . This indicates that students' job aspirations marry with their hopes and expectations about their qualifications. Higher educational aspirations are associated with higher levels of hoped-for educational achievement.



**Figure 5.8**

*Soc 2020 Classification of Ideal Job by Participant Socioeconomic Level*

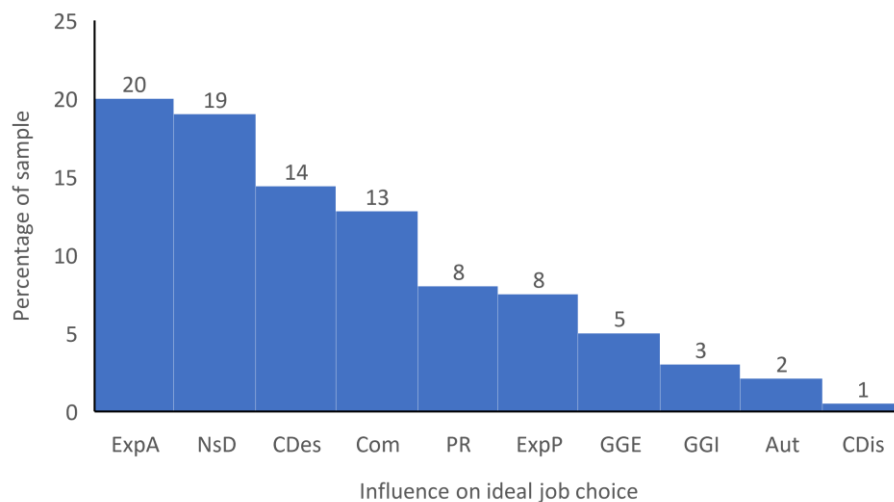


**5.4.2.14 What do young people perceive to be the main influences on their choice of ideal job?**

Participants were asked about what sparked their interest in their ideal job. This was an open response item. Responses were coded using an adaptation of Adler’s (2015) narrative identity motivational framework which is described in Chapter 3, along with interrater reliability calculations. Figure 5.9 shows the percentage of responses containing each motivational code.

**Figure 5.9**

*Self-Reported Influence on Ideal Job Type*



**Key**

ExpA= active experience, NsD=non-specific desire, CDes= crystallisation of desire, Com= communion, PR= personal relationships, ExpP=passive experience, GGE=extrinsic growth goals, GGI=intrinsic growth goals, Aut=autonomy, CDis=crystallisation of discontent

The data suggest that a young person's *active experience* was the most commonly perceived influence on ideal job choice, with a fifth of students including this in their responses. Examples of *active experience* included work experience or some other direct experience of the ideal job, for example, one participant discussed wanting to be a doctor due to having experienced the role due to extensive treatment as a child. A desire to do the job was the next most commonly featured motivation. *Non-specific desire*; for example 'I've always wanted to do it' was seen in 19% of responses. Others (14%) provided a more specific, *crystallisation of desire*, for example, 'I love cooking, it is my passion', this often linked to an interest, passion or skill in the present with a hoped-for job role. *Non-specific desire* was often vague and sometimes provided a circular sense of participants wanting to do a job because they wanted to do it, whereas *crystallisation of desire* gave more clarity to the wish to do the job. It is difficult to know if the lack of detail in *non-specific desire* was a result of participants' inability to articulate any further reasoning or a lack of desire to do so.

Other influences of note include; *communion*, for example, 'I want to help others', which was evident in 13% of responses and *personal relationships*, for example, a family member having the same job as the participant's ideal job, was found in 8%. A

smaller but sizable 7% of participants described the impact of *passive experiences*, such as watching a TV programme with a focus on a career, such as being a detective, as having an impact on their choice. A number of students identified *growth goals*, an intentional effort to guide self-development, as an influence on their occupational aspirations. Of all growth goals, 3% could be considered *intrinsic growth goals* e.g. 'I want to develop as a person' and 5% could be considered *extrinsic growth goals*, e.g., 'good pay'. Other influences included by participants in smaller numbers were, *autonomy* (2%), the view of being capable or in control and *crystalisation of discontent* (<1%), wanting to do the job in order to avoid something negative.

#### **5.4.2.15 Gender differences.**

There were significant gender differences in the self-perceived influences on ideal job ( $\chi^2(12)=45.17, p<.001$ ). In particular, females were more likely to indicate the influence of *active experience*, such as work experience than males (24% v 15%). On the other hand, 23% of all male students indicated that *non-specific desire* was the reason for their choice of ideal job, whereas only 16% of female students highlighted this as the reason for their ideal job choice. It is possible that this may be due to male students writing responses with minimal detail, meaning that a specific desire was not overtly present in the response (and as such could not be coded), rather than males not having a specific reason for their ideal job choice desire *per se*. There were also notable gender differences in those who indicated *Communion* as an influence; 17% of females cited this as an influence compared with only 6% of males. The number of participants including *extrinsic growth goals* also differed with gender, almost three times the percentage of males than females (3% v 9%) reported this as an influence on their ideal job choice.

#### **5.4.2.16 Year group.**

There were no significant associations seen between year groups and perceived influence on ideal job choice.

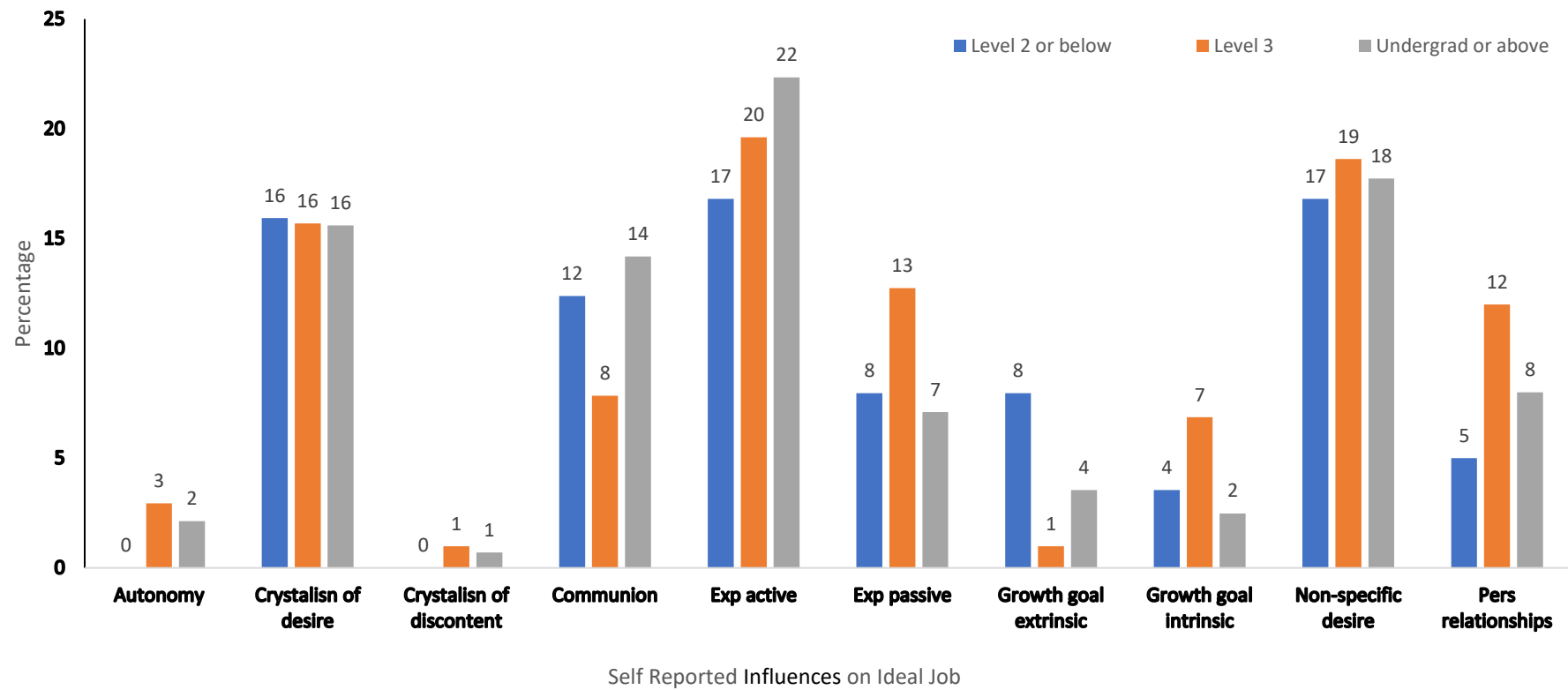
#### **5.4.2.17 SES.**

Significant differences in self perceived influences on ideal job choice were seen by participant SES as indicated by highest parental education ( $\chi^2(24), p=.02$ ) (Figure 5.10) but not highest parental occupational. In particular, participants whose parents had level 2 qualifications or below were the least likely to highlight *active experience* (Level 2 or below=17%, Level 3=20%, Undergrad or above 22%). They were also the least likely to cite the influence of personal relationships as an influence on their ideal job (Level 2 or below=3%, Level 3=10%, Undergrad or above 7%). However, those

in the lowest SES group were more likely to be influenced by extrinsic growth goals (Level 2 or below=8%, Level 3=1%, Undergrad or above 4%).

**Figure 5.10**

*Influences on Participant Choice of Ideal job by Highest Parental Education*



### 5.4.3 RQ 2.3 What behaviours and beliefs do young people exhibit with regard to their occupational future selves?

#### 5.4.3.1 Who do young people talk to about their future occupational plans?

We asked our participants whom they had talked to about their future plans and how helpful any discussions had been. Table 5.9 shows that most of our respondents had discussed their plans with someone. The most common person for our respondents to discuss their future plans with was a member of their family or an adult friend (93%), a friend was the next most common person to discuss plans with (87%), followed by teachers (74%) and careers professionals (72%). There was some variation in how helpful young people found these discussions about their future plans to be. Discussions with family/adult friends were perceived to be the most helpful, with 88% of participants finding the discussion of some help, teachers (83%) and friends (82%) were considered to be helpful by fewer participants with 82% indicating that discussions had given some help. Discussions with careers professionals were reported to be the least helpful, only 68% of our respondents indicated that discussions with careers professionals had been of any help and, in fact, only 29% reported that they had been very helpful, comparing poorly with discussions with family or adult friends, almost half of which had been considered very helpful.

**Table 5.9**

*With Whom Participants had Discussed Future Plans, and how Helpful Discussions were*

Who discussed plans with	Any discussion	How helpful any discussion was		
		Not helpful	Somewhat	Very
Family/adult friend				
%	92.78	11.58	39.52	48.90
n	501	58	198	245
Teacher/tutor				
%	73.52	17.38	48.36	34.26
n	397	69	192	136
Careers prof				
%	72.30	32.39	38.3	29.31
n	389	126	149	114
Friend				
%	87.2	17.66	51.49	30.85
n	470	83	242	145

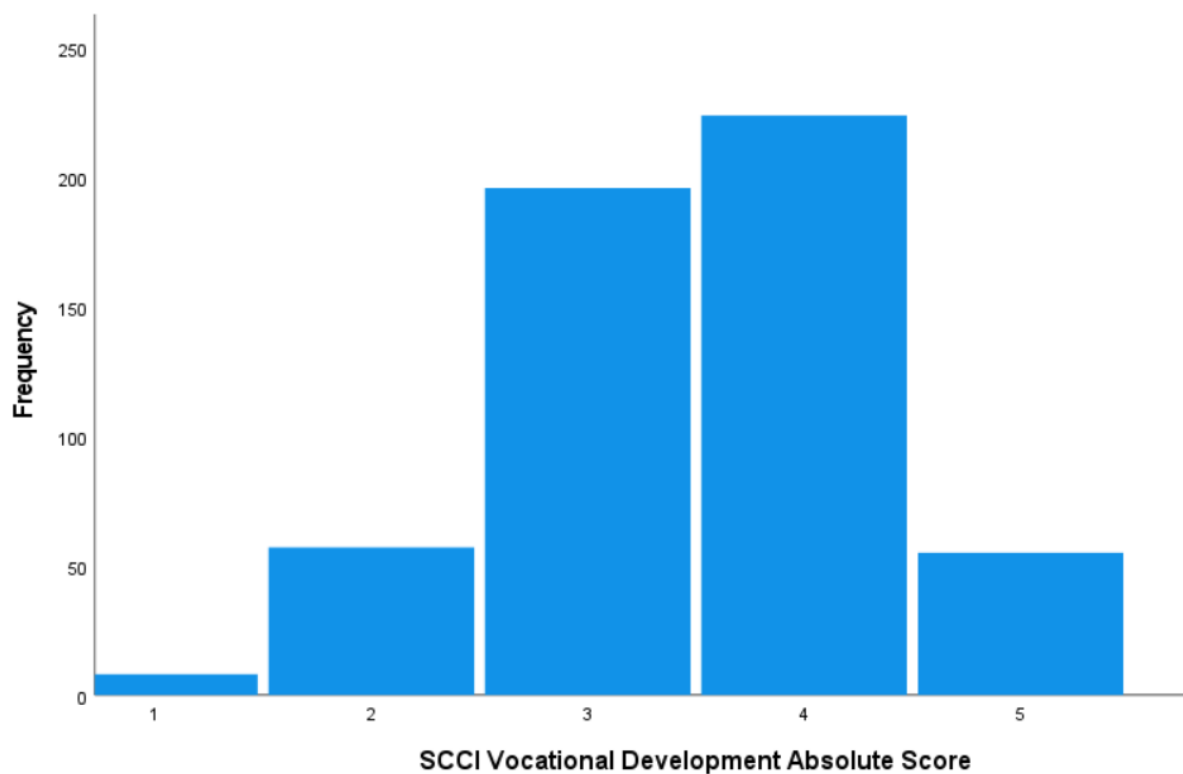
#### **5.4.3.2 How active are young people in constructing their careers?**

Table 5.10 shows descriptive statistics for the Student Career Construction Inventory (SCCI) for vocational development as an overall construct, as well as the individual subscales. The SCCI vocational development score was calculated by taking the mean of the subscales. (see Methodology chapter, section 3.4.5.1 Student Career Construction Inventory (SCCI) for more information on the measure, including reliability and validity).

Figure 5.11 shows the distribution of SCCI vocational development score. Overall, participants indicated that they believed that they knew what to do about their vocational futures, the composite vocational development scores showed a median of 3.54 and mean of 3.49, indicating that overall participants were beginning to 'do what needs to be done' (level 4 of the scale). However, there was a wide range of responses (1-5), with some students indicating that they had 'not yet much thought about' (score of 1) their career planning and preparing, whilst others told us that they had already 'completed what needed to be done' (score of 5). Measures of central tendency indicate that overall students had taken more action in some areas than in others, with crystallizing of self-concept and deciding scores being higher than 'exploring' and 'preparing'. Although this is not likely to be a fully linear process the data may suggest, that crystalising is the earliest process, followed by deciding, exploring and finishing with preparing.

**Table 5.10***Descriptive Statistics for SCCI Career Behaviour Variables*

	N	Min	Max	Median	Mean	SE	SD	Skew	SE
SCCI Exploring	537	1.00	5.00	3.43	3.40	0.04	0.91	-0.143	0.105
SCCI Deciding	532	1.00	5.00	3.80	3.63	0.05	1.11	-0.401	0.106
SCCI Preparing	531	1.00	5.00	3.16	3.15	0.04	0.93	-0.135	0.106
SCCI Crystalising	523	1.00	5.00	4.00	3.76	0.04	0.95	-0.623	0.107
SCCI Voc.Dev	520	1.00	5.00	3.54	3.49	0.04	0.80	-0.349	0.107

**Figure 5.11***The Distribution of SCCI Vocational Development Composite Scores*

Note: SCCI Items are rated on a 5-point Likert scale from "I have not yet thought much about it" to "I have already done this".

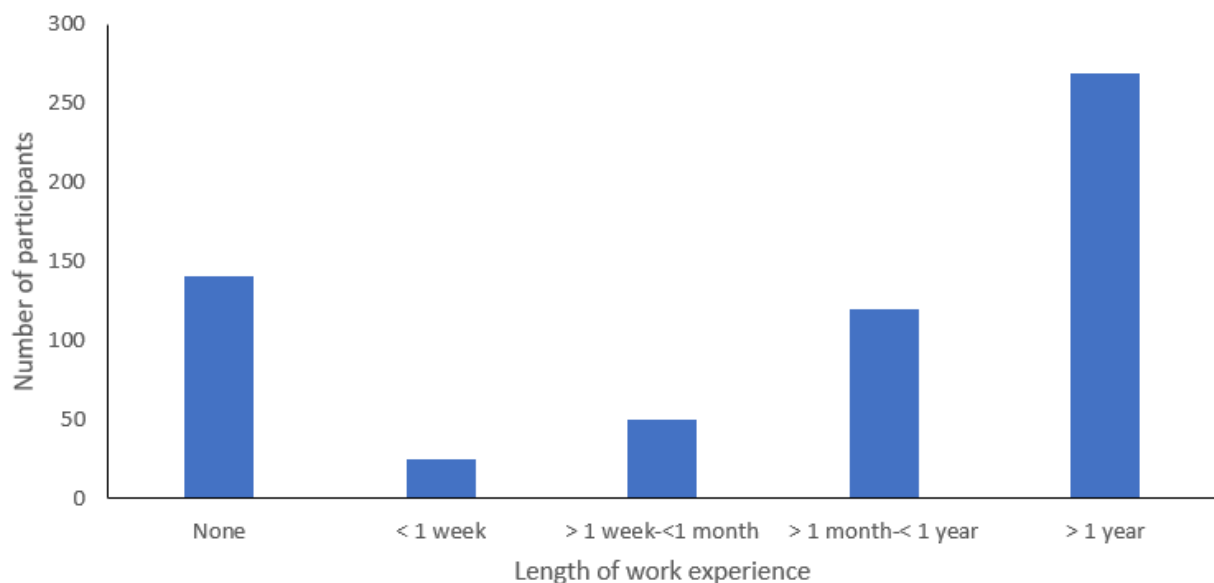


### 5.4.3.3 Work experience.

We asked participants to tell us about the amount of work experience they had undertaken (Figure 5.12). From this it is evident that although 44% of our participants had more than a year of experience of work' almost a quarter of respondents had no work experience at all. Group differences were explored, the results of which can be found below.

**Figure 5.12**

*Length of Work Experience Undertaken by Participants*



### 5.4.3.4 Beliefs. To what extent do young people feel confident and in control of their occupational futures?

**Certainty and difficulty in achieving ideal job.** Table 5.11 shows that participants demonstrated having some certainty about achieving their ideal job (On a Likert scale where; 1= disagree, 3= neither agree nor disagree and 5=strongly agree). However, although they had some confidence in their ability to achieve their ideal role ( $M=3.42$ ,  $Mdn= 4.00$ ) findings suggest that participants did not expect it to be easy to get the role ( $M=2.69$ ,  $Mdn=3.00$ ). Figures 5.13 and 5.14 show the distribution of participants' scores on this same scale. This also indicates that the majority of participants were certain or ambivalent about achieving their ideal job but also indicated that it would not be easy.

