

# **How do undergraduate University students make sense of their experience of loneliness and its relationship to social media?**

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The candidate confirms that the work submitted is his/her own and that appropriate credit has been given where reference has been made to the work of others.

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## Abstract

**Introduction:** When starting university, many students report feeling lonely. Research suggests loneliness impacts functioning, psychological wellbeing, and health. Social media has become a central part of young people's lives. Researchers have found a relationship between loneliness and social media, however, the direction of this relationship remains unclear. Research in this area is largely quantitative and says little about the lived experience of students. This research aimed to understand how undergraduate students made sense of their experience of loneliness and its relationship with social media.

**Method:** Undergraduate students (18-21) enrolled at the University of Leeds were recruited through an online screening survey. Those who met inclusion criteria were invited to participate in photo elicitation interviews. Twelve interviews were conducted. Interviews were analysed using interpretative phenomenological analysis (IPA).

**Results:** Five superordinate themes emerged, with eight subordinate themes. Participants explained their experiences of university, loneliness, and social media across two significant aspects: '*finding a community*' and '*curating an identity*'. Through a '*relationship lens*', participants described aspects of forming and maintaining relationships, and the central role that social media played in this. Participants' inner experiences of being '*in control or consumed*' were influenced by their online and offline worlds, shaping their experience of connectedness. Central to all experiences was a sense of '*feeling safe in vulnerability*' when moving to university, an unfamiliar place with unspoken rules and norms.

**Discussion:** Employing a novel research method using visual methods enhances understanding of undergraduate university students' individual experiences of loneliness and its relationship to social media. These findings set out a foundation from which student support can be developed. Combined approaches, using whole university and targeted interventions could support normalising and therefore relieving loneliness. Community-based approaches, such as peer support, could be helpful with this. Targeted approaches to help students develop emotional literacy and distress tolerance skills may support students with social media use and loneliness.

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## Abbreviations

DA – Discourse Analysis

IPA – Interpretative Phenomenological Analysis

ISR – Integration into Social Routines

MTUAS – Media and Technology Use and Attitudes Scale

NA – Narrative Analysis

PIS – Participant Information Sheet

SD – Standard Deviation

SMUIS – Social Media Use and Integration Scale

SIEC - Social Integration and Emotional Connection

WEMWBS – Warwick Edinburgh Mental Wellbeing Scale

## Chapter 1: Introduction

In this thesis, I report a study looking at how undergraduate university students make sense of their experiences of loneliness and the relationship between loneliness and social media. In this study, I used qualitative and visual research methods to understand students' experiences of loneliness and social media during their first two years of university. My thesis adds new insights and enhances the current understanding of significant factors in explaining loneliness and social media use in students. The in-depth results presented in this thesis can support the development of guidelines, policies, and services in this area, ultimately improving quality of life for undergraduate students.

I begin by providing a review of the literature and justification for this study in Chapter 2. In the literature review, I outline the impact of loneliness and social media use alongside current understandings of causal and maintaining mechanisms of these factors. Before considering the evidence on undergraduate students' experiences of loneliness and its relationship to social media, I highlight the importance of the transition to university during a significant developmental period in students' lives. The clinical implications of the literature are also discussed. In light of the findings of the literature review, I present the justification for my research.

Chapter 3 outlines the methodology I considered for this study and the justification of chosen methodology. I provide an in-depth understanding of the design and method of this research in Chapter 4. The method chapter includes ethical considerations, recruitment and sampling of participants, consideration given to quality and the procedure for collecting and analysing the data. I also discuss the training interviews I completed before collecting data and how these shaped the research.

The results of the study are provided in Chapter 5. I start by situating the sample to allow the reader to understand the participants who took part in this study. The results of the group analysis using IPA are then presented. Starting with a thematic map, I explore each theme in turn, with participant quotes to illustrate their experiences and make transparent how data was analysed and interpreted. In the final chapter, I discuss the results in the context of the literature outlined in Chapter 2, and novel contributions of my thesis are explained. I highlight how I ensured quality in this study, using a qualitative research quality framework. Finally, I explore the clinical and research implications of this study.

## Chapter 2: Literature Review

In this chapter, I start with an introduction to the concept of loneliness, providing key information regarding the prevalence and impact of loneliness within the general population. Following this, I explore a range of psychological theories of loneliness. In the second section of this chapter, I discuss the psychosocial impacts of starting university, giving context to the developmental changes experienced by university students aged 21 and under. In the third section of this chapter, I present the results of a comprehensive scoping review to answer the question:

*“What is the state of the evidence regarding the relationship between social media and loneliness in university students?”*

Three key terms from the research question guided the literature search: university student, loneliness and social media. Other keywords that describe these terms were identified in abstracts and subject headings using google scholar and PsycINFO. I identified literature using three databases: PsycINFO, Medline and Embase. Due to the broad search terms used, the literature search produced a total of 1711 articles, including duplicates (PsycINFO – 1149, Medline – 200, Embase –362). After removing duplicates and screening the titles for suitability, I examined abstracts of 224 articles. The full paper for the remaining 59 articles were reviewed. A further 22 articles were excluded because the research did not use samples of young people aged 18-25, the article was not available in English, the focus of the paper was internet addiction, or the focus of the paper was on the experience of international students. Of the 37 remaining papers, 24 focused on loneliness and social media using university student samples. Most of these used quantitative research methods, with just three using qualitative methodology. These papers are included in the third section of this chapter, where the predisposing and maintaining factors of loneliness and social media use at university are discussed.

The comprehensive scoping review informed the final section of this chapter. I provide a critique of the literature and identify gaps in the existing literature. Clinical implications of these findings are examined. Finally, I use the evidence presented throughout this chapter to provide a rationale and justification for exploring loneliness and social media use in university students.

### **Loneliness**

#### ***What is Loneliness?***

Interpersonal relationships play a central role in our identity and wellbeing (Baumeister & Leary, 1995). In recent years, loneliness has been considered a significant challenge to public health. Loneliness is associated with poorer health outcomes (Matthews et al., 2019; Valtorta et al., 2016), mental health problems (Vasileiou et al., 2019), self-harm (Rönkä et al., 2013) and suicidal ideation (Stravynski, & Boyer, 2001). Loneliness is a subjective experience felt despite contact with other

people (Peplau & Perlman, 1982). Loneliness is different from social isolation, which is an objective experience of solitude (de Jong Gierveld & van Tilburg, 2006).

Most people report feeling lonely at some point in their lives (Akin, 2010). Recent statistics revealed that 50% of 16–24-year-olds reported feeling lonely some of the time (Office for National Statistics, 2018b). The phenomenology of loneliness changes across the life span due to one's ability to cope with significant life events and as circumstances and opportunities change (Victor et al., 2018). In late adolescence and early adulthood, belongingness is driven by validation from close friends and developing romantic relationships (Rokach & Brock, 1998). If these needs are not satisfied, young people may experience loneliness. In old age, loneliness may occur following the loss of a partner (Qualter et al., 2015). Statistics reflect this change in loneliness across the lifespan, with 5% of adults and 10% of young people reporting they often or always felt lonely (Office for National Statistics, 2018a; Office for National Statistics, 2018b)

Different types of loneliness have been proposed. Transitory loneliness is a temporary experience of loneliness, usually felt when adjusting to new environments. It can encourage people to seek out a relationship. Conversely, chronic loneliness is a long-term experience associated with low self-worth, low trust, and an external locus of control. Factors associated with chronic loneliness, such as attribution style, may lead to negative interpretations of social interactions and therefore go on to maintain loneliness (Peplau & Perlman, 1979; Peplau & Perlman, 1982). Chronic and transitory loneliness are hypothesised to be caused by different factors, experienced differently, and can lead to different outcomes (Qualter et al., 2015). Weiss (1973) proposed differences between emotional and social loneliness. Emotional loneliness, defined by feelings of emptiness, anxiousness, and restlessness, is experienced in the absence of a significant other. Social loneliness, however, is caused by situational factors and the absence of a broad social network and is therefore experienced as marginalisation or boredom. Understanding different types of loneliness helps to develop ways of supporting the different needs brought about.

### ***Psychological Theories of Loneliness***

Many psychological theories exist to explain loneliness. Causes, maintaining factors and functions of loneliness are debated within the academic literature. The following section provides a brief explanation of different psychological theories of loneliness.