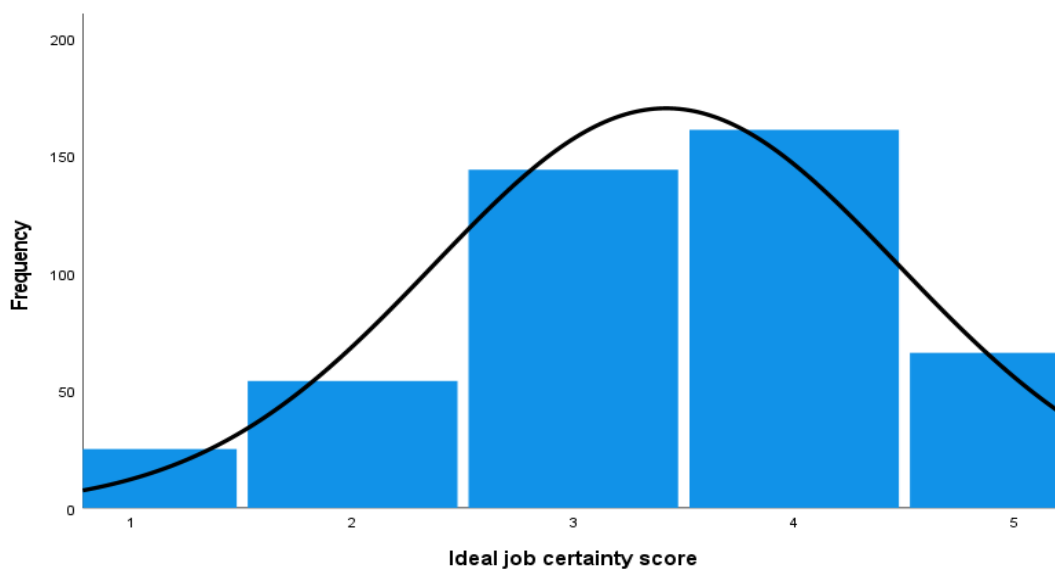
**Table 5.11**

*Descriptive Statistics for Agency Variables*

Variable	N	Min	Max	Mdn	Mean	SE	SD	Skew	SE
Ideal job certainty	450	1.00	5.00	4.00	3.42	0.05	1.05	-0.434	0.115
Ideal job ease	451	1.00	5.00	3.00	2.69	0.05	1.14	0.097	0.115
Confidence in future	516	1.00	5.00	3.50	3.33	0.05	1.11	-0.492	0.108
Control; Mastery	512	1.00	5.00	4.00	3.76	0.04	0.89	-0.711	0.108
Control; Constraints	511	1.00	5.00	3.25	3.29	0.04	0.89	-0.289	0.108
Perception of control	511	1.25	5.00	3.50	3.53	0.03	0.70	-0.082	0.108

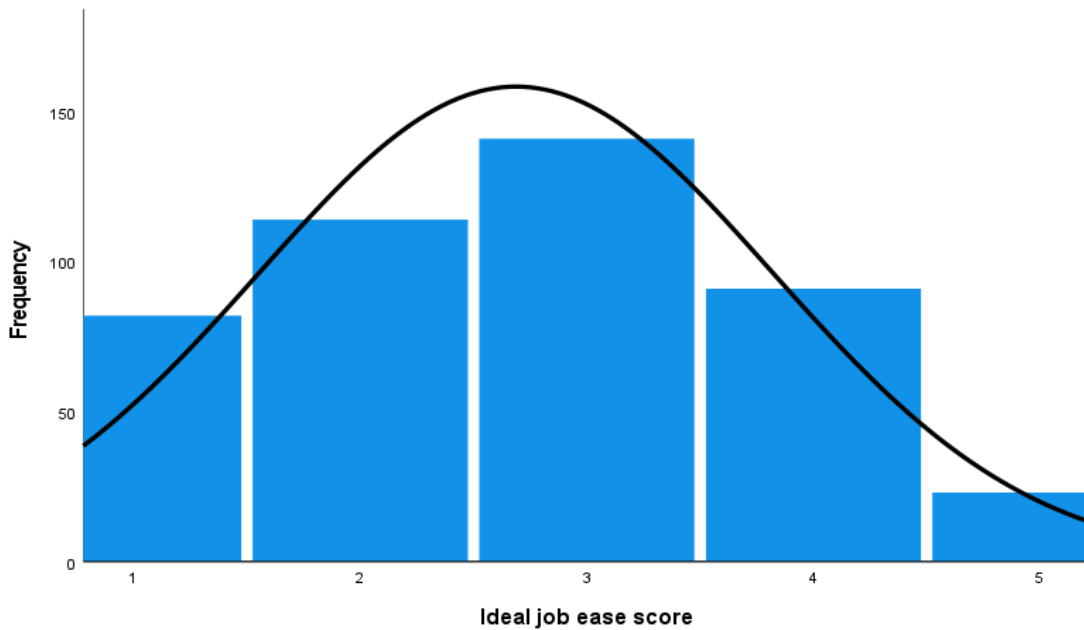
**Figure 5.13**

*Distribution of Scores for Extent of Agreement with Statement 'I am certain that I will do this job'*



**Figure 5.14**

*Distribution of Scores for the Extent of Agreement with Statement “It would be easy for me to get this job”*



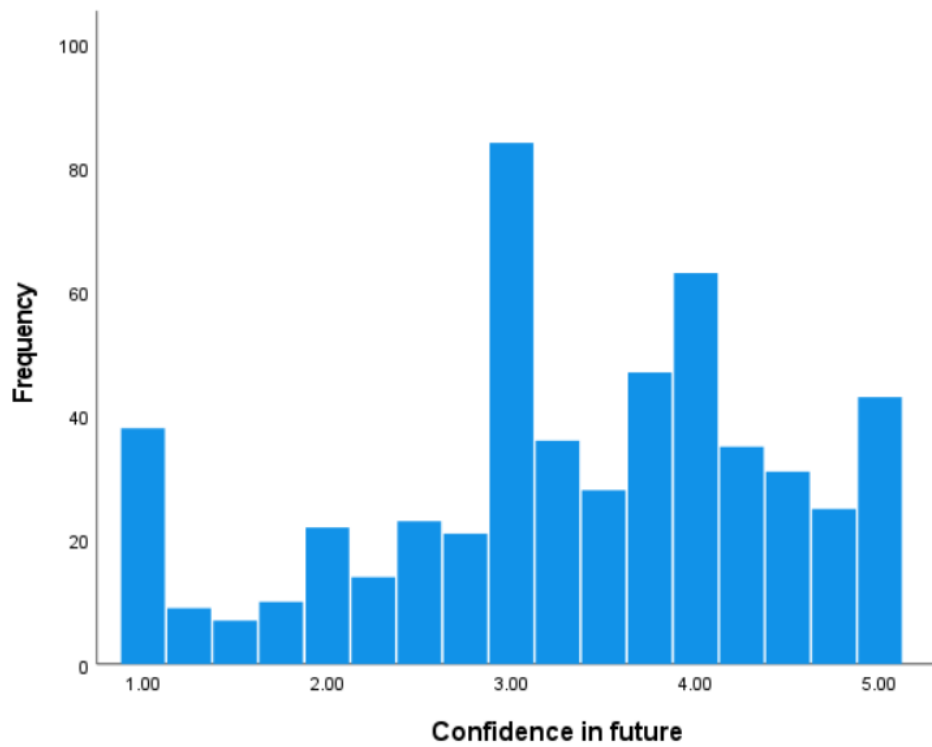
***SENSES confidence in the future and perceptions of control.*** Findings indicate that young people had some confidence in their ability to live up to their own expectations and those of others, and some sense of control over their lives. The composite confidence for the future score was calculated by taking the mean of the individual subscale scores. The mean (3.33) and median (3.5) scores for participant confidence in the future, and the distribution of these scores (Figure 5.15), suggest most young people had some confidence in their ability to meet their own expectations and the expectations of others (where a score of 4 indicates that individuals *somewhat agreed* that they had confidence in their future). Further information on this measure, including validity and reliability can be found in the methodology chapter (section 3.4.5.4 PLANS 2 Confidence for the Future Scale).

In terms of their sense of control over their lives (the composite sense of control score was calculated by taking the mean of the individual subscale scores), the distribution of perception of control scores (Figure 5.16) and scores of central tendency ( $M=3.76$ ,  $Mdn=3.5$ ), suggest that young people had some perception of mastery over aspects of their lives. However, a slightly lower average control over constraints score ( $M=3.29$ ,  $Mdn=3.25$ ) indicates that participants may feel less confidence due to outside

factors impacting facets of their lives. Further information on this measure, including validity and reliability can be found in the methodology chapter (section 3.4.5.5 Sense of Control Scale).

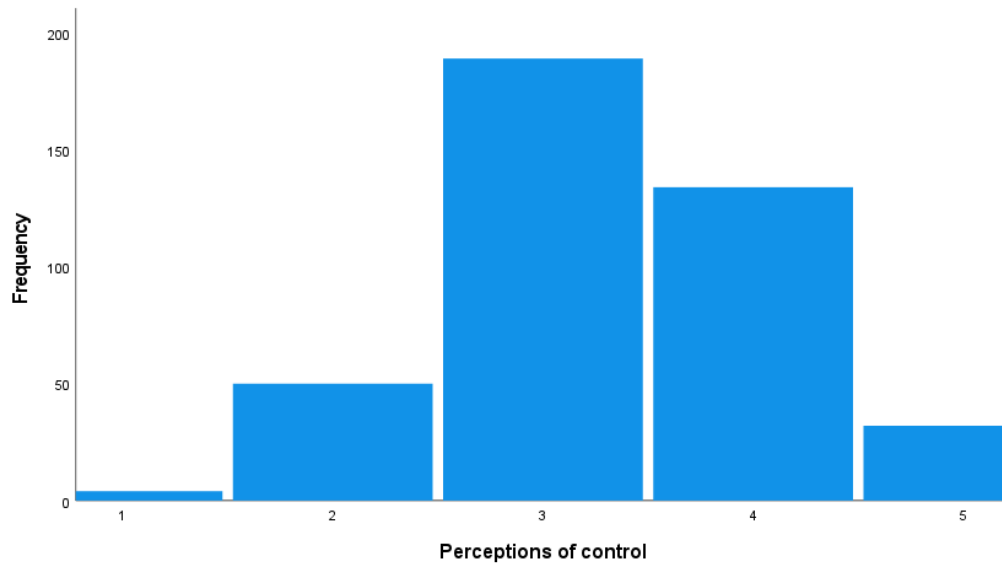
**Figure 5.15**

*The Distribution of Confidence for the Future Composite Score*



**Note:** Confidence for the future is a composite score calculated by taking the average of the individual subscales, individual scores are between 1 and 5, at intervals of .25. Subscores use a 5-point Likert response scale ranging from 1 = 'not at all true' to 5 = 'very true'.

**Figure 5.16**  
*The Distribution of Perception of Control Score*



NB: Sense of control scale uses a 5-point scale ranging from 'strongly disagree' to 'strongly agree'.

#### **5.4.3.5 Future oriented behaviours, beliefs; relationships and group differences.**

##### ***Correlations between future-oriented beliefs behaviours and demographics.***

Table 5.12 shows the relationship between career behaviours; SCCI vocational development behaviours and career beliefs. As might be expected, several beliefs about future career and behaviours towards careers show a positive correlation with educational stage. Educational stage showed a small but significant positive correlation with vocational development ( $\rho = .12, p < .001$ ) and perceived control ( $\rho = .18, p < .001$ ). This is likely related to cognitive development and experience that comes with age. Those who were older were further along with career construction activities and were more likely to have had longer periods of work experience. The participant's socio-economic status showed no relationship with any career behaviours or beliefs.

**Table 5.12***Spearman Rank Correlations Between Career Behaviours, Beliefs and Participant Demographics*

	1	2	3	4	5	6
1. SCCI Voc. Dev.	-					
2. Length of w. exp.	.18**	-				
3. Confidence in future	.29**	0.0	-			
4. Perception of control	.42**	.15**	.54**	-		
5. Ideal job certainty	.37**	.00	.24*	.17**	-	
6. Ideal job difficulty	-.21**	.00	-.19**	-.11*	-.52**	-
SES	.00	.15**	-0.1	.00	.00	.00
Year Group	.12**	.40**	.03	.18**	-.01	.00

*Note.* SES as measured by highest parental job (ONS1-3). \*\*. Correlation is significant at the 0.01 level (2-tailed), \* Correlation is significant at the 0.05 level (2-tailed).

Career behaviours were found to be significantly associated with several career beliefs. Vocational development behaviours showed moderate positive correlations with perceived control, ideal job certainty and salience. Findings also indicate a weak positive correlation with confidence in the future and a weak negative correlation with perceived difficulty in achieving ideal job. Individuals who were further along their career construction journey appeared to feel more in control over their lives and to have greater confidence in their futures overall. They also demonstrated greater certainty about achieving their ideal job and also indicated that they believed they would find it easier to achieve their ideal job. The length of work experience undertaken by participants also showed some significant but weak association with perceived control. Young people who had completed longer periods of work experience were more likely to be further along their career development pathway.

Participants' socio-economic status was only found to be related to the length of work experience undertaken, demonstrating a weak but significant positive correlation ( $\rho=.15$ ,  $p<.001$ ). Participants who were in a higher socioeconomic class were more likely to have completed longer periods of work experience.

#### **5.4.3.6 Career beliefs and behaviours by gender.**

A test of differences was required to determine whether there were significant differences between genders on career behaviour (Career Development Behaviour, amount of work experience) and career beliefs (Perceptions of control, self confidence for the future in terms of gender). As the dependent variables were ordinal and non-normal, the assumptions of parametric testing were not met, therefore, a Kruskal-Wallis test or a Mann Whitney U were used as appropriate.

The data first were checked to see if the assumptions of the Kruskal-Wallis were met, that is that there are at least two levels of the IV (Gender; female, male, 'prefer not to say' and other), the DVs are at least ordinal, and there is independence of observations. The final assumption, that the distribution of scores for the DV are similar for all groups (Pallant, 2020), was checked in SPSS. Where data did not show similar distribution, a Kruskal-Wallis test was run, using mean ranks to determine difference, or a Mann Whitney as appropriate (see Section 5.4.3.6.1).

##### **5.4.3.6.1 Career behaviours**

**Vocational development score.** A Kruskal-Wallis H test was run to determine if there were differences in vocational development scores between genders. Distributions of vocational development scores were similar for all groups, as assessed by visual inspection of a boxplot (Appendix H). Median vocational development scores were not statistically significantly different between genders,  $\chi^2(3) = 5.01, p = .171$ .

**Work experience.** A Kruskal-Wallis H test was run to determine if there were differences in the amount of work experience between genders. Distributions of vocational development scores were not found to be similar for all groups, as assessed by visual inspection of a boxplot (Appendix H). As such it was only possible to determine differences using mean ranks of work experience scores. Mean ranks of work experience scores (female= 331.64, male=257.45, prefer not to say=261.75, other=257.31) were statistically different between groups,  $\chi^2(3) = 28.91, p < .001$ .

Pairwise comparisons were performed using Dunn's (1964) procedure with a Bonferroni correction for multiple comparisons. Adjusted p-values are presented. Values are mean ranks unless otherwise stated. This post hoc analysis revealed statistically significant differences in work experience scores between the females (331.64) and males (257.45) ( $p < .001$ , but not between any other group combination).

##### **5.4.3.6.2 Career beliefs.**

Distributions of scores for each of the DVs were not found to be similar for all genders (Appendix I). However, as they were similar between females and males, and

these were the largest gender groups, a Mann Whitney U test was used to compare the two genders. A Mann-Whitney U test was run to determine if there were differences in career belief scores (Confidence in the future, perceptions of control, ideal job certainty and ideal job ease) between males and females. Distributions of the scores for males and females were similar, as assessed by visual inspection (Appendix I).

Table 5.13 shows differences in median scores for career beliefs. Confidence in the future, ideal job certainty and ideal job ease score were not statistically significantly different between females and males.

Median perception of control score was statistically significantly higher in females (3.56) than in males (3.31),  $U = 26251$ ,  $z = -2.709$ ,  $p = .007$ , using an exact sampling distribution for U (Dineen & Blakesley, 1973).

**Table 5.13**

*Differences in Career Beliefs between Male and Female Participants*

Variable	Female Mdn	Male Mdn	Mann Whitney U	Z	p value
Ideal job certainty	4.00	3.00	23321.00	-.823	.410
Ideal job ease	3.00	3.00	26526.00	1.522	.128
Confidence in the future	3.50	3.25	29290.00	-1.190	.234
Perceptions of control	3.56	3.31	26250.50	-2.709	.007

**5.4.3.7 Ordinal logistic regression analyses of future-oriented behaviours and beliefs.**

Possible predictor variables for future-oriented behaviours (Vocational Development, SCCI) and belief about certainty of gaining one’s ideal job (ideal job certainty) were explored. Initial predictor variables were identified from the results of tests of difference and correlation. Pallant (2020) recommends including variables where correlation coefficient is significant and .3. An ordinal linear regression was used to determine which independent variables might have a statistically significant effect on the dependent variables (vocational development score, ideal job certainty). This test was chosen, as the data met the first two assumptions of the test, the DVs were ordinal, and one or more of the IVs were continuous, ordinal or categorical. Collinearity diagnostic



checks were run in SPSS, for each regression, indicating that collinearity was not a concern. The tolerance statistics for vocational development predictor variables are outlined in table 5.14 below.

**Table 5.14**

*Tolerance Statistic for Testing Assumption of Multicollinearity for Vocational Development and Certainty of Ideal Job*

Dependent variable	Tolerance statistics for potential predictor variables			
	Voc. Dev	Confidence	Control	Certainty
Vocational Development	-	.772	.778	.691
Certainty of ideal job	.907	.779	-	-

*Note:* tolerance statistics are recorded only for variable identified as potential predictors.

#### **5.4.3.7.1 Vocational development career behaviour (SCCI).**

Confidence in the future, perceptions of control, ideal job certainty, were identified as potential predictors for vocational development behaviour (SCCI). The assumption of proportional odds was met, as assessed by a full likelihood ratio test comparing the fit of the proportional odds model to a model with varying location parameters,  $\chi^2(12) = 17.36, p = .14$ . The deviance goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(1372) = 968.50, p = 1.00$ . The final model statistically significantly predicted the dependent variable over and above the intercept-only model,  $\chi^2(4) = 68.30, p < .001$ . Table 5.15 outlines ordinal regression data.

An increase in ideal job certainty score was associated with an increase in the odds of higher vocational development scores with an odds ratio of 1.63 (95% CI, 1.34-1.98), a statistically significant effect (Wald  $\chi^2(1) = 23.94, p < .001$ ). An increase in perceptions of control was also associated with an increase in the odds of higher vocational development scores with an odds ratio of 1.50 (95% CI, 1.21-1.87), a statistically significant effect, Wald  $\chi^2(1) = 13.81, p < .001$ . However, there was no significant association with confidence in the future (Wald  $\chi^2(1) = .10, p < .756$ ).

#### **5.4.3.7.2 Ideal job certainty.**

Vocational development and confidence for the future were identified as potential predictors for ideal job certainty. The assumption of proportional odds was met, as assessed by a full likelihood ratio test comparing the fit of the proportional odds model to

a model with varying location parameters,  $\chi^2(6) = 6.63$ ,  $p = .357$ . The deviance goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(90) = 88.77$ ,  $p = .517$ . The final model statistically significantly predicted the dependent variable over and above the intercept-only model,  $\chi^2(2) = 75.12$ ,  $p < .001$ . Table 5.15 outlines ordinal regression data.

An increase in vocational development score was associated with an increase in the odds of higher ideal job certainty score, with an odds ratio of 2.04 (95% CI, 1.69-2.46), a statistically significant effect, Wald  $\chi^2(1) = 54.49$ ,  $p < .001$ ). An increase in confidence in the future score was also associated with an increase in the odds of higher ideal job certainty score, with an odds ratio of 1.34 (95% CI, 1.15-1.57), a statistically significant effect, Wald  $\chi^2(1) = 13.81$ ,  $p < .001$ ).

**Table 5.15***Ordinal Logistic Regressions for Vocational Development Behaviour and Ideal Job Certainty*

	Variable	Wald Chi-square	Df	Significance	Exp (B)	95% Wald Confidence interval Exp (B)
<b>Voc. Development</b>						
	Ideal job certainty	23.94	1	<.001	1.63	1.34-1.98
	Confidence in future	.10	1	.756	1.03	.86-1.22
	Perception of control	13.63	1	<.001	1.50	1.21-1.87
<b>Ideal job certainty</b>						
	Vocational Development	54.49	1	<.001	2.04	1.69-2.46
	Confidence in future	13.81	1	<.001	1.34	1.15-1.57

#### 5.4.4 RQ 2.4 What is the relationship between PFS prompted by ideal occupation and future-oriented beliefs and behaviours?

How are qualitative measures of PFSs (elaboration of self and salience) related to confidence for the future, sense of control, and vocational development behaviour?

##### 5.4.4.1 PFS variables and future-oriented behaviours and beliefs.

Table 5.16 shows the relationship between career behaviours; SCCI vocational development behaviours, and career beliefs. A Spearman rank correlation was used to explore the relationship between variables as the data were ordinal, represent paired observations, and did not appear to be non-monotonic.

**Table 5.16**

*Spearman Rank Correlations Between PFS Elaboration and Salience, and Ideal Career Choice (SES), Future-Oriented Beliefs and Behaviours*

Variable	PFS Elaboration	PFS Salience
1.PFS elaboration	1.000	.183**
2.PFS salience	.183**	1.000
3.Ideal job SES	.026	.011
4.Ideal job certainty	.003	.495**
5.Ideal job difficulty	-.017	-.312**
6.SCCI voc. dev.	.163**	.446**
7.Length work exp	.083*	.120**
8.Confidence in future	0.033	.321**
9.Perception of control	.153**	.358**

**Note:** \*\*. Correlation is significant at the 0.01 level (2-tailed), \*. Correlation is significant at the 0.05 level (2-tailed).

There is a small but significant relationship between elaboration of PFS and PFS salience, this and the potential reasons for this are discussed in Chapter 2 (section 2.1). Findings indicate that both PFS salience and PFS elaboration are significantly correlated with future-oriented beliefs and behaviours but not ideal

career choice by SES. PFS Salience appears to have more involvement with future-oriented beliefs and behaviours than elaboration. PFS salience is positively correlated with some future-oriented beliefs, showing a moderate correlation with ideal job certainty ( $\rho=.497, p<.001$ ) and a small but significant negative correlation with ideal job difficulty ( $\rho=-.312, p<.001$ ). An individual who reports having a more salient PFS is likely to feel a greater level of certainty about achieving their hoped-for job and is more likely to believe it would not be difficult to attain. It is also weakly correlated with confidence in the future ( $\rho=.321, p<.001$ ) and perceptions of control ( $\rho=.358, p<.001$ ), ie individuals who had more salient PFSs were reported greater confidence in the future and felt more in control. It is not clear what direction this relationship takes. Salience is also significantly correlated with career development behaviours, showing a moderate positive correlation with SCCI vocational development ( $\rho=.446, p<.001$ ) and a small positive correlation with length of work experience ( $\rho=.120, p<.001$ ). These findings indicate that the more experience one has and the more career related behaviours one undertakes the more salient one's PFS is likely to be. PFS elaboration on the other hand shows only a weak significant correlation with career behaviours (SCCI development and length of work experience) and perceptions of control.

#### ***5.4.4.2 Effect of ideal job choice on PFS elaboration and salience.***

Ideal job choice had initially been coded in terms of both socio-economic status and occupational field. Previous analysis outlined in Chapter 4 (section 4.4) did not find any relationship between the SES of participant ideal job choice and PFS variables. Analysis also indicated that ideal job choice did not have a significant effect on PFS salience or elaboration.

#### ***5.4.4.3 Predictors of PFS Salience and Elaboration.***

Findings from Spearman correlations were used to identify potential future-oriented behaviour and beliefs as predictor variables of PFS salience and elaboration. An ordinal logistic regression was used to determine which independent variables might have a statistically significant effect on the dependent variables (PFS salience and PFS elaboration). This test was chosen, as the data met the first two assumptions of the test, the DVs were ordinal, and the IVs were categorical. Collinearity diagnostic checks were run in SPSS, for each regression, indicating that collinearity was not a concern. The tolerance statistics for predictor variables are outlined in table 5.17 below.

**Table 5.17**

*Tolerance Statistic for Testing Assumption of Multicollinearity for PFS Salience and Elaboration*

Dependent variable	Tolerance statistics for potential predictor variables				
	Ideal job certainty	Voc. Dev	Confidence	Control	Work exp
PFS salience	.863	.740	.774	.680	.966
PFS elaboration	-	.824	-	.824	.972

**Note:** tolerance statistics are recorded only for variable identified as potential predictors.

Table 5.18 provides an overview of ordinal the logistic regression with proportional odds.

**Table 5.18**

*Ordinal Logistic Regressions for PFS Elaboration and Salience*

	Variable	Wald $\chi^2$	Df	Sig	Exp (B)	95% CI Exp (B)
<b>PFS Salience</b>						
	Ideal job certainty	80.48	1	<.001	2.36	1.96-2.84
	Confidence in future	3.14	1	<.077	1.17	.98-1.40
	Perception of control	11.26	1	<.001	1.67	1.24-2.26
	Vocational develop	18.44	1	<.001	1.76	1.35-2.28
	Work experience	1.11	1	.291	1.06	.95-1.17
<b>PFS Elaboration</b>						
	Vocational develop	15.73	1	<.001	1.69	1.30-2.19
	Perception of control	2.87	1	.090	1.29	.96-1.72
	Work experience	.28	1	.600	1.03	.92-1.16

Confidence in the future, perceptions of control, ideal job certainty, ideal job difficulty, length of work experience and SCCI vocational development were identified as potential predictors for PFS salience. Perceptions of control, length of work experience and SCCI vocational development were identified as potential predictors for PFS elaboration. Table 5.18 provides an overview of ordinal logistic regression with proportional odds.

#### **5.4.3.4 Ordinal logistic regression PFS salience.**

The assumption of proportional odds was met, as assessed by a full likelihood ratio test comparing the fit of the proportional odds model to a model with varying location parameters,  $\chi^2(66) = 6.63, p = .455$ . The deviance goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(4818) = 1715.10, p = 1.00$ . The final model statistically significantly predicted the dependent variable over and above the intercept-only model,  $\chi^2(6) = 188.72, p < .001$ .

An increase in scores of ideal job certainty, perception of control and vocational development were associated with an increase in the odds of higher PFS salience. An increase in ideal job certainty was associated with increased odds of higher PFS salience score with an odds ratio of 2.36 (95% CI, 1.96-2.84), a statistically significant effect (Wald  $\chi^2(1) = 80.48, p < .001$ ). An increase in perceptions of control score was also associated with an increase in the odds of higher ideal job certainty score, with an odds ratio of 1.67 (95% CI, 1.24-2.26), a statistically significant effect (Wald  $\chi^2(1) = 11.26, p < .001$ ), as was increased vocational development scores, with an odds ratio of 1.76 (95% CI, 1.35-2.28), a statistically significant effect (Wald  $\chi^2(1) = 18.44, p < .001$ ).

#### **5.4.3.5 Ordinal logistic regression PFS Elaboration.**

The assumption of proportional odds was met, as assessed by a full likelihood ratio test comparing the fit of the proportional odds model to a model with varying location parameters,  $\chi^2(9) = 16.12, p = .06$ . The deviance goodness-of-fit test indicated that the model was a good fit to the observed data,  $\chi^2(1961) = 916.48, p = 1.00$ . The final model statistically significantly predicted the dependent variable over and above the intercept-only model,  $\chi^2(3) = 29.45, p < .001$ .

Analysis indicated that only an increase in vocational development score was associated with increased odds of higher PFS elaboration score with an odds ratio for of 1.69 (95% CI, 1.30-2.19), a statistically significant effect (Wald  $\chi^2(1) = 15.73, p < .001$ ).

## 5.5 Key findings

### RQ 2.1 Young people's academic aspirations and expectations

- Young people have high aspirations and expectations for level of education. However, they have significantly higher hopes than expectations. 73% expected Level 4 and above, 80% hoped for it). While more than half (51%) of our sample hoped to achieve a post graduate qualification, considerably fewer expected to do so (30%).
- Expectations and hopes increased significantly with year group. The difference between the two was significant for all year groups but effect size decreased with age.
- Females had higher educational expectations and hopes than males. Both have higher hopes than expectations, but the effect size was greater for females.
- Educational hopes and expectations are correlated with SES. Participants in the highest socioeconomic (class 1) demonstrated the highest educational expectations (*Mdn*=3.00, *M*=3.62) and hopes (*Mdn*=4, *M*=3.76) and those in class 3 had the lowest expectations (*Mdn*=3.00, *M*=2.73) and hopes (*Mdn*=3.00, *M*=3.00) for their educational outcomes.

### RQ 2.2 Career aspirations and the main influences on these

- Professional roles were the most commonly aspired to jobs, in particular health professions, science and research and technology, and culture media and sports. Trades and unskilled occupations were the least popular. Almost three-quarters of participants hoped-for jobs were in NS-Sec Class 1 (using NS-Sec 1-3).
- Health and social care, science, research and tech, culture, media, sports and education were the most popular occupational fields.
- Gender differences: females were more likely to identify wanting jobs in health and social care and education, and males in corporate and management roles, science and technology and trades.
- Year group; Year 11 differed significantly from Year 13 and HE in terms of SES of ideal job. Younger participants were more likely to choose a job in the lowest 2 SES levels than older students. HE students were more likely to aspire to work in health professions and teaching than the two lower year



groups and were also less likely than lower year groups to aspire to business and media.

- Participant SES; there was a weak correlation with SES of the ideal job but no relationship with the occupational field of the ideal job.
- Moderate correlation between SES of ideal job and hoped-for and aspired-to education. Indicates that students' job aspirations marry with their hopes and expectations about their qualifications. Higher educational aspirations are associated with higher levels of hoped-for educational achievement. This makes sense as higher SES jobs generally do require higher levels of academic qualification. This may suggest that students are aware of the requirements of the jobs that they aspire to.

### **RQ 2.2 Self-perceived main influences on ideal job choice?**

- Active experience such as work experience is the most common perceived impact, followed by non-specific desire and crystallisation of desire (an explanation of why they want to do the job- how it links to something that they enjoy now). Other influences included personal relationships such as family and passive experience such as watching TV programmes.
- Females were more likely to cite active experience and communion and males non-specific desire and extrinsic growth goals.
- Participant socioeconomic status had some impact on self perceived influence on job choice. Young people in the lowest group by parental education, were the least likely to include active experience and least likely to cite personal relationships.

### **RQ 2.3 Beliefs and behaviours about occupational future selves?**

- Young people have some confidence in their ability to achieve their ideal job but they do not feel that it will be easy. Participants generally had some confidence in their ability to meet their own and other people's expectations and they also felt that they had mastery over their lives. They were, however, less confident about their ability to control the influence of outside factors.
- Almost all young people had spoken to someone about their plans for the future. Most had spoken with a family member or adult friend, less than  $\frac{3}{4}$  had discussions with a teacher or careers professional. However, there were key differences in how helpful young people found the discussions to be. Family and adults were seen to be the most helpful and careers professionals the least helpful.

### **Career Development behaviours.**

- There was a wide range of responses with some participants having done very little and some had completed the majority of the career development process. Overall young people demonstrated that they knew what to do about aspects of their vocational futures and were beginning to do what needed to be done. However, overall, students scored higher on scores of crystallising of self-concept and deciding, in comparison with exploring and preparing. The data may imply the following order for the career development process; crystallising is the earliest process, followed by deciding, exploring and finishing with preparing.
- Work experience: almost a quarter had no work experience but almost half had over a year of experience.
- Educational stage was correlated with vocational development, control and salience of job. It is likely that participants in a higher educational stage are older and will have had more opportunity to experience career related behaviours. Vocational development correlated with perceived control, ideal job certainty and salience, confidence in the future and negative with difficulty. Length of work experience was related to perceived control and salience and career development. Participant SES was positively associated with length of work experience.
- Gender differences evident in some career beliefs and behaviours. Females reported significantly longer length of time in work experience. Females also demonstrated higher levels of perceptions of control. Confidence in the future, ideal job certainty and ideal job ease score were not statistically significantly different between females and males.

### **Predictors of future-oriented beliefs and behaviours**

- **SCCI vocational development.** Confidence in the future, perceptions of control, ideal job certainty, were identified as potential predictors for vocational development behaviour (SCCI). An increase in ideal job certainty and perceptions of control were associated with an increase in the odds of higher vocational development scores. However, there was no significant association with confidence in the future.

- **Ideal job certainty.** Vocational development and confidence for the future were identified as potential predictors for ideal job certainty. Both were associated with an increase in the odds of higher ideal job certainty scores.

#### **RQ 2.4 Relationship between PFS prompted by ideal occupation and future-oriented beliefs and behaviours.**

There is a small but significant relationship between PFS salience and elaboration. Findings indicate that aspects of PFS are significantly correlated with future-oriented beliefs and behaviours but not SES of ideal career choice.

- PFS salience shows a significant correlation with ideal job certainty, confidence in the future and perception of control and a weak negative correlation with PFS difficulty. Individuals who report greater PFS salience are more likely to feel greater levels of certainty about achieving the job they aspire to, and a greater sense of control and confidence in their future. Those with greater PFS salience report feeling that this future will be easier than those with lower PFS salience.
- PFS salience is correlated with SCCI vocational development and the amount of work experience that young people have had. This indicates that the more career development behaviours undertaken the more salient an individual's PFS is likely to be.
- PFS elaboration shows only a weak correlation with career development behaviours (SCCI vocational development behaviours and work experience) and perceptions of control.
- **Career oriented predictors of PFS salience and elaboration**  
**Salience-** An increase in scores of ideal job certainty, perception of control and vocational development were associated with an increase in the odds of higher PFS salience.  
**Elaboration-** only vocational development score was associated with increased odds of higher PFS elaboration score.

## 6 Discussion

### 6.1 Introduction

Adolescence can be a challenging phase, characterised by significant social, emotional, and physical development, during which young people tend to seek more independence and responsibility. However, limited experience and lack of knowledge, compounded by the impact of ongoing neurodevelopment on executive functions, can make it difficult for young people to make rational and informed decisions, including those related to their future selves. Vulnerable populations, particularly those from disadvantaged backgrounds, may require additional support during this transitional phase. Government initiatives, such as improved career guidance and increased access to HE, though beneficial for some, may oversimplify the complex issues of inequality and social mobility that are central to planning the future.

This research aimed to examine the factors influencing young people's decisions and future plans, contributing to a greater understanding of career aspirations and the influences shaping them. Understanding the salient features of young people's PFSs and how they align with their motivations and beliefs can inform more equitable career guidance policies and practices. Thus, this study aimed to explore how late adolescents imagine their PFSs and examine the relationship between these constructs and future-oriented beliefs and behaviours. Understanding the mechanisms through which young people imagine themselves in specific job roles, and indeed the future more holistically may help educators provide pupils with more targeted, effective, and equitable support to make decisions about their future. Young people between the ages of 16 and 24 in full-time education took part in a survey which explored their PFSs and future-oriented beliefs and behaviours. The survey employed both quantitative and qualitative items. A number of research questions were posed with most centred on the following overarching questions:

- How do young people imagine their future selves through the lens of their ideal job?
- What are young people's occupational aspirations?
- What future-oriented beliefs and behaviours do young people demonstrate?

**Overview of findings.** A summary of the key findings can be found in Sections 4.5 and 5.5.

## **6.2 How do young people imagine their PFSs through the lens of their ideal job?**

This research explored how young people conceptualise and narrate their PFSs through the lens of their ideal job. Ideal job was used as a cue for eliciting other aspects of the PFS and identity (Shepard & Marshall, 1999). In taking a narrative perspective, I aimed to obtain a richer understanding of young people's identity than might be attained through a purely quantitative approach. The specific research questions were as follows.

- What is the content of young people's PFS narratives? Does PFS content differ with age, gender and experience/demographic factors?
- How salient (how often and easily it is to bring the PFS image to mind) and elaborated (vividness and detail, including integrations of different aspects of self) are young people's PFS narratives?

### **6.2.1 What is the content of young people's PFS narratives?**

Young people's PFS narratives provide some insight into their aspirations, values, and perceived challenges. Having been prompted to think about their ideal jobs, young people described aspects of their ideal work in varying amounts of detail but also commented on what they wanted from that work, and how they view their selves when integrated into this future. Their PFS narratives provided useful insights into what is important for adolescents. Young people narrated futures that included five categories covering various aspects of self; ***My work, Why I do it, Life outside work, My values*** and ***How I feel***. ***My work*** was the most commonly seen category and included information directly pertaining to young people's aspired to jobs and contained two subcategories: *what I do* and *where and when I work*. The findings suggest that most young people have some existing occupational knowledge and have explored aspects of their ideal occupation For example, Participant 234 stated "*I want to create my own fashion line*", and Participant 568 described how they "*would be running group activities, conducting assessments seeing what there diagnose [sic]could be*".

These findings are consistent with research indicating that adolescents begin to develop a coherent sense of self across the adolescent period as a result of sociocultural pressures and individual development (Erikson, 1958). They begin to

think more clearly about their life choices by considering their current circumstances, reflecting on previous experiences and looking into the future (Merrill & Fivush, 2016; Habermas & Bluck, 2000; McAdams & McLean, 2013). Indeed, this aligns with Erikson's concept of adolescents moving through the 'identity versus confusion' stage of development. Erikson describes adolescence as being a time of experimenting with and developing identity roles; a period whereby young people explore their independence and the external experiences that impact and connect with their internal identities. The current findings imply that young people desire enjoyable, challenging, and fulfilling work that offers security for themselves and their future families but that they are also aware of the need to contain their work and ensure that they have a balance between work and other aspects of their lives. This aligns with theories of conceptualisation of adulthood and the transition from adolescence to adulthood (Arnett, 1997, 1998, 2001; Perry, 1999). Such theories have found that although there are often more rigid notions of the meaning of adulthood, eg chronological age, or family factors such as marriage and having children, individualistic transitions such as determination of one's own value systems and the capacity to support one's self and one's family, and being able to take responsibility for one's own actions, were commonly more important than having a job *per se* (Arnett, 1997, 1998, 2001; Perry, 1999)

Although perhaps unsurprising that ***My work*** was the most prevalent category, given the nature of the prompt, it is interesting to note that young people often narrated a story of their future which went beyond the job role, integrating factors and values that would bring meaning and purpose into their lives. Young people often discussed details about the job they hoped to have, which aligns with Erikson's suggestion that during the adolescent 'identity vs role confusion' stage, young people work towards developing a sense of self and personal identity. Successfully integrating personal values, career aspirations, and broader life goals contributes to a coherent and stable sense of identity. Failure to achieve this can lead to role confusion and a weak sense of self. This category reflects young people's exploration of potential roles and their understanding of what they want from their future work, which is a crucial component of vocational identity development. This may indicate that adolescents have a developing sense of self-knowledge and integration of self within the world. In the ***Why I do it*** category, young people wrote about the value that the job would bring to their future selves; for example, "*I hope to... do something that I really enjoy/find rewarding*" (Participant

366), often including comments relating to expectations, money, and security; for example, “*I want to have enough money to support a family*” (Participant 174). Having work that brought happiness, success, variety, and fulfilment are all featured in some narratives. “*A varied and challenging job, which involves problem solving*” (Participant 546). Findings reflect young people's exploration of potential roles and their understanding of what they want from their future work, which is a crucial component of vocational identity development (Savickas, 2002).

Additionally, young people's narratives reflected their values and what was important to them, often including information on the activities they might do outside of work (**Life outside work**), “*I would like to travel around the world*” (Participant 39), and what was important to them, **My values**, “*Use my money to affect people's lives in a good way*” (Participant 144), and **How I feel**, “*Having just the right amount of stress within my job to keep it challenging and interesting but not overwhelming*” (Participant 345). This suggests that young people do not view work in a vacuum but as part of their wider future lives. Individuals often had a clear view of what they wanted from a job and placed value on factors beyond money and wealth, indicating that they believed that their job would play an integral role in their future self and their satisfaction with their future lives.

Connection with others, fulfilling leisure activities, enjoyment, independence, and well-being, all of which are commonly associated with life satisfaction, were salient features of many participants' stories. Interestingly, most young people placed little emphasis on more traditional markers of success such as wealth, power, or status. Narratives that focused on aspects such as money were largely observed in the youngest age group. This suggests that a greater understanding of what work can bring, beyond financial gain, develops with maturity and experience. This evolution in terms of the value of work aligns with predictions of The IBM model (Oyserman, Bybee, & Terry 2006), which posits that identity expression reflects the relative salience of organising self-concept structures, indicating that having a purposeful life and positive functioning is important to some young people, over and above a life of pleasure. This perspective offers a useful lens through which to understand why older adolescents might place more emphasis on job security, time for family, helping others, and leisure time when they contemplate future jobs, aspects identified as significant by prior research (ONS, 2018). These findings may offer insight for the adults responsible for guiding young people in their career development. By recognising that young people increasingly seek jobs that offer

personal fulfilment and contribute to a well-rounded life, those supporting the young can more effectively guide them. This may involve helping young people to explore and understand the wider personal benefits of engaging in work and exploring career paths that offer both financial stability and personal satisfaction. Such a comprehensive approach to career guidance would not only align with the young people's developmental trajectory but also enhance their overall well-being and life satisfaction. However, it should be noted that while findings may tell us what young people currently value, they do not tell us the extent to which individuals may be currently living according to those values, or how they might change over time and with experience.