Evolutionary theory hypothesised loneliness is a survival mechanism, as such human beings have an innate drive to belong to groups (Cacioppo, Cacioppo & Boomsma, 2014). Loneliness provokes anxiety and drives people towards group membership (Brewer, 2004). It has been proposed those with 'selfish genes', who put their own needs before those of the group, were less likely to have offspring that survived. Genes that did not promote group belonging would therefore not be passed on. Caregiving, trust, and cooperation are vital attributes to group belonging. Adoption and twin studies

support evolutionary theories, suggesting that loneliness can be heritable (Cacioppo et al., 2014; Boomsma et al., 2007). Baumeister and Leary (1995) proposed the 'belonging hypothesis'; a lack of group belonging predicts loneliness. The desire to belong may lead individuals to become hypervigilant to social cues, leading them to feel disconnected from others if they misinterpret these. The cognitive and behavioural changes experienced when one is driven to connect with others will be discussed further.

As evolutionary theory positions loneliness as an adaptive mechanism, other theories position loneliness as a normative experience. This view is different from that of loneliness as an epidemic, which pathologises loneliness and seeks to relieve it. Existential approaches view loneliness as a normal part of human existence (Moustakas, 1961). Loneliness is said to motivate us to seek activity with other people. Aloneness and separateness are a condition of human experience rather than maladaptive and to be alleviated.

Personality traits are inconsistently associated with patterns of interpersonal interactions, which negatively impact social relationships. Neuroticism and shyness correlate with loneliness (Buecker et al., 2020; Marangoni & Ickes, 1989; Teppers et al., 2013; Vanhalst et al., 2012). People with neurotic traits are more likely to be hypervigilant, looking out for threats in relationships. Hypervigilance in relationships may be unattractive to others, thus acting as a confirmation bias, leading to self-defeating behaviour. Those who present with increased trait shyness may experience elevated levels of loneliness as they are less likely to share information about themselves with others. A lack of sharing in relationships can make them feel they lack closeness (Marangoni & Ickes, 1989). Conversely, extroversion, agreeableness, conscientiousness, and openness correlated with lower levels of loneliness (Buecker et al., 2020). However, these findings are weak and inconsistent, suggesting other factors may interact with personality factors.

Attachment theory can help explain experiences of loneliness. Developmental experiences shape ways of interacting with others (Argyle, 1981). Through early attachments, people learn how to respond to others and how others will respond to them. The relationship between an infant and their caregiver is central to developing a blueprint for future relationships. Infants learn how to regulate their emotions through others when caregivers respond to their needs. Securely attached individuals have better social communication and problem-solving skills (DiTomasso et al., 2003; Erozkan, 2011; Pakdaman et al., 2016), which can help form and maintain social relationships, thus reducing experiences of dissatisfaction.

Suboptimal attachment experiences can lead to difficulties in relationships in adulthood and a sense of oneself as unlovable. Those who have had no experience of having their needs met by others may struggle to form emotional attachments. Those with anxious and avoidant attachment styles frequently report loneliness (Hazan & Shaver, 1987; Pakdaman et al., 2016). Anxious attachment can lead to

difficulties feeling secure in relationships, fearing abandonment, which may cause interpersonal difficulties when others cannot meet their needs. Those with avoidant attachment styles are usually highly independent and struggle to express emotions. In relationships, others may perceive they do not recognise their needs, leading to poorer quality relationships. Disorganised attachment styles can lead individuals to be fearful of others and afraid of rejection. While early attachments shape ways of relating in adulthood, adult attachments are often more reciprocal (Oulette, 2004) and are likely to be shaped by factors additional to attachment style. Attachment theory predicts 17% of the variance in experiences of loneliness (Erozkan, 2011). It is therefore essential attachment theory is understood alongside other factors.

Cognitive theories of loneliness postulate that lonely people may perceive social relationships differently (Peplau & Perlman, 1982). Loneliness occurs when there is a difference between an individual's desired and achieved social relationships. 'Attribution theory' hypothesises the experience of loneliness is shaped by one's perception of the causes of loneliness (Weiner, 2014). Attributions have three causal characteristics: locus, stability, and controllability. Locus is characterised by attributing loneliness to internal or external causes. Stability identifies whether attributions are made to stable or unstable causes and controllability to controllable and uncontrollable causes. Lonely people tend to attribute their experiences to uncontrollable and stable causes (Anderson, Horowitz & French, 1983; Marangoni & Ickes, 1989; Peplau & Perlman, 1979; Revenson, 1981). Lonely people are likely to see themselves as passive victims which may lead to them not taking action to relieve loneliness, further exacerbating their experience. Lonely people perceive less intimacy in friendships (Jones, Freeman & Goswick, 1981) even when there is no difference in time spent with others than those who perceive more intimacy in friendships, demonstrating the importance of cognition in the experience of loneliness. Attributions, therefore, perpetuate feelings of loneliness rather than cause them.

Behavioural theories of loneliness often sit alongside cognitive theories. The way lonely people interpret social relationships may lead to behaviour that exacerbates loneliness. Non-lonely people are more likely to use problem-solving methods, and lonely people are more likely to use emotion-focused strategies to manage loneliness (Achterberg et al., 2020). Self-fulfilling prophecies may therefore perpetuate loneliness. Negative attributions can also impact social skills (Burholt, Windie & Morgan, 2017). Social skills allow for appropriate interactions with others across different settings. Those with better social skills report lower levels of loneliness (Burholt et al., 2017). Research on the relationship between social skills and loneliness is inconsistent (Jones et al., 1981; Sloan & Solano, 1984). Different methodologies, such as observations and self-report measures used across studies, may explain inconsistencies. (Jones et al., 1981; Sloan & Solano, 1984). These findings are not generalisable to the wider population as research uses opportunistic student samples with small effect sizes (Dragon & Duck, 2015).

Weiss (1973) proposed a combined theory of loneliness, where personality and situational factors combine. Situational factors are thought to be more influential than personality factors. The ‘interactionist approach’ posits that loneliness stems from one’s relationships being unable to meet their needs for attachment and reassurance of worth. Weiss outlined six provisions of social relationships: attachment, social integration, reassurance of worth, reliable alliance, guidance, and nurturance. Provisions meet different needs and are provided by different people including family, friends, mentors, and the self. It is thought that multiple social relationships are needed to satisfy all needs. However, marital relationships are said to satisfy multiple needs. This theory was developed through research looking at the impact of a group programme for single mothers in the 1970s. The social and cultural norms at this time may have influenced the conclusions drawn from this study. Nevertheless, the integration of individual and social factors on experiences of loneliness should be considered.

The sociological approach to loneliness proposes that society has become more individualistic. Declining primary relations and increased mobility may have increased loneliness over recent years. Loneliness may result from societal changes and external influences such as messages from mass media (Bowman, 1955; Riesman, 1950; Slater, 1976 cited in Peplau & Perlman, 1982).

In summary, loneliness is common but may be experienced differently by individuals due to various factors. For some, loneliness can become chronic with broader impacts on physical and mental health. Many theories exist to explain why some are more susceptible to feelings of loneliness and the mechanisms that maintain loneliness. There is no evidence to suggest a dominant theory; therefore, I will not focus on a single theory in my thesis, rather I will look at the impacts of multiple theories.

### **Transition to University**

In the ‘Loneliness Strategy’ (HM Government, 2018), loneliness in students is highlighted as an area of concern. The strategy outlines the government’s plan to tackle loneliness through education, public health campaigns, and student support. The first year of university is argued to be the most challenging period of adjustment for students (Giddan, 1988). When starting university, the transitional period brings heightened risks of loneliness and anxiety, stress, and depression. During the first two weeks of university, 75% of students reported feeling lonely (Cutrona, 1982). Loneliness and social support accounts for 27% of the variance in adjustment to university (Nicpon et al., 2006). One-fifth of university students said loneliness impacts their functioning (YouGov, 2016). Loneliness was the strongest predictor of mental distress in students compared to 23 variables, including discrimination, childhood trauma and academic performance (McIntyre et al., 2018).

While some undergraduate students feel homesick when moving to university, homesickness is conceptually different from loneliness. Despite this, homesickness and loneliness are often used interchangeably. Homesickness is a form of grief that causes distress and impacts functioning because

of separation from home (Thurber, Walton, & Council on School Health, 2007). Those who are homesick become preoccupied with home and the people and places associated with it (Shal et al., 2011).