Young people's educational stage appears to be relevant to which aspects of their PFSs were most salient. Findings indicate that older adolescents are more likely to think abstractly, which is reflected in their narratives showing insight into their identities, values and priorities. Additionally, they tend to focus on more concrete, specific aspects of their ideal job. HE students' narratives are generally more nuanced than those of younger students. They not only detail how they expect to perform their hoped-for jobs, but also consider the broader impact that these roles might have on their lives, often emphasising the importance of work-life balance, flexible work hours, and overall job flexibility.

The increasing complexity and nuance in PFSs is supported by cognitive development theory (Piaget, 1955, 1977), which posits that adolescents move from thinking only logically about concrete and visible concepts to including more abstract ones. This shift to hypothetical reasoning enables young people to conceptualise situations that are not rooted in immediate reality, such as contemplating future possibilities, whether in solving maths problems or in career and life planning. In terms of age, this may indicate that students develop a greater ability to see the future consequences of different actions, such as taking different career paths. This increased focus may help adolescents build a clearer picture of what different futures might look like for them. Research indicates that the scope (the amount and the distance) of future-oriented thinking expands with age, indicating that adolescence is characterised by an increase in future thinking compared to childhood (Wessman & Gorman, 1977). As adolescents mature, their increasing capacity to engage in abstract thinking and plan for future possibilities highlights the need for career guidance that meets their needs.



The findings also suggest distinct gender patterns in narratives, which may provide insight into identity differences during adolescence. Female narratives typically focused more on life satisfaction, relationships, and personal values. In contrast, male PFS narratives tended to be more directly related to ideal job roles and job-related outcomes such as pay. Females demonstrated more nuance in describing aspects of their work and working life, which suggests that they may integrate the self more thoroughly into their imagined future roles. This potentially indicates a deeper understanding of their current self, compared to male adolescents. However, it should be acknowledged that some of these differences may be explained by the lower word count of male responses. This might reflect a reluctance among male respondents to write more extensively or a tendency for males to adhere more closely to the given prompt. However, these gender-based differences are consistent with previous research, which suggests that males are often more focused on achievement and self-assertion, whereas females are more inclined to value connections with others and altruism (Henry & Cliffordson, 2013; Knox, 2006).

The differences in PFS content may also be attributed to their different levels of exposure to job roles and work environments (range and depth), influenced by factors such as work experience, career guidance, and the influence of family and media. This topic is discussed further in Section 6.4.1.2, which examines how these factors may contribute to shaping young people's aspirations for the future and highlights the disparities in access to these formative experiences.

### **6.2.2 How salient and elaborated are young people's PFS narratives?**

The elaboration of self; the extent to which the narrator provided vivid detailed stories of their future and included different aspects of their future lives, was systematically coded from participant's narratives. The salience of narratives; how readily available and clear an image of the future is (King & Smith, 2004), was a self-reported measure. In keeping with findings from the content analysis of PFS narrative, gender and work experience were all found to play a role in the elaboration of the self within the narratives. Elaboration was also found to be influenced by SES. The salience of individual PFSs was found to differ significantly by year group and work experience. The salience of narratives was also found to be predictive of the level of PFS elaboration. Notably, females, older students, and individuals with the most work experience demonstrated the highest levels of elaboration of self. Elaboration demonstrated by HE participants ( $Mdn=2$ ,  $M=2.11$ ,

$SD=0.64$ ) was significantly higher than for both those in Year 11 ( $Mdn=2$ ,  $M= 1.95$ ,  $SD= 0.67$ ,  $p=.019$ ) and Year 13 ( $Mdn=2$ ,  $M=1.85$ ,  $SD=0.67$ ,  $p<.001$ ). Interestingly the difference between Year 11 and Year 13, in terms of elaboration of self was not statistically significant. Similarly, salience was also higher for HE students ( $M=3.81$ ,  $Mdn=4$ ) compared to Year 11 students ( $M=3.54$ ,  $Mdn=3$ ). This pattern suggests that while there is little variation in elaboration of self between Year 11 and Year 13, a marked increase is evident as students transition into HE. The differences in salience suggest that as students transition into HE, both the clarity and detail of their future self-narratives improve significantly.

Understanding the mechanism behind this may be important for career support and guidance frameworks. It may indicate that younger students require more support to develop a cohesive narrative of their futures, or that career guidance becomes more effective after 18. However, these conclusions are tentative, as this research is exploratory in nature. Furthermore, it is difficult to make comparisons between groups due to the year groups being increasingly homogenous with age. Further analysis underscored gender differences: female participants ( $Mdn= 2$ ,  $M= 2.06$ ) produced PFS narratives that were significantly more elaborate than their male counterparts ( $Mdn=2$ ,  $M=1.83$ ). Indeed, ordinal linear regression suggested that gender was predictive of PFS elaboration, with females being more than twice as likely as males to produce more elaborate narratives ( $OR=2.15$ , 95% CI [1.44-3.21]) times that of males. These differences in elaboration may partly be explained by better literacy and cognitive capacity in females, which not only enhance their capability but potentially increase their willingness to express themselves in detail. Additionally, these findings suggest that some individuals may have greater opportunities to explore and reflect on their potential futures, thereby gaining a clearer and more comprehensive understanding of their ideal roles and other job possibilities. It is plausible that developing a detailed ideal self requires an individual to evaluate and exclude alternative PFS options, contributing to a more refined and elaborate narrative.

There were also some significant differences in elaboration of PFS according to SES (using parental occupation as an indicator). Young people from the highest SES class (parents in the NS-SEC Class 1 occupation) demonstrated a notably higher elaboration of self ( $Mdn=2$ ,  $M= 2.00$ ,  $SD= 0.64$ ) compared to those in Class 2 ( $Mdn=2$ ,  $M=1.76$ ,  $SD=0.72$ ). Interestingly, participants parents Class 3 also exhibited higher elaboration ( $Mdn=2$ ,  $M=2.14$ ,  $SD=0.55$ ) than those in Class 2,

suggesting that the relationship between SES and elaboration is not linear. This non-linear relationship implies that there may be a number of different factors which impact the PFS narratives of young people. Individuals from the highest SES may experience higher parental expectations and aspirations, have better access to career-relevant resources, and have greater opportunities for exposure to various jobs, compared to those in lower SES groups. These factors can influence and enhance reflection and clarity in career planning (Archer et al., 2023; Friedman et al., 2015; Moote & Archer, 2018). Conversely, individuals from lower SES backgrounds might also draw on community and familial networks to support their career decision-making. For instance, exposure to a community predominantly engaged in trades or industries may strongly influence career directions and provide clear pathways to get there.

Psychological factors may also impact PFS elaboration. While those in higher-SES groups may have more opportunities, and career and social capital, those from lower-SES families may face more challenges impacting their determination and motivation for a specific future. Lower elaboration is seen in Class 2 (the middle of the three-tier classification of SES) individuals. This may result from these young people experiencing a balance of motivation and resources that does not necessarily compel them towards a high level of clarity in their career and future planning, unlike those in the highest and lowest SES groups. This group (SES class 2) may possess sufficient resources to consider various options but lack the pressure, or necessity, to make definitive career decisions. (Clarke et al., 2022; Clark & Thévenon, 2022; (Archer et al., 2014; Winterton & Irwin, 2012). Although these explanations are speculative, findings indicate that there may be important differences in the way adolescents view their futures according to their SES. These variations indicate that the impact of SES on future planning requires more than just supporting those in the lowest SES groups. As such, there may be a need for more comprehensive research into how SES influences career planning and guidance so that career support and guidance can be appropriately targeted. At first glance, the idea of having a high level of clarity around future plans might seem advantageous. However, it may be important to examine why this is beneficial and under what circumstances. For some individuals, particularly in the earlier stages of their study, committing to a specific career path is not a priority, and they may prefer to keep their options open. In contrast, for others, lack of clarity and definite plans can be a source of anxiety and uncertainty. Understanding these dynamics can help in

developing more effective career guidance strategies that accommodate the varying needs and preferences of adolescents across different SES backgrounds.

Current findings demonstrated a positive correlation between PFS salience and elaboration of self ( $\rho=.25$ ,  $p<.001$ ), consistent with previous content analyses of PFS narratives (King & Raspin, 2004; King & Smith, 2004; Strauss et al., 2012). King and Smith (2004) suggest that salience is often related to elaboration of self, but that this is not always the case. Indeed, McElwee and Haugh (2010) distinguish between thinking frequently and thinking clearly about the future but highlight that it is likely to be difficult (although not impossible) to express elaboration and detail in very short (in terms of number of words) narratives. Participant narratives in this study averaged 37 words. Ordinal logistic regression analysis provides further insight, suggesting that while the relationships between PFS salience and elaboration are reciprocal, elaboration has a more substantial impact on salience (OR=1.70, 95% CI [1.36, 2.1]) than salience on elaboration (OR=1.44, 95% CI [1.17, 1.78]). A clear PFS is likely to support the development of an integrated and detailed PFS. Analysis indicates that the more vivid the image of the future the more often and easily it is brought to mind. However, the more salient an image is, the more likely different aspects will be explored. This exploration is only possible if these images are available to an individual. For example, without detailed knowledge or experience of various jobs, it would be challenging for young people to effectively imagine themselves in these roles in a meaningful way. Therefore, interventions designed to support young people in thinking about and planning for the future should focus on encouraging detailed thinking about their futures and providing ample opportunities to gain relevant experiences and information. This dual approach would support young people to form both vivid and comprehensive PFSs. The differences in PFS content may also be attributed to young people's varying levels of exposure to job roles and work environments (range and depth). This exposure is influenced by factors such as work experience, career guidance, and the influence of family and media. Work experience and exposure to work are discussed further in Section 6.4.1.2.

Overall, the findings highlight the way in which young people describe their PFS through the lens of their ideal job, content, and elaboration and salience. Findings indicate that young people not only discuss career aspirations but are often able to imagine the role as well as how it may integrate with their broader life aspirations.

### 6.3 Young people's occupational aspirations

This research explored participants' educational and career aspirations as well as the factors that might influence their goals. The specific research questions were as follows.

- What are young people's academic aspirations and expectations?
- What are young people's career aspirations and what are the main influences on these?

#### 6.3.1 What are young people's academic aspirations and expectations?

**Overview of findings.** A summary of the key findings can be found in Section 5.5. The findings from this research suggest that young people have high hopes for their future, both in terms of their academic and career aspirations. They have ambitious goals and aspirations, which indicate an optimistic attitude towards their education. However, academic hopes were significantly higher than expectations. This discrepancy suggests that, while young people might have high hopes, their expectations are somewhat more modest, implying that they may have some awareness of the challenges and constraints they may face in achieving their aspirations.

Educational hopes and expectations are correlated with SES. Participants in the highest socioeconomic level (Class 1) demonstrated the highest educational expectations ( $Mdn=3$ ,  $M=3.62$ ) and hopes ( $Mdn=4$ ,  $M=3.76$ ), whereas those in Class 3 had the lowest expectations ( $Mdn=3$ ,  $M=2.73$ ) and hopes ( $Mdn=3$ ,  $M=3.00$ ) for their educational outcomes. Educational aspirations and expectations also differed by gender, with females demonstrating the highest academic expectations and aspirations. The oldest participants similarly reported higher expectations and aspirations than the younger individuals; however, this may be explained, at least to some extent, by those students having presumably already experienced some academic success; for example, HE students will likely already have achieved both Level 2 and Level 3 qualifications.

In this study, professional roles were the most commonly aspired to jobs, among young people, particularly in the fields of health, science, technology, culture, media, and sports, with nearly three-quarters of participants desiring a job in NS-Sec Class 1. Trades and unskilled occupations were the least popular. This trend of high career aspirations aligns with recent large-scale studies, such as PISA (Mann et al., 2020) which found that the most popular jobs for 15-year-olds included doctors (9.4%), and teachers (8.2%). Similarly, the *Aspires Project* (Archer et al., 2014),

noted managerial and professional roles as the most popular. A significant proportion (22.3%) of participants in the current study aspired to jobs in Health and Social Care, such as nurses, psychologists, physiotherapists, and social workers, reflecting similar interests observed in the Aspires Project, the Millennium Cohort Study, and the Household Longitudinal Study. Additionally, culture, media and sports attracted 14% of participants, which was also consistent with previous findings. The preference for roles in education was also notable, with 7% of participants aspiring to careers in education, aligned with the Household Longitudinal Study and the high rank of teachers in PISA data.

The data in the current research point to a large interest in science and research; however, other than a specific reference to engineering, this is not directly seen in the findings of other studies. This may indicate a growing trend towards STEM careers that is not explicitly highlighted; it may also be reflective of the way in which data were gathered, such as giving pre-defined options of careers, rather than open responses, which were offered in the current study. Additionally, comparisons between current findings and previous research may be difficult because they provide limited information on how occupations were classified. It is also important to note that all findings from this thesis were gathered prior to the pandemic, since which there has been considerable change in the technical and scientific landscape, which may have impacted the types of jobs available. There have also been political changes which have put a strain on services such as the NHS and social care, which may have impacted how people view roles in health and social care. It is also notable that, where previous research included participants who were younger than the current sample, jobs in the arts and sports were more popular. This suggests that participants in the older adolescent age group had more realistic aspirations (Platt & Parsons, 2018). This emphasises the importance of supporting young people to understand the requirements of specific roles, including relevant qualifications.

The findings revealed notable gender differences in career aspirations. Females demonstrated a higher preference for roles in health and social care, and education, while males favoured positions in corporate management, science, technology, and trades. This pattern supports earlier research suggesting that girls are more likely to want to work in female-dominated careers (e.g. medical, caring, and educational roles), while boys gravitate towards male-dominated fields (e.g. technology and engineering) (Archer, 2016). Additionally, distinctions emerged

among year groups. Year 11 students were more inclined towards lower socioeconomic status (SES) jobs compared to Year 13 and HE students. It is important to note that the Year 11 sample was the most heterogeneous of the three year groups. At this age, all young people must be in a secondary setting. Unlike HE and Year 13 respondents who were currently attending educational settings, not all individuals in the wider population of these age groups are necessarily in education, reflecting a broader diversity. HE students exhibited greater interest in health and teaching roles, whereas younger year groups were more attracted to business and media fields. There was a weak correlation between participants' SES and the SES of their ideal job, suggesting minimal influence of their current socioeconomic status on their career ambitions. However, a moderate correlation was found between the SES of the ideal job and students' educational aspirations, indicating that career choices are often aligned with educational expectations. This suggests that students are aware of the educational requirements of their desired professions, especially those requiring higher academic qualifications typically associated with higher SES occupations.

These findings indicate that socioeconomic factors, age, and gender continue to shape young people's perceptions of their educational and career prospects. This aligns with data from UCAS (2023) which indicates that students from the most deprived backgrounds are still the least likely to attend university. Older students and females often display higher academic expectations and aspirations, possibly reflecting evolving societal norms, greater opportunities for female students, and the impact of maturity on occupational goals. Additionally, research indicates that cognitive ability and the ability to prospect increase over the adolescent period (Mello & Worrell, 2015; Steinberg et al., 2009).

Despite over two decades of efforts by the UK government to improve social mobility, recent findings suggest these initiatives have had minimal impact. According to the Institute of Fiscal Studies (Erve & Krutikova, 2023), social mobility is currently at its lowest since the 1960s, highlighting persistent socio-economic disparities. Educational policy continues to emphasise the need to raise the aspirations of individuals from lower SES groups. This notion portrays young people from lower SES backgrounds as having inherently low ambitions for their futures (DBIS, 2014) and implies that young people need to aim higher to improve their life outcomes. The Social Mobility Commission (2022) argues that an individual's 'choices and effort should determine where we end up' (p. 29). While on the surface

this seems to promote *equality*, it has been criticised for adopting a deficit view that locates the problem within the individual and their families, rather than addressing broader societal issues (Allen & Hollingworth, 2013; Baker, 2017; Harrison & Waller, 2018; Mendick et al., 2018). The findings of this current research, however, align with Baker et al. (2014), who suggest that, in fact, those from lower SES backgrounds may have low expectations rather than low aspirations, and Boxer et al. (2011), who reported that disadvantaged young people tend to have considerably higher aspirations than expectations.

Therefore, as Harrison and Waller (2018) contend, educational policy may be better served by targeting expectations rather than aspirations when aiming to improve the outcomes of disadvantaged young people. Such an approach may offer a more nuanced way of understanding decision-making for future plans, one that takes into account ideas of certainty and difficulty. In keeping with Rainford's (2023) contention that the concept of raising aspirations has been diversely interpreted and operationalised, the findings from this thesis indicate that it may be important for policy and practice to clarify the difference between aspirations and expectations so that policy and settings can provide a clearer understanding and support for young people (Hardgrove et al., 2015). At the very least Policymakers should clarify the difference between the concepts and avoid conflating the two.

### **6.3.2 Main influences on, and motivations for, hoped-for career**

When considering the self-perceived main influences on their ideal job choice, young individuals in the current study identified various factors. Active experience, particularly work experience, emerged as the most common influence (20%), underlining the importance of practical engagement in shaping career aspirations. Non-specific desire (19%) and crystallisation of desire (wanting to do a job linked to current preferences) (14%) were also commonly identified influences. Personal relationships (8%) and passive experiences (8%), such as exposure to job-related content through media, also played a role in shaping these aspirations.

These findings indicate that educational programs which include an element of active vocational participation may be particularly effective in supporting young people's career development. Notably, 20% of participants discussed exposure to aspects of the job, through purposeful work and incidental life experiences, as being influential. For example, one participant discussed wanting to be a doctor due to having experienced the role due to extensive treatment, as a child. This suggests



that both direct and passive exposure may also be impactful in shaping career aspirations. Work experience is discussed further in Section 6.4.1.2.

The results also emphasise the importance and impact of *Communion* in career choices, with 13% of participants valuing roles that involved connection to, and caring for, others. Furthermore, the role of family context and experiences outside the educational setting were identified as having an influence on young people's aspirations. It may be particularly important to support young people who do not have opportunities within the family and home contexts to find opportunities to be actively involved in a range of different types of work. For such individuals, the support received in school may have a greater importance. Indeed, this need is further supported by the fact that a number (8%) of young people in the sample explicitly indicated that personal relationships, such as having a family member who had the same job, had a key influence on their choice of aspired to career. Additionally, some young people were inclined toward a particular career path, even if they did not have specific experiences or exposure related to that field. A further 8% of participants highlighted passive exposure, such as exposure through the media, as being influential in career choice, demonstrating that young people can develop interest in careers without detailed information about the job's realities. This indicates that they could pursue a career without having important information about what the job would be like for them. This exposure broadens their career horizons but also highlights the need to ensure the quality of the information they receive.

In the current research parents and family were cited as a common influence on career choice, aligning with findings in the initial stage of the Futuretrack study (Purcell et al., 2008). This earlier study also emphasised the role of family views and experience as significant influences on young people's occupational choices (choice of HE institution, in terms of its reputation and location). However, by the final year of HE, the study noted a potential shift in the influences as they related to job applications. Factors such as the desire for work-life balance and flexibility, job security, and opportunities for promotion were predominant rather than family, highlighting a transition where family influence becomes more implicit in decision-making or is perceived as more relevant earlier in the career decision-making process, such as in establishing one's underlying values. These factors are aligned with findings of the UK Household Longitudinal Study (Office for National Statistics, 2018b) which found the most important influence on career aspirations included 'how interesting the job was, job security, time for family, helping others, income,

contribution to society, and leisure time. Unlike the current study, it does not clarify the origins of these job interests. The differences in approaches and findings suggest that there may be two ways to consider career and occupational choices; what sparks occupational interest in the first place, but also perspectives on the benefits and values associated with the job role. It may be important to support young people to develop their knowledge and thinking around both of these areas i.e. developing implicit knowledge and understanding around a wide range of jobs and the daily role, but also understanding what values are important to the individuals and weighing these up against each other.

Findings from the current study highlight significant gender differences in career aspirations and the self-perceived influences on these aspirations. Females tend to attribute their ideal job choices to active experiences and communal aspects, emphasising the importance of hands-on involvement and social connections. This suggests that women value roles that allow for direct engagement and interpersonal relationships. On the other hand, males are more likely to cite non-specific desires and extrinsic growth goals, such as career advancement and salary, which may reflect traditional gender norms and societal expectations about male roles in the workforce. Additionally, the study shows a correlation between the SES of participants and the SES of their aspired job roles, supporting the notion that young people understand the educational requirements associated with their desired professions. However, individuals from lower SES backgrounds, as indicated by parental education levels, were less likely to consider active experiences and personal relationships as influential, highlighting how socioeconomic constraints can shape career aspirations differently. This finding aligns with existing literature that reports gendered patterns of career interest and the influence of SES on occupational aspirations, such as the work by Archer & Moote (2016) and findings from the Office for National Statistics (2018). These observations also align with Futuretrack study (Purcell et al., 2008) which found higher social class applicants were more likely to choose courses based on interest, whereas lower social class applicants often prioritised courses perceived to lead to secure professions or better employment opportunities.