### ***Development in Adolescence and Early Adulthood***

Development in adolescence and early adulthood is crucial to understanding students' experiences of loneliness and social media. Between the ages of 10 and 24, adolescents and young adults go through significant cognitive, social, emotional and behavioural changes (Coleman, 2011; Hagel & Shah, 2019). Development is based on interactions between biological needs and social environment. Brain anatomy continues to change until 25-years-old, becoming more efficient and adapting to an individual's environment (Blakemore, 2010; Giedd, 2004). The brain becomes attuned by learning from experiences. Learning that takes place in this period is important in shaping social skills and therefore impacts on experiences of social relationships (Blakemore, 2012; Morris et al., 2018). In the earlier stages of development, young people are supported in navigating the world around them by others through social scaffolding (Dhal, 2004). Support from others is gradually removed throughout adolescence; by the time young people are starting university, they are expected to have developed these skills. However, for some, social scaffolding is removed too quickly, leading to challenges in managing complex relationships (Duru, 2008).

With these cognitive, social, emotional and behavioural developments, young people develop a sense of themselves. Adolescents first develop an idea of who they are, before understanding how others view them across different contexts (Coleman, 2011). In Erikson's (1968) model of psychosocial development, he argues that the development of the self and relationships with others are crises that must be resolved in adolescence and early adulthood. Transitioning to university happens during late adolescence and early adulthood for many. The task of adolescence is to construct a social identity and find a social environment in which one can belong (Erikson, 1968). During this phase, individuals consider how they appear to others, reflect on who they are, and consequently change their self-concept. Self-acceptance is sought through others, with changing ideas about how to fit in. In early adulthood, the task of psychosocial development is forming relationships with others. As relationships become increasingly complex, individuals may experience rejection or find themselves having to sacrifice their own identity to fit in. Some may struggle with the costs of social relationships and choose to protect themselves through withdrawing from social relationships.

Arnett (2000) coined the phrase '*emerging adulthood*'. This concept was developed from Erikson's ideas of a '*prolonged adolescence*'. Since the development of Erikson's model of psychosocial development in the 1960s, economic changes have shifted the timing of cultural norms such as moving away from home, having children, getting married, and career development. Young adults report feeling in a void between adolescence and adulthood (Arnett, 2007). Benson & Elder (2011)



spoke of the “young adult identity”. Identity is constructed through interactions with others, with a continuous assessment of the consistency between what the role means to them and how they appear to others. Social comparisons help individuals to understand the social norms and expectations of their environment.

Identity formation is rarely reached by the end of adolescence and usually continues into adulthood (Valde, 1996). Three domains of exploration in early adulthood were proposed: love, work, and world views. In adolescence, relationships with others seem temporary. However, as a young adult, one must find out who oneself is in relation to others. In developing their worldview, individuals are likely exposed to different ideas, concepts, and values than available to them in childhood or adolescence. Exposure to new ideas leads to the development of their own worldviews. For those starting university, development in these areas occurs within a context where existing social relationships are no longer present to support them.

There are some limitations to theories of development in that they were constructed through the lens of white, western, middle-class men. Those from different backgrounds may have fewer opportunities to explore their identity in the way described in this theory.

In the present day, young people grow up in an environment where 95% of 16–24-year-olds own smartphones (Hagel & Shah, 2019). Developing an identity now takes place partly online. Smartphones are used to access social media more by 16–24-year-olds than 25–34-year-olds (Office for National Statistics 2018c). Turkle (2011) argues that creating an identity online with opportunities to change who you are through social media may be harmful. With increased social media use, adolescents can experience impacts to their day to day functioning (Twenge, Spitzberg & Campbell, 2019).

### **University Students, Loneliness and Social Media Use**

Due to advances in technology, we have opportunities to be more connected to others than ever before. Despite this, many people continue to feel disconnected from others. The internet may harm social relationships. Online communication is superficial, leading to poorer quality interactions and increasing loneliness (Turkle, 2011). Conversely, online communication can create a sense of increased control, flexibility, and anonymity, allowing for increased opportunity to connect with those similar to us (Hood, Creed and Mills, 2018).

Social media is associated with increased self-reported feelings of loneliness, depression, and social anxiety, albeit weakly (O’Keefe & Clarke-Pearson, 2011; Selfhout et al., 2008). Loneliness explains 8% of the variance in problematic social media use. There is no consensus amongst researchers regarding the direction of the relationship between loneliness and social media use (Wang et al., 2014). For example, loneliness was found to mediate negative emotional states experienced because

of social media use (Shettar et al., 2017); however, other research suggests lonely people are more likely to turn to social media (Clayton et al., 2013; Kim & Haridakis, 2009; Skues, William & Wise, 2012; Whon & LaRose, 2014). Further to this, Ryan et al. (2017) found that the relationship between social media and social connectedness was unclear when reviewing 12 studies. Some suggested social media increased social connectedness, and others found it increased loneliness. The reported inconsistencies may be due to the different functions of using social media and its impact on loneliness. Social media can be used for different purposes and can, therefore, gratify different needs. It can be used for creativity, distraction, connecting with others, or information seeking (Closson & Bond, 2019).

There is no single experience or way of transitioning to university. Students have different experiences which are not linear, fluctuating over time (Stirling, 2016). Loneliness before university has a domino effect (Whon & LaRose, 2014). The 'poor get poorer' hypothesis argues that those who have an increased risk of loneliness before starting university are likely to experience factors that exacerbate loneliness when starting university (Peter, Valkenburg & Schouten, 2005). Loneliness is a more robust indicator of adjustment in the transition to university than any dimension of social media use (Whon & LaRose, 2014). Several factors have been demonstrated to predispose students to experience loneliness when starting university; in this next section, I will start by outlining these. Factors that predispose individuals may also be part of the mechanism which perpetuates loneliness. There are additional factors that have been found to maintain or exacerbate feelings of loneliness when starting university, these will also be explored. By bringing together the literature relating to loneliness and social media use when starting university, I hope to create an understanding of the factors which may impact this. Multiple understandings are presented as this research is not guided by a lone theory or hypothesis.

### ***Predisposing Factors***

***Attachment.*** As outlined earlier in this chapter, early attachment relationships are critical for developing skills necessary for interpersonal relationships. Those with anxious or avoidant attachment styles have an increased risk of loneliness when starting university and were more likely to use social media to keep in touch with parents when starting university (Bernardon et al., 2011; Ramsey et al., 2013). Preoccupation with past relationships may prevent them from forming new relationships with peers at university.

Starting university can be stressful, moving to an unfamiliar place with unfamiliar people. Students use social media to regulate their mood when feeling lonely (Reissman et al., 2014). Attachment behaviour activates when people are fearful or sad (Pakdaman et al., 2016). Sub-optimal attachment experiences lead to less developed emotion regulation skills. There is an association between poor self-regulation and social media use, suggesting it may be used for distraction (Skues et al., 2016).

Conversely, Dickard (2019) found that using social media helped students cope with feelings of loneliness. The study found that engaging and reminiscing through social media supported students in their transition to university and helped develop and maintain social relationships.

Whilst there is clear evidence that attachment perspectives should be considered to understand the relationship between loneliness and social media use for undergraduate students, it cannot explain why some students are more impacted than others with similar attachment experiences (Erozkan, 2011). There is likely a complex interaction between attachment experiences and other factors influencing loneliness and social media use.

*Self-identity.* The development of self-identity takes place in late adolescence and early adulthood. Young people create and project a persona online (Turkle, 1999). Many young people construct a socially desirable online self that displays the aspects they deem socially desirable. Gardner and Davis (2013) found that young people take a great deal of care in how they present themselves online for public consumption. Once the self has been constructed on social media, there is evidence that people then engage in constant identity performance. Maintaining and managing the online self is time-consuming and may prevent people from truly connecting with others.

Self-identity is strongly associated with experiences of loneliness and social media use when transitioning to university. Pelling & White (2009) used the 'theory of planned behaviour' (TPB) to explain the link between poor self-identity, low belongingness and high social media use. According to the TPB, behaviour is determined through an individual's positive or negative evaluation of performing the behaviour, subjective norms and perceived behavioural control. For example, individuals whose self-identity is related to social media and who have a strong need to belong with others were more likely to report addictive tendencies toward social media. The need for belongingness may not influence the frequency of social media use but instead influences the intensity of use and feelings brought about by using social media.