These findings indicate that social class impacts educational and occupational choices, suggesting that while young people are aware of and influenced by practical considerations like job security and educational requirements, their career aspirations are also deeply influenced by broader social

and economic factors. Gender norms and socioeconomic status not only shape individual aspirations but also affect the opportunities available to young individuals, influencing their career planning processes.

These findings emphasise the importance of providing a range of opportunities for practical experience, addressing gender-related disparities, and considering the unique challenges faced by individuals from lower SES backgrounds in their pursuit of career aspirations.

Findings suggest that young people's career aspirations may be shaped by a combination of factors including SES, gender experience, personal relationships, and media. Identity-Based Motivation theory may provide some insight into how personal identity can impact motivation towards future careers (Oyserman, 2009). According to IBM, when individuals perceive their career aspirations as congruent with their identity and within their reach, they are more likely to pursue these aspirations actively. This could explain the influence of personal relationships and media exposure on career choices found in our study, suggesting that these elements may reinforce or challenge the alignment between an individual's identity and career aspirations. Furthermore, the Proactive Motivation Model (Parker et al., 2010) complements this understanding by suggesting that imagining a future work self can drive individuals to engage in behaviours that align with these imagined futures. This model highlights the importance of "can do" factors such as personal abilities and psychological resources, which motivate individuals to pursue their career goals actively. This is particularly relevant to current findings where active engagement through work experience was highlighted as a key influencer of career aspirations. Viewing findings in this way points to the importance of young people developing a coherent future-oriented self-concept, the motivational impact of identity congruence, and the role of proactive behaviours in career planning and decision-making.

#### **6.4 What future-oriented beliefs and behaviours do young people demonstrate?**

This research aimed to examine how actively engaged young people are in planning to meet their occupational goals, how certain they are about meeting them and how difficult they perceive it would be to achieve their ideal occupations. The research also explored more general beliefs about self and the future, considering the extent to which adolescents feel in control of their lives, and their self-confidence for the future.

The specific research questions were as follows.

- What beliefs and behaviours do young people exhibit with regard to their occupational future selves?
- What is the relationship between PFSs prompted by ideal job and future-oriented beliefs and behaviours?

**Overview of findings.** A summary of the key findings can be found in Section 5.5. The findings from this research suggest that young people generally possess some confidence in their ability to attain their ideal jobs but recognise that the journey may not be easy. They express confidence in meeting personal and societal expectations and believe that they have a degree of mastery over their lives. However, they were less confident about their ability to control external influences. Nearly all young individuals reported having engaged in discussions about their future plans, primarily with family members or adult friends, while fewer had spoken with teachers or career professionals. Notably, the perceived helpfulness of these discussions varied significantly, with family and adult conversations being considered the most beneficial, whereas interactions with career professionals were viewed as less helpful in guiding their career plans.

#### **6.4.1 Future-oriented behaviours and beliefs**

##### **6.4.1.1 Career behaviours.**

Young people largely demonstrated a proactive stance towards career planning. The mean vocational development score was 3.49, with a median of 3.54, indicating a general inclination to engage in vocational planning activities. However, the range of responses (1-5) highlighted variability in engagement levels, which may reflect differential access to resources, motivation, and individual circumstances. Scores were higher in the crystallisation of self-concept and decision-making phases than in the exploring and preparing phases, which suggests that individuals have a greater focus on (or capacity to engage with) identity and preliminary decision-making career behaviours than activities that involve concrete planning and preparation.

On the whole, young people were engaging in discussions with others about their future plans, but they mostly appeared to prefer to have discussions with people close to them, such as family members. While findings highlight the significance of informal support networks in guiding career decisions, advice from career professionals was considered the least beneficial. This may be explained by

the fact that family members know them best, whereas career professionals are likely to only have limited contact with students, and although they may be experts in careers and qualifications, they are likely to lack understanding of the individual young person's wider hopes, values, and interests. This suggests that career professionals may not be best placed to provide direct support for individuals. Upskilling teaching staff who have a higher level of contact with students in school may be more beneficial, however, there is a risk that this would place an additional burden on already stretched staff.

The data revealed a small but significant positive correlation between educational stage and both vocational development ( $\rho=.12$ ,  $p<.001$ ), and perceived control ( $\rho=.18$ ,  $p<.001$ ). This association likely reflects the contribution of cognitive maturation and accumulated experience to career planning and self-efficacy. Progression through educational stages not only enhances cognitive capabilities relevant to career planning but also provides experiential learning opportunities, thereby facilitating greater engagement in career construction activities and an enhanced sense of control over career outcomes.

#### **6.4.1.2 Work experience and exposure to work.**

Research indicates that children form views about careers from a young age (Moulton et al., 2018), emphasising the importance of early exposure to a range of career options. This exposure is not just about having information but about personalising it to fit the young person's context (Behavioural Insights Team, 2016). Findings from the current research indicate that work experience is a key influence on choice of ideal job, with 20% of participants highlighting the importance of practical engagement in shaping career aspirations. However, the amount of work experience young people have varies across different groups. HE students were much more likely to have had some work experience than Year 11 students; 86% of HE students had more than one month of experience compared with less than half of Year 11 students, and only 9% of HE students had yet to experience work, as opposed to 45% of the youngest year group. These findings are largely consistent with Archer and Moote's (2016) research which found that more than half of Year 11 students had not undertaken any work experience. Furthermore, findings suggested a significant (but weak) association between length of work experience and socioeconomic status. Understanding how these patterns differ across groups may help support young people in accessing supportive experiences and resources for

their career development. While older students benefit from greater cognitive capacity to understand the career development process and have more opportunities to experience various aspects of career development, these findings highlight inconsistent opportunities in an area that may be particularly important in developing a salient future self. Some young people have access to work experience through their families and wider circles, whereas others do not.

Schools are well placed to ensure equality of opportunity in this area; however, having been given greater autonomy in managing work-related learning activities, the current guidelines may not be enough to provide appropriate and targeted support for those who most need it. This is especially true given the competing pull of academic attainment and need for curriculum time. The mandatory requirement for work experience for Key Stage 4 students was removed in 2012 following the Wolf report (DBIS, 2011), which described the reluctance of employers to host under 16s and concerns over the cost and quality of work experience placements. The more recent Gatsby benchmarks (Holman, 2014) emphasise the importance of young people engaging with workplaces, advocating for at least one workplace experience by the age of 16, beyond any part-time employment, and another by 18. It also recommends that starting from age 11, students should have annual interactions with employers to gain insight into the workforce and learn what is required for success in their future careers (DBIS, 2011).

Certainly, it makes sense that having a clear image and goal for the future can promote current action, but engaging in proactive behaviours such as undertaking work experience is likely to offer the chance to imagine a PFS that has more detail and becomes more accessible. These findings complement those presented in the Futuretrack study, which found that older students were more likely to have a clear career focus (Atfield & Purcell, 2010; Purcell et al., 2008, 2009, 2012). Furthermore, they indicate that individuals who had a 'clear idea' about their future careers were more likely to engage in paid work during their studies. Purcell (2009) suggested that this experiential learning seemed to equip students with a more robust foundation for making informed decisions about their next steps after graduation, suggesting that work experience, even part-time or in different fields, may contribute to the clarification of career goals. The implication here is that experiential learning through work provides practical insights into the workforce, enhancing students' understanding of their own career preferences and the realities of the job market, potentially offering informal advice networks. These systems

should be adaptive to the diverse needs of young individuals, enhancing the relevance and accessibility of career guidance services, while promoting opportunities for meaningful work experiences. Such an approach could more effectively support young individuals in navigating the complexities of career development, thereby optimising their readiness for, and success in, their future occupational endeavours. Insights into the prevalence and variability of work experience will contribute to a nuanced understanding of its impact on career planning and development

It should be noted that both the current study and the Futuretrack study considered engagement in work (experience or exposure) while studying, but did not examine the type or the reason behind it. As such, future research should explore the specific impact of the different types of experience on career decision-making, skill development and employment outcomes as well as the reason for engaging in such experiences,

#### **6.4.1.3 Career beliefs.**

Significant associations were observed between career behaviour and various career beliefs. Specifically, vocational development behaviours showed moderate positive correlations with perceived control and ideal job certainty, along with a weak positive correlation with confidence in the future. These relationships indicate that individuals who actively engage in career development activities possess a more robust sense of control, are more certain about achieving their ideal jobs, and exhibit greater overall confidence in their future career paths. The ordinal logistic regression analyses suggest that ideal job certainty and perceived control emerged were significant predictors of higher vocational development scores, with odds ratios of 1.63 and 1.50, respectively. This underscores the role of a strong belief in one's ability to achieve the ideal job and a sense of control in facilitating vocational development. Conversely, confidence in the future did not significantly predict vocational development, suggesting that specific career-related beliefs might be more influential in driving vocational behaviours than general future-oriented optimism. Similarly, vocational development and confidence in the future were identified as significant predictors of ideal job certainty. The positive associations suggest that engaging in vocational development activities and possessing confidence in future outcomes are critical in enhancing certainty about achieving one's ideal job.

#### **6.4.2 PFS Salience, elaboration, and future-oriented beliefs and behaviours.**

The analysis revealed ideal job certainty, perception of control, and vocational development to be significant predictors of PFS salience. Specifically, increases in ideal job certainty (OR=2.36), perceptions of control (OR=1.67), and vocational development scores (OR=1.76) were associated with increased odds of higher PFS salience. These results highlight the importance of confidence in one's future occupational prospects, belief in one's ability to influence future outcomes, and engagement in vocational development activities to heighten the salience of one's personal future. The strong association between ideal job certainty and PFS salience suggests that when individuals have a clear vision of their desired occupational outcomes, they are more likely to prioritise and value their future plans. This finding aligns with career development theories that emphasise the role of clear vocational goals in motivating individuals to engage in future-oriented planning and decision-making.

The salience of PFS among young people is positively associated with their ideal job certainty, confidence in the future, and perception of control, whereas it is negatively correlated with PFS difficulty. PFS salience is also linked to active career development behaviours and the amount of work experience, suggesting that engagement in vocational development contributes to the prominence of their future selves. However, the level of elaboration in PFS exhibits weak correlations with career development behaviours and perceptions of control, and the occupational field of the aspired job influences the vividness of PFS, with education and health-related careers having more detailed future self-images than science and technology fields.

These findings suggest that young people generally express confidence in their ability to attain their ideal jobs, indicating a degree of self-assuredness and optimism about their future career prospects. However, they also recognise that achieving their ideal occupations may not be easy, suggesting a realistic awareness of the challenges and uncertainties that can accompany career development. Findings indicate that young people have a nuanced understanding of factors that may influence their outcomes, showing some sense of agency and responsibility while demonstrating concerns about external factors that may be out of their control.

When considering how aspects of the PFS relate to vocational development, it was noted that the salience of young peoples' PFSs is positively associated with some beliefs, including confidence for the future, perceptions of control and how



certain they felt about achieving their ideal job. This could indicate that a strong sense of self-confidence and agency are linked to a clearer and more vivid vision of young people's future selves. PFS salience was also linked to active career development behaviours and the amount of work experience undertaken, which may indicate that young people who actively engage in vocational development and gain practical experience tend to have a more accessible future self-image. These findings add to the existing literature and help us understand how young people navigate their career aspirations and the factors that contribute to their beliefs and actions in the pursuit of their ideal jobs. This fits with the idea that Stein (1994) showed that those with less elaborate identities were less likely to seek advice and information about how to achieve their hoped-for future selves and were less likely to prepare for unforeseen events and cross-sectional and longitudinal research has demonstrated associations between the clarity and vividness and salience of PFSs and many behavioural and cognitive outcomes, including well-being, goal attainment, academic success, and life satisfaction (Oyserman & Destin, 2010; Lee & Oyserman, 2007). However, findings indicate that vocational development may be predictive of both PFS salience and elaboration suggesting that the relationship may be more complex and would benefit from further exploration to better understand what impact of various different aspects of vocational development.

These findings may be understood through the lens of career construction theory (Savickas, 2002), which emphasises that individuals actively construct their career narratives, imagine their idealised future selves, and adapt their expectations as they encounter real-world constraints. The progression through educational stages enhancing cognitive capabilities relevant to career planning supports the theory's notion that career construction is an evolving process, influenced by increasing self-concept clarity and vocational maturity. The fact that higher educational stages correlate with greater engagement in career construction activities suggests that as individuals grow and acquire more experiences, they become better equipped to develop and refine their career narratives. Additionally, the significant engagement of participants with their families and friends when discussing future plans highlights the importance of social and personal networks in the career construction process.

According to Career Construction Theory, such discussions are integral as individuals construct their careers through stories and these interactions provide the narrative resources that help them make sense of their vocational behaviours. The

preference for informal advice sources over formal ones could be attributed to the perceived relevance and empathetic understanding that closer personal contacts can offer, which aligns with the theory's emphasis on the narrative nature of career development. Furthermore, the variability in access to work-based learning highlights the differential resources that individuals have to construct their vocational paths, a key consideration in Career Construction Theory. Work experiences can be important narrative elements that individuals integrate into their career stories, influencing their self-concept and future work identity. The findings that work experience varies significantly with socioeconomic background and that it plays a crucial role in developing a clear and elaborated PFS underscore the importance of equitable access to such opportunities for all young individuals.

## **6.5 Limitations**

A number of limitations and boundaries around the research presented in this thesis should be considered. It is not possible to claim that the findings outlined in this thesis are an accurate depiction of all young people's PFSs. Limitations relating to the participant sample including participant recruitment and sample heterogeneity, (including in terms of SES and educational experience) are considered in section 3.8. Section 3.8 also addresses the drawbacks of using a written, electronic survey, including issues of consistency, ethical administration, and response bias stemming from individual interpretations of open-ended questions.

A further limitation relates to the use of the ideal job prompt for the PFS narrative and the data collected in response. It is important to acknowledge that the findings relating to PFS narratives may only tell us what comes to mind when prompted to think about an ideal job, and not necessarily what is important to young people now or in their future lives. Furthermore, some differences may be attributed to the willingness of participants to write down prompted thoughts. On average, younger and male students wrote less than female and older students. This may reflect an aversion to writing on the topic rather than a lack of reflexivity about the future. Using a written approach to collecting PFS narratives is also likely to be more difficult for young people who have any learning or physical needs that make writing challenging. The written PFS responses were relatively brief, and as such might be considered lacking in richness and depth. However, this limitation was somewhat offset by a relatively large sample size (in comparison to that usually obtained for qualitative research) which allowed for more breadth within the sample responses. It would, however, be useful to extend the qualitative aspect of the research, for

example by conducting in depth interviews or focus groups alongside the written responses. This approach would enable a more detailed exploration of young people's perspectives and experiences, facilitating the triangulation of data.

Finally, it should be noted that data were collected prior to the Covid-19 pandemic, and the subsequent cost of living crisis, factors which may have impacted the way young people think about the future as well as their current behaviours had the data been collected post-pandemic.

## **6.6 Conclusion**

This research explored adolescents' possible future selves and the factors that shape young people's career aspirations and their future-oriented beliefs and behaviours. Key findings from this study highlight the significant role of elements such as work experience, educational stage, gender, family, and socioeconomic status. Notably, there is a strong link between the salience and elaboration of PFS and various career-related beliefs, which point to the importance of having clear vocational goals. These goals serve as a motivational foundation for proactive planning and decision-making directed toward future careers. The findings point to the importance of practical engagement, particularly through work experience, in shaping young individuals' career aspirations. The variability in engagement with vocational planning activities suggests a need for career guidance that is responsive to the unique needs and developmental stages of adolescents.

## **7 Conclusion**

The research presented in this thesis aims to contribute to the understanding of factors that influence young people's decision-making processes regarding their future selves. It emphasises the importance of considering the salient features of PFSs and how these relate to adolescent motivations and beliefs. By understanding the mechanisms by which young people envision their future roles, educators and policymakers can provide more effective support for career planning and decision-making. The findings from the two studies conducted in this research shed light on the content of young people's PFSs and their relation to ideal jobs. They demonstrate that young people can envision their future selves and narrate various aspects of these selves. Factors such as age, gender, socioeconomic status, and work experience play significant roles in shaping the content and elaboration of these future selves.

### **7.1 Implications for practice**

Adolescents become more future-oriented as they age but they still need guidance and support to navigate the challenges of transition to adulthood and to make decisions about their futures and next steps. Schools are legally obliged and well-placed to support young people with this. However, research indicates that the support they provide is not always satisfactory and the guidance and resources that young people receive may not be equitable. The findings from this current research suggest that supporting young people in a more holistic way to develop and explore their PFSs may be a beneficial approach. Understanding these factors can help educators and policymakers develop more equitable and effective strategies to support young people in achieving their educational and career goals.

The findings of this research indicate that while some adolescents can narrate nuanced aspects of self, others are unable or reluctant to do so. This implies that there is considerable variability in the development of an integrated sense of self. An individual's ability to understand self may be evident within the stories we tell but research also suggests that the act of narrating one's story can also help in developing a coherent sense of identity (Merrill & Fivush, 2016). Therefore, understanding the content of young people's PFSs may be useful to educational professionals to provide targeted support for adolescents through this sensitive period of development. Giving young people the opportunity to consider their PFSs would promote the development of a reflexive capacity that is critical to

understanding the self and could help educators identify superficial or unrealistic understanding of the world of work.

Additionally, offering career guidance that includes details about how undertaking such work or further study would relate to an individual's broader life goals, interests and personal values could be beneficial. This approach could help young people 'try on' alternative PFSs that they have not yet considered. For example, an individual may not be able to produce a coherent image of themselves as a university student, if they do not have family or friends who have been to university to tell them about their experiences. Giving young people more opportunity to reflect on their PFS is likely to increase their salience and as this is correlated with elaboration of self indicates that this may also be increased in the process. The finding that word count was positively associated with elaboration of self and PFS word count may suggest that encouraging students to write slightly more extended prose could support the development of elaboration of self and would increase the PFS salience. It is important to consider young people who have difficulty writing or do not enjoy it. Offering alternative ways of producing narratives, such as using speech-to-text software or a scribe to record verbal responses, may help with this process.

Furthermore, educators should encourage young people to develop a coherent, balanced and integrated future script, one that focuses not only on educational and occupational goals. Focusing on the present and the future, cultivating values, and being guided by abstract, bigger-picture concepts are all associated with a greater sense of wellbeing (Hutta, 2017). Additionally, greater clarity of one's future has been found to be predictive of higher levels of traits such as optimism and lower levels of anxiety (McElwee & Haugh, 2010). This may be more important for some groups of individuals, for example, young people from lower socio-economic groups are less likely to have experiences and opportunities that can be readily integrated into their PFSs.

Both current and previous research highlight the role of work experience in developing a clear view of one's future self (Atfield & Purcell, 2010; Purcell et al., 2008, 2009, 2012). While recent guidance requires schools to offer some experience of the workplace, the interpretation of this requirement may vary. This variability, combined with differing exposure to work experience outside of education, may result in inequitable access. Schools should endeavour to understand each student's unique experiences and opportunities, so that they can

provide targeted support to those most in need, rather than applying a one-size-fits-all approach or focusing solely on students from lower socioeconomic background.

In light of the current findings, the timing and nature of career support given to young people warrants careful consideration. Notably, both elaboration of self and salience increase with educational stage and therefore age, suggesting that there is still a window of opportunity between the ages of 16 and 24 whereby PFS interventions may be directly targeted at young people. However, the majority of career support from schools is currently given before the age of 16 (DfE, 2023). While it may not be feasible to alter the varied experiences and exposure to job roles that young people encounter outside of education, schools can work to level the playing field by adopting a needs-based approach to career guidance. An equitable career system should be targeted to individual need rather than a blanket career strategy, such as that set out in the current statutory guidance for England and Wales (DfE, 2023). Establishing a baseline understanding of each individual's preferences, values, strengths and needs is the initial step towards providing tailored support. To achieve this, a shift from discrete career guidance processes towards a life design approach, which is integrated into the educational experience, could be considered. This approach would not only encompass the top-down dissemination of information about various careers but also empower young people to cultivate self-awareness and explore their interests and values comprehensively. Findings also highlight that young people may prefer to discuss their career options and preferences with people who know them well. This suggests that schools should carefully consider who delivers careers guidance and supports young people in their decision-making, aiming for a balance between those with expertise in careers guidance, such as career advisors, and those who can establish strong relationships with the individual student, such as school pastoral staff. It would be important that these individuals receive appropriate training in careers guidance to ensure they can provide effective support. However, this approach may present challenges in terms of time and cost. Regular one-to-one meetings can be time consuming for staff, potentially adding to their existing workloads. To manage this, schools might need to allocate additional resources or adjust timetables, which could incur extra costs. Furthermore, providing training for staff involved in careers guidance would also require investment in professional development programmes.

While personalised guidance is ideal, it should be complemented by access to professional career advisors to ensure all students receive comprehensive support.

Balancing personalised and professional guidance can help mitigate some of the time and cost implications, ensuring a sustainable and effective approach to career guidance in schools.

Education is not just about getting a job, though that is part of it. Education should support young people in becoming well-rounded and prepare them for adulthood. Having a job that is enjoyable and fulfilling is an important part of well-being and overall fulfilment, but it is not possible to make good decisions without being fully informed. Understanding and harnessing the potential of adolescents' PFSs as a tool for targeted support could help adolescents navigate this crucial phase of self-development. Encouraging adolescents to craft meaningful narratives about their future selves and aligning career guidance with personal values and life goals may lead to more profound self-elaboration and greater salience of these narratives. A more formalised structured approach, for example, based on young people developing a portfolio of evidence may offer a valuable avenue for achieving this objective.

## **7.2 Recommendations for future research.**

Findings from the current study and previous research (Atfield & Purcell, 2010; Purcell et al., 2008, 2009, 2012) indicate that work experience may play a significant role in shaping career aspirations. However, these findings primarily focus on the amount of work experience or whether students have engaged in work experience at all. Future research should explore the differences between types of work experience (e.g., internships, part-time jobs, volunteer work) and the reasons behind engaging in such experiences. It would be beneficial to examine how these factors impact career decision-making, skill development, and employment outcomes. Understanding how the context and quality of work experience influence career planning could inform the development of more effective experiential learning opportunities for students.

Current research suggests that middle SES (Class 2) individuals exhibit lower elaboration in career planning, possibly due to a balance of motivation and resources. While I have tentatively suggested that this group may have enough resources to consider various options but lack the pressure or necessity to make definitive career decisions, further clarification would be useful. Future research might investigate the specific factors and mechanisms contributing to this phenomenon. A deeper understanding of these dynamics might help develop more

tailored support strategies for different SES groups, ensuring that career guidance meets the unique needs of each group.

Future research should aim to address the limitation of the sample's homogeneity, particularly the over-representation of students from higher socioeconomic backgrounds. This could be achieved by employing a more diverse sampling strategy that includes young people who are not in full-time education, training, or employment. Doing so would provide a more comprehensive understanding of how PFSs vary across different socioeconomic groups and life situations. Additionally, as research indicates that some groups are more vulnerable to poorer life outcomes, it would be useful to target those populations, for example, children with special educational needs, as well as those from the lowest socioeconomic groups, in research to build up a more comprehensive picture of their specific strengths and needs.

The current research reflects the situation of the young people in the sample prior to the Covid 19 pandemic. As such, exploring young people's PFSs, and future-oriented beliefs and behaviours with populations in the current context or over time could offer valuable insights into the impact of significant life events such as the COVID-19 pandemic and economic challenges. Following a cohort of participants from different age groups over several years would also allow changes in career aspirations, goals, and the salience of PFSs to be tracked dynamically.

While taking an approach which includes both qualitative alongside quantitative data was appropriate for the current research, it would be useful to further extend the qualitative aspect of data collection. Conducting in-depth interviews or focus groups alongside written surveys would overcome some of the disadvantages of written qualitative responses and allow for a more nuanced exploration of participants' perspectives and experiences.

### **7.3 Concluding remarks**

Adolescence is a complex and challenging life stage marked by significant brain maturation, along with social, emotional, and other biological development. During the transition to adulthood, young people are expected to navigate a number of structural changes and make challenging decisions about their futures. Young people are required to give careful consideration to a range of future self options, including educational and career aspirations. This process may be especially difficult for adolescents, particularly as restructuring of the brain may impact their executive function, including their ability to plan, organise and ignore some impulses. Certain



groups of adolescents, such as those from low socioeconomic backgrounds and those with special educational needs, may face additional challenges.

Inequalities persist, and economic disparities remain a concern, even in Western societies. Efforts to address inequality and social mobility have been a consistent aim of UK governments, with the concept of "raising aspirations" central to these strategies. However, this approach oversimplifies complex issues and may place the burden of change on individuals rather than addressing the wider societal context. A more nuanced approach that focuses on expectations rather than aspirations may provide a deeper understanding of decision-making processes. Understanding the level of certainty and perceived difficulty in achieving future goals is crucial. Research has shown that young people often have higher aspirations than expectations, and experiences and exposure to different career paths significantly influence the formation of their PFSs.

While efforts to support young people's aspirations, through strategies such as the widening participation agenda and career education policy, may help upskill young people, it should be acknowledged that a more comprehensive approach that addresses structural inequalities and systemic issues is also required. It is crucial to recognise that social change may necessitate broader structural reforms, including wealth taxation, increased social housing, and enhanced funding and wages. Ultimately, the goal should be to create a more equitable and supportive environment for all young people as they navigate the complexities of planning for their future selves.

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## 9 Appendices

### 9.1 Appendix A: Pathway to Future Self Survey

Link to Qualtrics [https://york.qualtrics.com/jfe/form/SV\\_26xr8Egc8gINbQE](https://york.qualtrics.com/jfe/form/SV_26xr8Egc8gINbQE)

End of Block: Consent

---

Start of Block: Demographics

I am..

- Female (1)
  - Male (2)
  - Other, please specify (3) \_\_\_\_\_
  - Prefer not to say (4)
- 

I am currently in..

- Year 11 (4)
- Year 13 (5)
- Last year of taught degree (6)

End of Block: Demographics

---

Start of Block: Parental/carers occupations and qualifications

We would like to know more about the occupations and qualifications of your parents/carers.

If you have two parents you will have the opportunity to answer for the second parent/carers below. It does not matter which parent you answer for first.



Thinking back to when you were 14 what was the primary occupation of your parent /carer (eg hairdresser, teacher, parent, retail manager, student, unemployed or retired).

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This person is my

- Mother (1)
- Father (2)
- Male carer (4)
- Female Carer (5)
- Other, please specify (3) \_\_\_\_\_

-----

Page Break \_\_\_\_\_

What is the highest level of education that this parent/carer reached? (If appropriate)

- Did not complete Secondary Education (GCSE/O-Levels/equivalent) (7)
- Secondary Education (GCSE/O-Levels) (1)
- Post-Secondary Education (College, A-Levels, NVQ3 or below, or similar) (2)
- Undergraduate Degree (BA, BSc etc.) (3)
- Post-graduate Degree or professional qualification (MA, MSc, PGCE etc.) (4)
- Doctorate (PhD) (5)
- Do not know (6)

What is the main occupation of your second parent/carer when you were 14? (If relevant, if not go to please click the arrow to go on to the next page).

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This person is my

- Mother (1)
- Father (2)
- Male carer (4)
- Female Carer (5)
- Other, please specify (3) \_\_\_\_\_

What is the highest level of education that this parent/carer reached? (If appropriate)

- Did not complete Secondary Education (GCSE/O-Levels/equivalent) (7)
- Secondary Education (GCSE/O-Levels/equivalent) (1)
- Post-Secondary Education (College, A-Levels, NVQ3 or below, or similar) (2)
- Undergraduate Degree (BA, BSc etc.) (3)
- Post-graduate Degree or professional qualification (MA, MSc, PGCE etc.) (4)
- Doctorate (PhD) (5)
- Do not know (6)

**End of Block: Parental/carer occupations and qualifications**

---

**Start of Block: Work Experience**

We are interested in your experience of the world of work. This may be a full time or part time job and/or an unpaid work placement.

Please indicate which statement is most true for you.

- I have had a job and/or work placement for more than one year (1)
- I have had a job and/or work placement for between one month and a year (2)
- I have had a job and/or work experience for between one week and one month (3)
- I have had a job and/or work experience for less than one week (4)
- I have not had a job or any work experience yet. (5)

---

Page Break

**End of Block: Work Experience**

**Start of Block: Future Self**

We would like you to time mentally travel into the future and tell us what your perfect/ideal job would be.

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---

Tell us about why you would like to do this job. (Who or what inspired you? How did you find out about the job?)

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Describe this future self that you have imagined. Tell us as much as you can about yourself doing this ideal job (What you do day to day, and what you imagine your life being like as a person with that job).

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---



Keeping this mental image in mind, please rate the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
This future is very easy for me to imagine. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mental picture of this future is very clear. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about this future (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Page Break

Q16 If the ideal job is not possible, what job or career do you expect would be a realistic alternative for you?

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Q34

Describe this future self that you have imagined. Tell us as much as you can about yourself doing this realistic job (What you do day to day, and what you imagine your life being like as a person with that job).

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Q35

Keeping this mental image in mind, please rate the following statements.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
This future is very easy for me to imagine. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The mental picture of this future is very clear. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often think about this future (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Future Self**

---

**Start of Block: Career Construction**

We want to learn more about you and how you think about and make plans for your future.



Please indicate how much thinking or planning you have done about each activity.

	I have already done this (6)	I am now doing what needs to be done (2)	I know what to do about it (3)	I have thought about it but do not know what to do about it (4)	I have not yet thought much about it (5)
Interviewing people in a job that I like (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discussing my career with teachers and advisors (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Learning about different types of jobs (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reading about occupations (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Investigating occupations that might suit me (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Working a part-time job related to my interests (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determining the training needed for jobs that interest me (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate how much thinking or planning you have done about each activity.

	I have already done this (6)	I am now doing what needs to be done (2)	I know what to do about it (3)	I have thought about it but do not know what to do about it (4)	I have not yet thought much about it (5)
Deciding what I really want to do for a living (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding a line of work that suits me (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Selecting an occupation that will satisfy me (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Planning how to get into the occupation I choose (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reassuring myself that I made a good occupational choice (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate how much thinking or planning you have done about each activity.

	I have already done this (6)	I am now doing what needs to be done (2)	I know what to do about it (3)	I have thought about it but do not know what to do about it (4)	I have not yet thought much about it (5)
Developing special knowledge or skills that will help me get the job I want (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding opportunities to get the training and experience I need (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Beginning the training I need for my preferred job (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Qualifying for the job that I like best (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page Break

Please indicate how much thinking or planning you have done about each activity.

	I have already done this (6)	I am now doing what needs to be done (2)	I know what to do about it (3)	I have thought about it but do not know what to do about it (4)	I have not yet thought much about it (5)
Making plans for my job search (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Getting a job once I complete my education or training (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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Page Break

Please indicate how much thinking or planning you have done about each activity.

	I have already done this (6)	I am now doing what needs to be done (2)	I know what to do about it (3)	I have thought about it but do not know what to do about it (4)	I have not yet thought much about it (5)
Forming a clear picture of my personality (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recognizing my talents and abilities (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Determining what values are important to me (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Knowing how other people view me (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Identifying people that I want to be like (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Finding out what my interests are (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Setting goals for myself (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Career Construction**

---

**Start of Block: Discussing career plans with other people**

We would like to find out if you have talked to other people about your future study/career ideas and plans.

Please indicate who you have discussed your future study/career plans and ideas with and how helpful these were to you

	True- the discussion was very helpful (5)	True- the discussion was somewhat helpful (9)	True- the discussion was not helpful (6)	False- I have not discussed future plans (7)
A family member or adult that I know socially (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A teacher /tutor (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A careers advisor (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A friend (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Discussing career plans with other people**

---

**Start of Block: Yerdelen Self-efficacy**

We are interested in how confident you feel about your future.

Please indicate how true each of the following statements are for you.

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
I am confident that I can live up to what my parents expect of me (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can live up to what my teachers or lecturers expect of me (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident that I can live up to what I expect of myself (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a clear plan for what I hope to do next (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Yerdelen Self-efficacy**

---

**Start of Block: sense of Control**

We would like to know more about how much control you feel you have in your life.

Strongly disagree (1)

Somewhat disagree (2)

Neither agree nor disagree (3)

Somewhat agree (4)

Stongly agree (5)

Please indicate how true each of the following statements are for you.

I can do just about anything I really set my mind to. (10)

When I really want to do something, I usually find a way to succeed at it. (11)

Whether or not I am able to get what I want is in my own hands. (12)

What happens to me in the future mostly depends on me. (13)

There is little I can do to change the important things in my life. (1)



I often feel  
helpless in  
dealing with the  
problems of life.

(2)

Other people  
determine most of  
what I can and  
cannot do. (3)

What happens in  
my life is often  
beyond my  
control. (5)

There are many  
things that  
interfere with  
what I want to do  
(6)

I have little control  
over the things  
that happen to  
me. (7)

There is really no  
way I can solve  
the problems I  
have (8)

I sometimes feel I  
am being pushed  
around in my life.  
(9)

## 9.2 Appendix B: Ethical Approval process and Timeline as of March 2019

### Step one (September 2018- February 2019)

- Design of research and proposal development
- Ethical consideration of research design
- Reflection and discussion with supervisor
- Development of consent form and participant information sheet
- Ethical audit form

### Step two (February 2019)

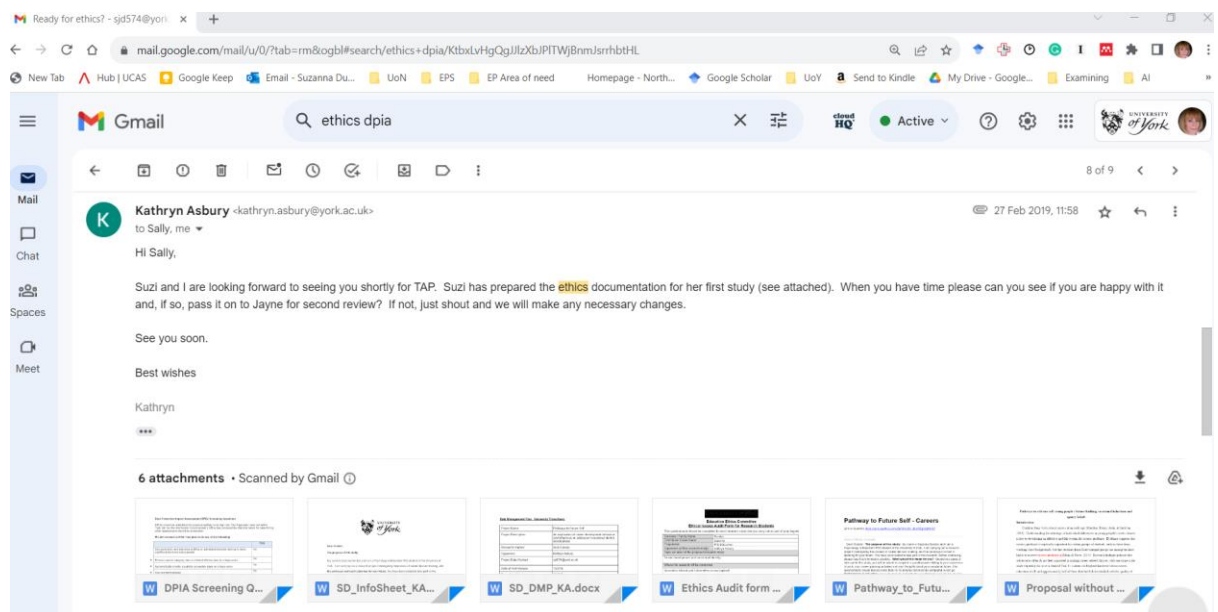
Completion of ethics application which included:

- Ethics Audit form
- Data Protection Impact Assessment (DPIA) Screening Questions
- Data management plan
- Participant information sheet
- Research survey (including participant consent)

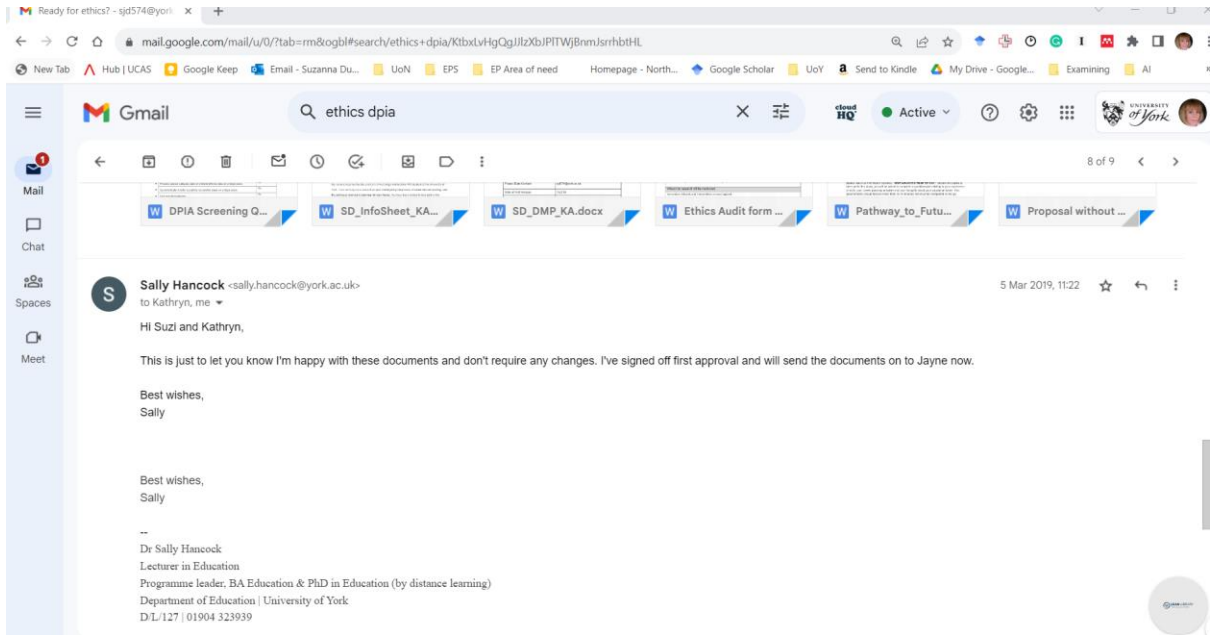
### Step 3 Ethics approval February-March 2019

#### a. Approval by thesis advisory panel (TAP) member

Following approval by PhD supervisor ethical application was sent to thesis advisory panel (TAP) member Dr Sally Hancock on 27.2.19

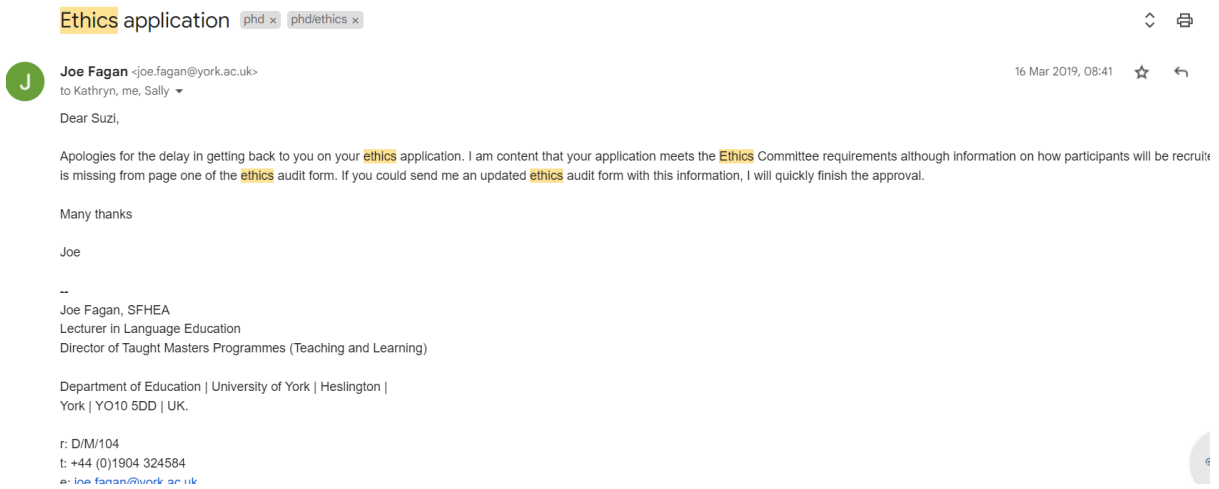


Approved by SH on 5.3.19



**b. Ethics Committee approval March 2019**

The ethical application was then sent to the Higher Degrees Administrator who will seek a second who seeks opinion from a designated member of the Education Ethics Committee. Approval given on 19.3.23





**Joe Fagan** <joe.fagan@york.ac.uk>  
to education-research, me, Kathryn, Sally ▾

19 Mar 2019, 10:22 ☆

Thanks Suzi

I have now approved your **ethics** application and enclose the signed **ethics** audit form for your records.

All the best with your data collection.

Kind regards,

Joe

\*\*\*

One attachment • Scanned by Gmail ⓘ



See Appendix C for ethics application, including signed approved ethics audit form

### 9.3 Appendix C: Ethics Audit Form



#### Education Ethics Committee

#### Ethical Issues Audit Form for Research Students

This questionnaire should be completed for each research study that you carry out as part of your degree.

Surname / Family Name:	Dundas
First Name/ Given Name:	Suzanna
Programme:	PhD Education
Supervisor (of this research study):	Kathryn Asbury
Topic (or area) of the proposed research study:	
Career development and vocational identity.	
Where the research will be conducted:	
Secondary Schools and Universities across England.	
Methods that will be used to collect data:	
Online questionnaire.	
If you will be using human participants, how will you recruit them?	
Schools will be approached by sending an email containing information about the study to Headteachers and/or school career leaders.	
We will start with schools (with a sixth form) in the Yorkshire and Humber region and will approach a variety of types of schools. Depending on the level of take up in the Yorkshire and Humber region we may then extend this same approach to other regions of the country.	

For university student participants we will send an email to a representative range of University Departments, asking them to circulate it to their students. Within a region (e.g. Yorkshire and Humber) we will approach a Science, Social Science and Arts & Humanities Department in a Russell Group and a non-Russell Group University. We will do the same in other regions e.g. Greater London with a view to gathering data from a representative sample of students in England. We will continue until our sample is sufficient.

Supervisors, please read *Ethical Approval Procedures: Students*.

The application is a joint one by the research student and supervisor(s). It should be submitted to the TAP member for initial approval and then to the Higher Degrees Administrator who will seek a second opinion from a designated member of Education Ethics Committee. Forms may also require review by the full Ethics Committee (see below).

**First approval:** by the TAP member (after reviewing the form):

Please select one of the following options.

I believe that this study, as planned, meets normal ethical standards. I have checked that any informed consent form a) addresses the points as listed in this document, and b) uses appropriate language for the intended audience(s).	X
I am unsure if this study, as planned, meets normal ethical standards	<input type="checkbox"/>
I believe that this study, as planned, does not meet normal ethical standards and requires some modification	<input type="checkbox"/>

TAP member's name (please type):	Sally Hancock
Date:	5/03/2019

**Second approval:** by a designated Ethics Committee member:

Please select one of the following options:

I believe that this study, as planned, meets normal ethical standards. I have checked that any informed consent form a) addresses the points as listed in this document, and b) uses appropriate language for the intended audience(s).	<input checked="" type="checkbox"/>
I am unsure if this study, as planned, meets normal ethical standards	<input type="checkbox"/>
I believe that this study, as planned, does not meet normal ethical standards and requires some modification	<input type="checkbox"/>

Name of Ethics Committee member (please type):	Joe Fagan
Date:	19/03/19

The Ethics Committee member should now email this completed form to the Programme Administrator, unless approval is required by the full Ethics Committee (see below).

**Approval required by the full Education Ethics Committee**

If the application requires review by the full Education Ethics Committee, please select one of the following options then forward the application to the Research Administrator ([education-research-administrator@york.ac.uk](mailto:education-research-administrator@york.ac.uk)).

The study involves deception	<input type="checkbox"/>
The study involves an intervention and procedures could cause concerns	<input type="checkbox"/>
The topic is sensitive or potentially distressing	<input type="checkbox"/>
The study involves vulnerable subjects	<input type="checkbox"/>
Other reason:	

Name of person making referral (please type):	
Date:	<a href="#">Click here to enter a date.</a>

## **FOR COMPLETION BY THE STUDENT**

### **Data sources**

- 1 If your research involves collecting secondary data only **go to SECTION 2.**
- 2 If your research involves collecting data from people (e.g. by observing, testing, or teaching them, or from interviews or questionnaires) **go to SECTION 1.**



**SECTION 1: For studies involving people**

3 a) Have you screened your study for risk using the Data Protection Impact Assessment (DPIA) screening questions? **YES**

b) Did you have to undertake the Data Protection Impact Assessment? **NO**

4 a) Is the amount of time you are asking research participants to give reasonable? **YES**

b) Is any disruption to their normal routines at an acceptable level? **YES**

5 Are any of the questions to be asked, or areas to be probed, likely to cause anxiety or distress to research participants? **NO**

6 a) Are all the data collection methods used necessary and appropriate to the context and participants? **YES**

b) Do you need to gather personally identifiable data? **NO**

c) Are you capturing the minimum amount of personal data/special category data necessary for your research project?

**YES**

*\*NA if no personal data is to be collected*

- 7 Could you anonymise data or pseudonymise data at any point during the project to minimise data protection risk? N/A

*\*NA e.g. if only anonymous data is to be collected*

If NO, please explain:

- 8 Will the research involve deception? NO

- 9 Will the research involve sensitive or potentially distressing topics? (The latter might include abuse, bereavement, bullying, drugs, ethnicity, gender, personal relationships, political views, religion, sex, violence. If there is lack of certainty about whether a topic is sensitive, advice should be sought from the Ethics Committee.) NO

If YES, what steps will you take to ensure that the methods and procedures are appropriate, not burdensome, and are sensitive to ethical considerations?

- 10 Does your research involve collecting data from vulnerable or high risk groups? (The latter might include participants who are asylum seekers, unemployed, homeless, looked after children, victims or perpetrators of abuse, or those who have special educational needs. If there is a lack of certainty about whether participants are vulnerable or high risk, advice should be sought from the Ethics Committee. Please note, children with none of the above characteristics are not

necessarily vulnerable, though approval for your project must be given by at least two members of staff; see above). NO

If YES, what steps will you take to ensure that the methods and procedures are appropriate, not burdensome, and are sensitive to ethical considerations?

11 Are the research participants under 16 years of age? NO

**If NO, go to question 12.**

If YES, and you intend to interact with the children, do you intend to ensure that another adult is present during all such interactions? Choose an item.

If NO, please explain, for example:

i) This would seriously compromise the validity of the research because [*provide reason*]

ii) I have/will have a full Disclosure and Barring Service check (formerly Criminal Records Bureau check). Choose an item.

iii) Other reasons:

## Payment to participants

- 12 If research participants are to receive reimbursement of expenses or any other incentives, including financial, before or after the study, please give details. You should indicate what they will receive and, briefly, the basis on which this was decided.

We will offer to send a lay report of findings once analysis is complete. Careers leaders may be able to use the findings to support their school career guidance offer.

It is often considered good practice to consider what the researcher might offer the participants, in the spirit of reciprocity. Some ideas of what this might be include: materials at the end of the study, a workshop summarising the results of the study, a delayed treatment/intervention at the end of the study, an indication about where the findings might be accessed at a later date, a letter or token of thanks. Please ensure that you have considered the potential for reciprocity in your research.

**If your study involves an INTERVENTION i.e. a change to normal practice made for the purposes of the research, go to question 13** (this does not include 'laboratory style' studies i.e. where ALL participation is voluntary):

**If your study does not involve an intervention, go to question 20.**

- 13 Is the extent of the change within the range of changes that teachers (or equivalent) would normally be able to make within their own discretion? Choose an item.

14 Will the change be fully discussed with those directly involved (teachers, senior school managers, pupils, parents – as appropriate)? Choose an item.

15 Are you confident that *all* treatments (including comparison groups in multiple intervention studies) will potentially provide some educational benefit that is compatible with current educational aims in that particular context? (Note: This is *not* asking you to justify a non-active control i.e. continued normal practice) Choose an item.

Please **briefly** describe this / these benefit(s):

16 If you intend to have two or more groups, are you offering the control / comparison group an opportunity to have the experimental / innovative treatment at some later point (this can include making the materials available to the school or learners)? Choose an item.

If NO, please explain:

17 If you intend to have two or more groups of participants receiving different treatment, do the informed consent forms give this information? Choose an item.

18 If you are randomly assigning participants to different treatments, have you considered the ethical implications of this? Choose an item.

- 19 If you are randomly assigning participants to different treatments (including non-active controls), will the institution and participants (or parents where participants are under 16) be informed of this in advance of agreeing to participate? Choose an item.

If NO, please explain:

**General protocol for working in institutions**

- 20 Do you intend to conduct yourself, and advise your team to conduct themselves, in a professional manner as a representative of the University of York, respectful of the rules, demands and systems within the institution you are visiting? **YES**
- 21 If you intend to carry out research with children under 16, have you read and understood the Education Ethics Committee's *Guidance for Ethical Approval for Research in Schools*? Choose an item.
- 22 If you are conducting research overseas, have you checked whether local ethics approval is needed? Choose an item.
- 23 If local ethics approval is needed, have you obtained it? Choose an item.

If NO, please explain:

**Informed consent**

24 Have you prepared Informed Consent Form(s) which participants in the study will be asked to sign, and which are appropriate for different kinds of participants? **YES**

If YES, please attach the informed consent form(s).

If NO, please explain:

25 Please check the details on the informed consent form(s) match each one of your answers below. Does this informed consent form:

a) inform participants in advance about what their involvement in the research study will entail?

**YES**

b) if there is a risk that participants may disclose information to you which you may feel morally or legally bound to pass on to relevant external bodies, have you included this within a confidentiality clause in your informed consent form?

**N/A**

c) inform participants of the purpose of the research?

**YES**

- d) inform participants of what will happen to the data they provide (how this will be stored, who will have access to it, whether and how individuals' identities will be protected during this process)? **YES**
- e) if there is a possibility that you may use some of the data publicly (e.g. in presentations or online), inform the participants how identifiable such data will be **and** give them the opportunity to decline such use of data? **YES**
- f) give the names and contact details (e.g. email) of at least two people to whom queries, concerns or complaints should be directed? One of these people should be on the Education Ethics Committee (please use [education-research-administrator@york.ac.uk](mailto:education-research-administrator@york.ac.uk)) and not involved with the research. **YES**
- g) in studies involving interviews or focus groups, inform participants that they will be given an opportunity to comment on your *written record* of the event?

Choose an item.

If NO, have you made this clear this on your consent form? Choose an item.

If NO, please explain why not:

- h) inform participants how long the data is likely to be kept for? **YES**



i) inform participants if any data will be kept indefinitely? YES

j) inform participants if the data could be used for future analysis and/or other purposes?

YES

k) inform participants they may withdraw from the study during data collection?

YES

l) provide a date/timescale by which participants will be able to withdraw their data and tell the participants how to do this? (NB. If your data is going to be completely anonymised, any withdrawal of data needs to happen before this.)

YES

*\*NA if your data will be anonymous at point of collection*

If your answer was NO to any of the above, please explain here, indicating which item(s) you are referring to (a-j):

26 Who will be asked to sign an Informed Consent Form? Please select all that apply:

CATEGORY	
Adult research participants	<input checked="" type="checkbox"/>
Research participants under 16	<input type="checkbox"/>
Teachers	<input type="checkbox"/>
Parents (of U16s)	<input type="checkbox"/>
Head/Senior leadership team member	<input type="checkbox"/>
Other (please explain)	<input type="checkbox"/>

27 In studies involving an **intervention** with under 16s, will you seek informed consent from parents?

N/A

If NO, please explain:

## SECTION 2

### Data Storage, Analysis, Management and Protection

28 I am accessing data from a non-publicly available source (regardless of whether the data is identifiable) e.g. pupil data held by a school or local authority, learners' work.

**NO**

If YES, I have obtained written permission, via an informed consent document, from a figure of authority who is responsible for holding the data. This informed consent a) acknowledges responsibility for releasing the data and b) confirms that releasing the data does not violate any informed consents or implicit agreements at the point the data was initially gathered.

Choose an item.

29 a) I have read and understood the Education Ethics Committee's Guidance on Data Storage and Protection. **YES**

b) Are you working collaboratively with 3rd parties or sharing data with non-University personnel? **NO**

c) If YES have you consulted the Information Governance Office and/or IP and Legal to ensure appropriate contract and/or data sharing arrangements are in place? **Choose an item.**

30 What technical and organisational measures have you put in place to safeguard data (e.g. storage arrangements, folder and file encryption, safe handling practices etc.)?

Please give details:

a) Have you completed a Data Management Plan? **YES**

If NO, please explain:

31 If any anonymised data is to be kept indefinitely it will be stored with the University's Research Data York service, as I am practising Open Science. YES

32 If your data can be traced to identifiable participants:

a) who will be able to access your data?

b) approximately how long will you need to keep it in this identifiable format?

33 If working in collaboration with other colleagues, students, or if under someone's supervision, please discuss and complete the following:

We have agreed:

a) Suzanna Dundas will be responsible for keeping and storing the data

b) *Suzanna Dundas, Kathryn Asbury and members of the GOALS lab* will have access to the anonymised data

c) *Suzanna Dundas, Kathryn Asbury and members of the GOALS lab* will have the rights to publish using the data

### **Reporting your research**

- 34 In any reports that you write about your research, will you do everything possible to ensure that the identity of any individual research participant, or the institution which they attend or work for, cannot be deduced by a reader? **YES**

If NO please explain:

--

**Conflict of interests**

- 35 If the Principal Investigator or any other key investigators or collaborators have any direct personal involvement in the organisation sponsoring or funding the research that may give rise to a possible conflict of interest, please give details:

--

**Potential ethical problems as your research progresses**

- 36 If you see any potential problems arising during the course of the research, please give details here and describe how you plan to deal with them:

--

Student's Name (please type):	Suzanna Dundas
Date:	19 February 2019

Please email this form to your supervisor who will send it to the TAP member

**NOTE ON IMPLEMENTING THE PROCEDURES APPROVED HERE:**

If your plans change as you carry out the research study, you should discuss any changes you make with your supervisor. If the changes are significant, your supervisor may advise you to complete a new 'Ethical issues audit' form.

For Research Students (MA by Research, MPhil, PhD), once your data collection is over, you must write an email to your supervisor to confirm that your research did not deviate significantly from the procedures you have outlined above.

## 9.4 Appendix D: Participant Information and Consent Sheet

### An exploration of how young people think about and plan for their futures

#### Participant Information and Consent Sheet

Dear Student,

My name is Suzanna Dundas and I am a Psychology in Education PhD student at the University of York. I am carrying out a research project investigating the process of career decision making, and the pathways involved in planning for your future. You have been invited to take part in this research. Before continuing, please read this information carefully:

#### **What would this mean for you?**

Should you agree to take part in this study, you will be asked to complete a questionnaire which asks about your career planning activities, any experience of work you have had, and your thoughts about your vocational future. This questionnaire should take between 10 and 15 minutes.

#### **Participation is Voluntary**

If you do agree to complete the questionnaire, you are free to stop at any point. Once the questionnaire has been submitted the data cannot be withdrawn as it is anonymous, so there will be no way to identify your data. If you do not want the data to be used in this way, please do not complete the questionnaire.

#### **Processing of your data**

Information that you provide will be treated confidentially and shared on a need-to-know basis only. The University of York is committed to the principle of data protection by design and default and will collect the minimum amount of data necessary for the project. In line with our charter which states that we advance learning and knowledge by teaching and research, we process personal data for research purposes under Article 6(1) (e) of the GDPR:

For information about General Data Protection Regulation (GDPR), please follow the link

[https://www.york.ac.uk/education/research/gdpr\\_information/](https://www.york.ac.uk/education/research/gdpr_information/)

#### **Storing and using your data**

All of the data collected for this study will be anonymous. We will not ask for your name or any other identifying information. The data will be stored in a password protected file and will only be accessible to the researchers involved in the project – myself, my supervisor Dr Kathryn Asbury and researchers in the GOALS lab at the University of York. The anonymous data may be used in presentations, online, in research reports, in project summaries or similar. In addition, the anonymous data may be used for further analysis. Your individual data will not be identifiable, but if you do not want the data to be used in this way, please do not complete the questionnaire.

I am practising Open Science and anonymised data will be managed professionally and stored indefinitely with the University's Research Data York service.

#### **Questions or concerns**

This research has been approved by the Department of Education's Ethics Committee at the University of York. If you have any questions or complaints about this research please contact myself Suzi Dundas [sjd574@york.ac.uk](mailto:sjd574@york.ac.uk) or Chair of the Ethics Committee ([education-research-administrator@york.ac.uk](mailto:education-research-administrator@york.ac.uk)). By submitting this questionnaire, you are agreeing to all of the points above.

Many thanks for your help with this research

Suzi Dundas



**Consent Form- An exploration of how young people think about and plan for their futures**

**Please read the following statements and tick or highlight each box if you are happy to take part in this research.**

**Add your name and sign at the bottom.**

I confirm that I have read and understood the information given to me about the above, named research project and I understand that this will involve me taking part as described above.

I understand that the purpose of the research is to explore how young think about and plan for their futures

I understand that data will be stored securely on a password protected computer for a short time (3 weeks) and only Suzanna Dundas will have access to any identifiable data before being fully anonymised.

I understand that my data will not be identifiable and the data may be used ....

in publications that are mainly read by university academics  
 in presentations that are mainly attended by university academics  
 in publications that are mainly read by the public  
 in presentations that are mainly attended by the public  
 freely available online

I understand that I can withdraw my data at any point during data collection and in the following 3 weeks after which the data will be anonymised

I understand that my data can be stored indefinitely and used in the future for research or other purposes.

\_\_\_\_\_  
Participant Name (Printed)

\_\_\_\_\_  
Participant Signature

\_\_\_\_\_  
Date

Please return this form by email to Suzi Dundas (sjd574@york.ac.uk) or bring it with you on the day that you complete your questionnaire.

**Thank you very much for taking part.**



## 9.5 Appendix E PFS Codebook

### Codes

Name	Description	
Being successful in job	May use the word successful or may refer to being important or gaining accolades.	A successful engineer get more important positions in the business I would like lots of people to work for me. i would like
Belongings and possessions	Reference to belongings, not house or pets- cars, clothes, shopping	Work hard to achieve what none has achieved before. Make sure I leave nothing to be desired from my work. Outside of the workplace, live a suave life, full of fancy dinners, expensive suits. would be financially stable living in a nice house with dogs and a family, nice car, nice area with good school etc. Be able to afford holidays
Boring job		
Busy, working hard	Working hard, effort work to best of one's ability, busy. Work ethic	at the same time i will need to do a lot of effort. Very busy making everything run well. work a lot of hours Working hard to help people and save lives whilst still enjoying doing what I love. Good work ethic
Challenging work	Challenging work, difficult but not insurmountable- still worth it an).	I would like my job to provide different challenges
Connections outside of work	Relationships and connections that are not within work or direct family. Friends and groups socialised with.	Some time off with friends

Diet	Diet and meals	would like to still have a plant based diet.
Driven to succeed	Working towards success- motivation and behaviour to be successful	Work hard to achieve what none has achieved before. pushing myself and fulfilling my full potential and
Family	Spouse, children, family, kids, parents. Spouse, children, family, kids, parents. Finding love.	will hopefully be married to a woman, have children, eventually married with children move to part time to care for my children more just want to find love keep my parents happy, try my utmost best to be religious,
Financial stability	Financial stability, enough money (to support family), live comfortably, fund self, sustain self. Not just about pay- or being wealthy.	A financially stable, happy adult. that I can provide for myself and for my family.
Flexible working	Choosing work hours and place of work having options (not working from home unless this is given as ppt option- as WFH may not be a choice.	I'd like to work in an office around the Manchester area but also have the options to work from home. I would hope that working flexible hours will allow
Fulfilling career	Getting something out of work, rewarding, giving something back, making a contribution	a flourishing life but also to do something that I really enjoy/find rewarding. I will contribute to the development of future scientists as well as contributing to the scientific community myself
Happy in job	Happy, enjoying or loving job.	and to be inspired by and love my job.
Happy, enjoying life	Happy, enjoying life, excited for future. Not specifically related to job	enjoying life. My daily life would be good. Future self is happy and content in her life and where she is.
Health and Fitness	Physical and psychological wellbeing, fitness and exercise	In my free time I run. I run a few ultra marathons every year. Am married to my current girlfriend, we have children, Quite simple. and also deal with myself psychological problems properly

		I would like to be happy, with my close family and friends, good health
Helping others	Helping others, looking after others. This may be in job or not, specific or not	i get to help people overcome their struggles and i really want them to be helped. to help people overcome their struggles and i really want them to be helped. Helping other on a daily.
Hobbies & non work activities	Hobbies and non social activities outside of work. (if exercise- put in health unless states hobby/social activity (need to work this one out)	Enough free time to engage in activities outside of work going to the pub afterwork with the lads Enough free time to engage in activities outside of work
Home environment	Describes aspects of home/house. Inside living space or type/size of accomodation	come home to a nice house and chill out Enough free time to engage in activities outside of work
How I will look	Relates to personal appearance, clothes, body, face	A young well groomed business man I will finally achieve a healthy lifestyle, with my dream body as a bonus.
I don't know	Actively states that they don not know or are unsure. Not to be applied to missing data	Dont know Not sure
Independence	Talks about looking after self, making own decisions, independence. Living away from others	be independent. I want to move away from home,
Job general area eg physics	Refers to the job role, broad activities and tasks or general area the job is in eg teaching	potentially own a business working for tesla temporarily to translate or work as a social worker
job stability	Stable job or work	

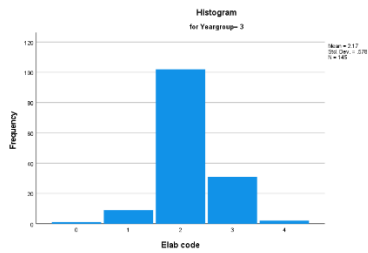
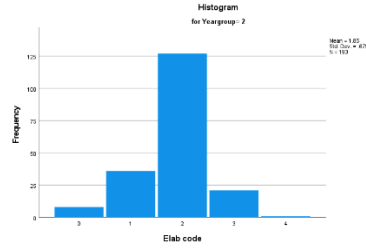
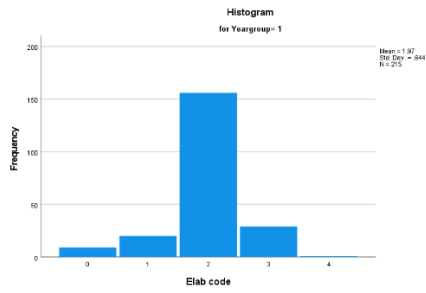
Learn new skills	Continuing learning, learn new skills, training undertaking study	go to training in the evenings depending if I have the day off. I want to learn new skills when i do this job.
Level of stress	Any mention of stress or overwhelm or opposite such as relaxing.	stressful and important job, it would be busy and stressful but something that i love and enjoy I would be happy and live a relatively relaxing home life while having just the right amount of stress within my job to keep it challenging and interesting but not overwhelming
Location	Geographical town and country  Place of work or home eg flat, office, school. Working from home	work in a private school in the states Working in a nice location and having a nice office with lots of books. living in a major city
Other- not answering the question	Answers that appear to be random and not related to the question.	
Other personal qualities & attributes I will have	Reference to traits, personality and attributes. How they will be rather than what they will do	Positive outgoing willing good at time management had have good self control. I should be charismatic with leadership qualities and the ability to communicate and engage with constituents. I hope to be a more confident and social version of myself with this job.
Pay	Pay, salary, income. Not solely about being wealthy or being rich or financial stability	i want to have a good secure income with decent pay as it's quite niche and sought after at the moment.
People I work with	Relationships and communication with people at work. This might be colleagues or clients.	talking to people about their designs working with other actors directing producing shows on tv
Person Job Fit	How aspects of individual's personality or likes and dislikes match or make them a good fit for the job.	I think i have an eye for these things i am a active person that likes to do hands on jobs I have always liked Business

Pets and animals	Any depiction of pets and animals in future life	Have some pets I would probably have an apartment with a specified separate room for Andre (my green checked conure- he is a little parrot). The floors would be wood to avoid mess. I would also have a dog.
Power,status and fame	Feeling or looking powerful, with status or important. Fame	Delegating most of the menial work to people employed by me, while still being involved in whatever business is doing. Good work/life balance. Happy. Powerful
Psychological wellbeing	Any reference to psychological wellbeing other than stress	I will be able to deal with my psychological problems Healthy mind
Same as before (only realistic)	Describes or states same job as in ideal PFS	
Spiritual	Religion, faith, worship and spirituality	Will hopefully be married to a woman, have children, live a healthy life, keep my parents happy, try my utmost best to be religious, work a job that pays a lot of money, potentially own a business and hopefully just have a chill life with my friends and family to also continue my journey of faith.
Structure of the working day	Descriptions that look at activities and tasks that might happen during the day. This should be above what the job is about (more of a job description) – for example not just ‘teaching’ but include aspects such as teach lessons, mark books, go to meetings. It may include aspects before and after work such as go the the gym before work. It is likely to include more than one. Action. This may be alongside work hours but work hours alone should not be coded here- should be in separate code	eat porridge for breakfast everyday. read a lit. learn stuff simply for the sake of learning Walk around to a house and clean the windows Eat well, train and play matches
Travel	Travel and holidays but not just one non UK location- eg not I will live in New York.	I would like to travel around the world Working in shows around the world.

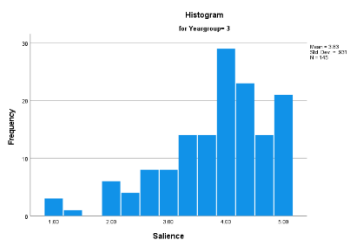
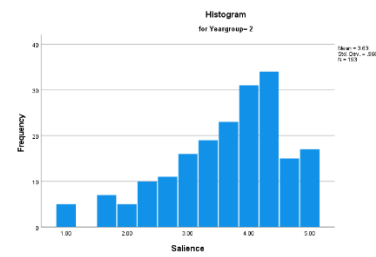
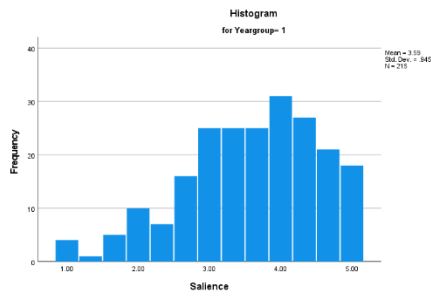
Variety	Explicit reference to doing different things or variety in job	Everyday will be different and I will constantly be meeting new people. My days will never be the same as no two students and no two patients are the same.
Wealth	Rich, wealth rather than pay	rich I have financial freedom and, more important, free will to do whatever I understand it's best for me. I will be the boss of my startup and I will be famous and wealthy
What I do now	Reference to current work	I will continue to do the same job as I do now.
Work hours	Hours to be worked (but not about being busy or working hard). Days worked. Being part time	work 9-5 cooking and serving working most days would work in a school probably a secondary school and I would work there part time and the days I am off I would possibly coach trampolining since I know lots about that already
Work life balance	Reference to work and home life. Eg having time for family or not bringing work home.	Then having free time to do what I want whether that be a hobby like playing piano or playing with a pet I'll inevitably get. My daily life would include focusing on my studies but always taking time out for myself as I don't do that at all and i'm always told that I should do id want to keep everything in balance with my work life and my private life

## 9.6 Appendix F Comparing distribution of PFS elaboration scores for year group, parental SES and gender

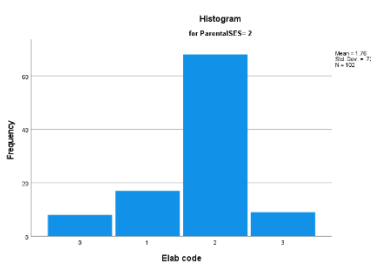
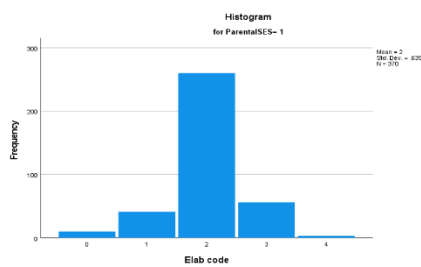
### Elaboration- Year group

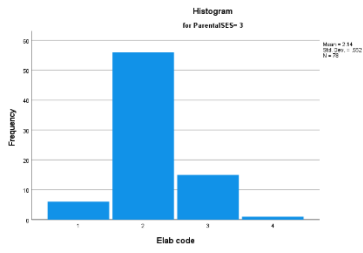


### Salience- Year group

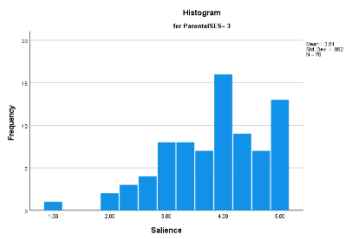
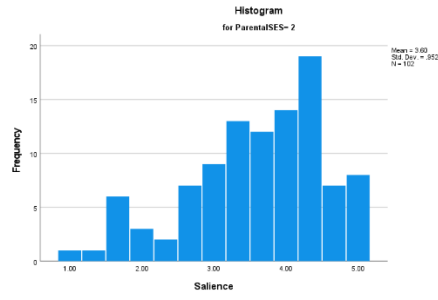
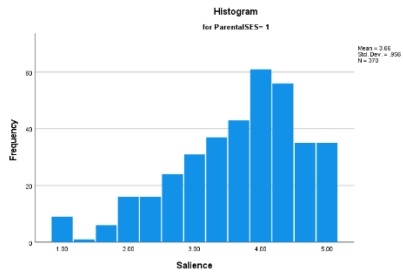


### Elaboration- Parental SES

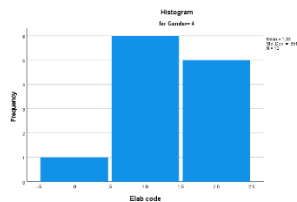
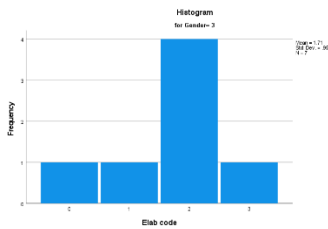
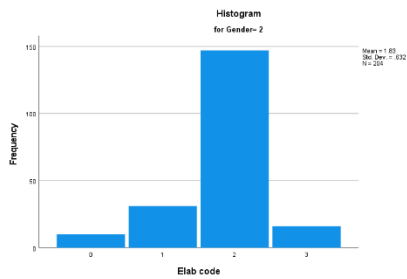
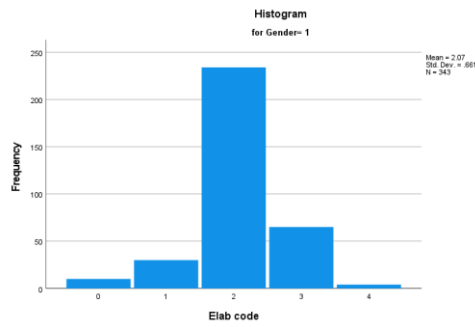




## Salience Parental SES

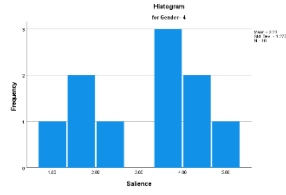
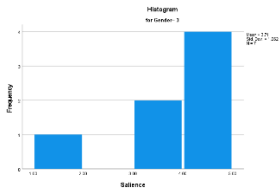
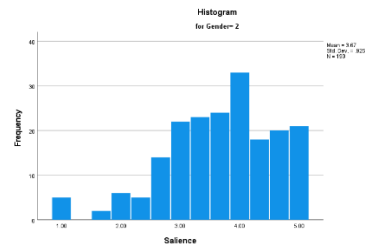
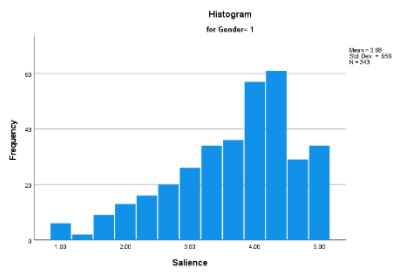


## Elaboration-gender





# Saliency-gender



## 9.7 Appendix G Collinearity Statistics for elaboration and salience

Dependent Variable: Salience

Collinearity  
Statistics

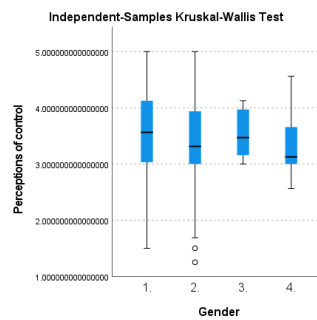
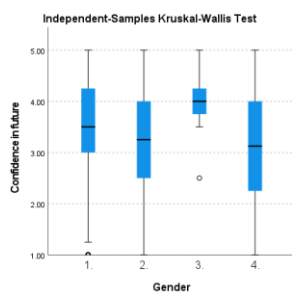
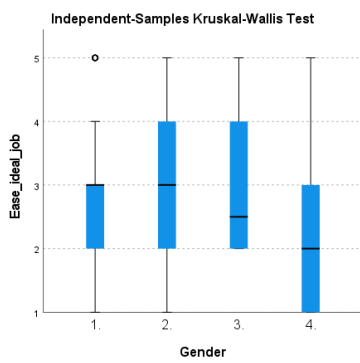
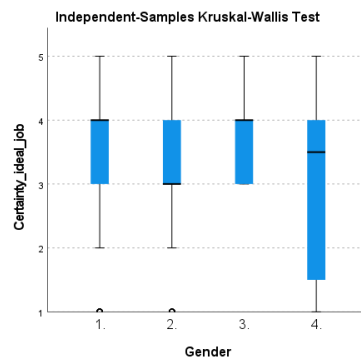
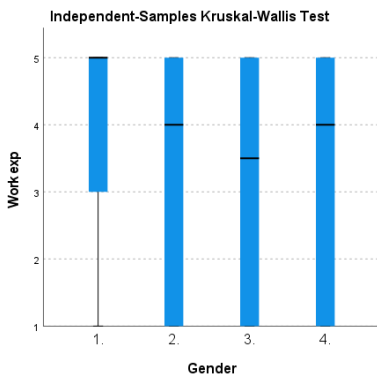
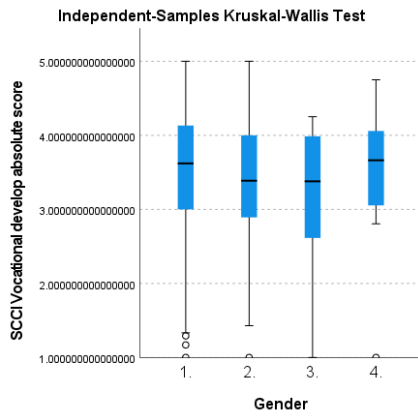
Model		Tolerance	VIF
1	Elaboration code	.983	1.018
	Year group	.826	1.211
	W Exp	.826	1.211

Dependent Variable: Elaboration

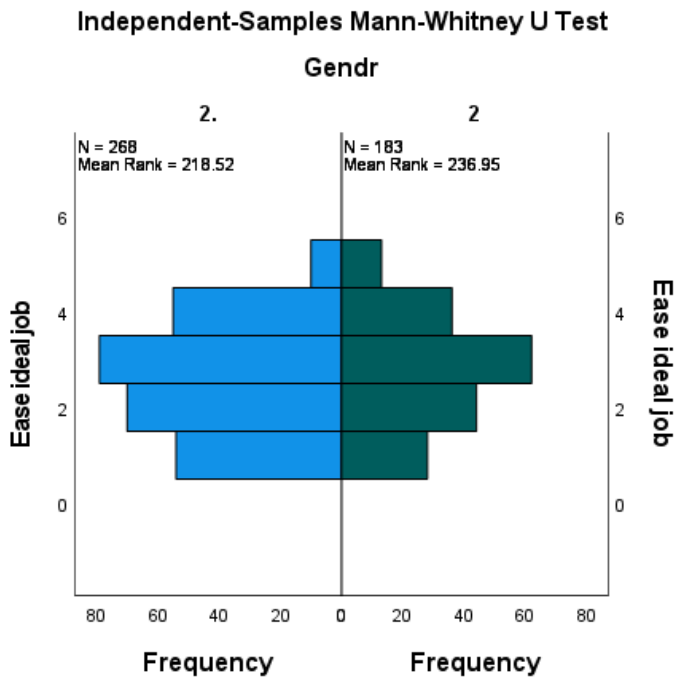
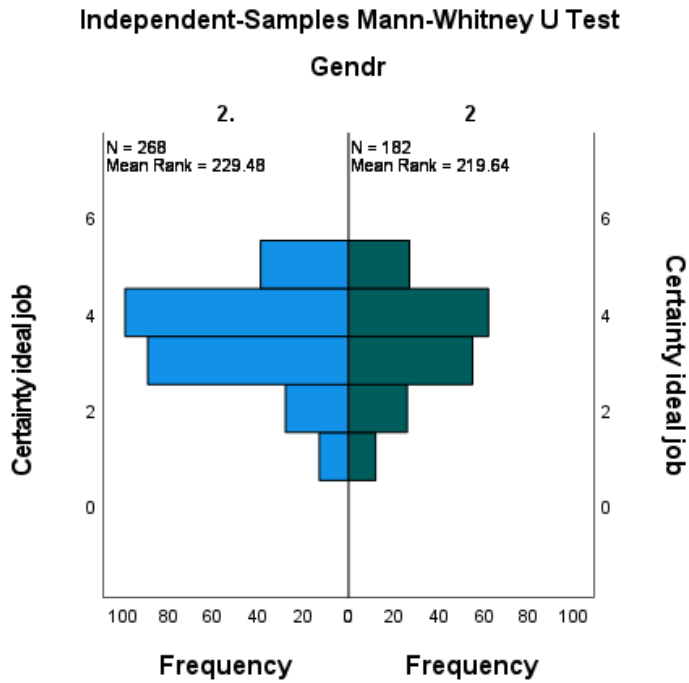
Collinearity  
Statistics

Model		Tolerance	VIF
1	Year group	.825	1.212
	W Exp	.792	1.263
	Salience	.984	1.017
	Gender	.959	1.043
	Parental SES	.980	1.020

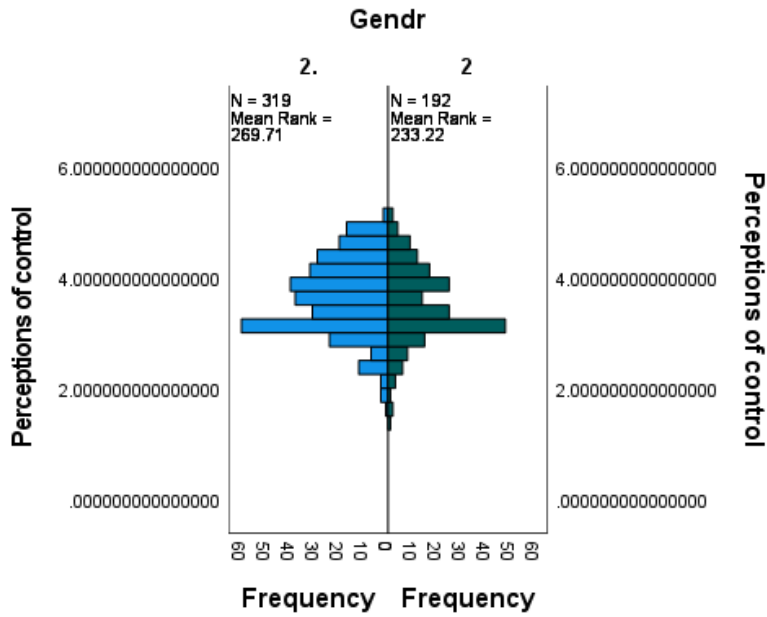
## 9.8 Appendix H Comparing distribution of career behaviours and beliefs by group



9.9 Appendix I Comparing distribution of career behaviours and beliefs by group



### Independent-Samples Mann-Whitney U Test



### Independent-Samples Mann-Whitney U Test