Identity development does not occur in a vacuum; therefore, it is likely influenced by other variables. Many students have used social media for several years and constructed their self-identity through social media before starting university. Students who already frequently use social media may increase their use as they try to integrate different parts of their identity.

**Cognitive.** Social relationships are perceived differently in those who report higher levels of loneliness (Peplau & Perlman, 1982). Students with an external locus of control are more likely to experience elevated levels of loneliness and prefer online social interactions (Ye & Lin, 2015). Stirling (2016) found that students felt they always had to be switched on when it came to social media, using social media as their first source of information. When students perceived negative consequences of reducing their social media use, their risk for social media addiction increased. Students cited concerns that they would not be up to date, or that they risked losing friends (Yu et al., 2016).

Tsai & Reis (2009) found that lonely students were more negative about their close friends and more positive about friends they were less close to online. Increased negative cognition regarding close friends could result from different expectations of them to fulfil greater needs compared to new friendships. As a result, this may lead to dissatisfaction when their close friends fail to meet their needs. More broadly, cognitions have been found to influence and be influenced by multiple factors such as behaviours, personality, affect and development (Albarracín & Wyer, 2000; Eagly & Chaiken, 1993; Oulette & Wood, 1998). Cognitive theories of loneliness and social media use should therefore be understood in the broader context.

**Behavioural.** Behavioural explanations report that those with increased anxiety use Facebook more frequently (Clayton et al., 2013). Spraggins (2009) found that loneliness mediated the relationship between social anxiety and problematic internet use. It is, therefore, not the lack of social relationships that lead to experiences of loneliness but a lack of perceived social intimacy. Those with social anxiety may seek closeness in existing offline friendships through social media to relieve loneliness. Connecting with existing friends may prevent students from forming new friendships when starting university.

The ‘rich get richer’ hypothesis argues that those who have good social relationships are likely to continue building new positive social relationships (Peter et al., 2005). Extroverts are more likely to benefit from social media interactions with others in reducing loneliness (Whaite et al., 2018). Therefore, students with good social relationships before university are likely to continue to experience good relationships at university. People who have increased confidence in in-person interactions also have increased confidence online. This hypothesis does not help to explain why those with positive social relationships before university experience difficulties when moving.

Social media may impact the mechanism for coping with being alone and feeling disconnected (McEwen, 2009). Increased posting on social media decreased feelings of loneliness (Deters & Mehl, 2013). The positive effect of posting on social media may be due to “social snacking”. Social media helps individuals tolerate the distress experienced when feeling lonely and may therefore be used as a short-term coping mechanism for transient experiences of loneliness.

Personality traits are associated with loneliness and social media use, although the evidence is inconsistent. Gebre (2017) found that shyness negatively impacted adjustment to university. Students with higher levels of shyness engage less with other students, which led to increased loneliness and self-esteem. Satici (2019) found that loneliness and shyness mediated the effects between Facebook addiction and wellbeing. Those who are addicted to Facebook are more likely to be shy. However, Casale & Fioravanti (2011) found that shyness did not explain the link between loneliness and problematic internet use. Shyness may reduce the number of social relationships a person has but may not reduce the quality of relationships.

Adolescents who scored lower on agreeableness and extraversion reported increased loneliness (Teppers et al., 2013). However, other research found no link between extroversion, shyness, and Facebook use (Petrocchi et al., 2015; Skues et al., 2012). The confounding evidence for a link between personality traits may be explained by several factors, such as the samples being from different cultural backgrounds or the studies using different measures to investigate the phenomena.

### ***Maintaining Factors***

***Type of Use.*** The way social media is used is consistently associated with loneliness (Dumas et al., 2017). The ‘displacement hypothesis’ (Kraut et al., 1998) suggests loneliness increases when online relationships replace offline relationships. Heavy social media use amplifies feelings of loneliness (Lai & Gwung, 2013). Increased loneliness may be due to reduced quality in existing relationships and less frequent in-person social interaction (Kim & Haridakas, 2009; Lai & Gwung, 2013; Wang et al., 2014). People may also experience a reduction in the positive effects of offline interaction, harming the development of new relationships (Lepp, Li, & Barkley, 2016; McEwen, 2009).

Lonely people use social media excessively to compensate for limited social opportunities (Yu et al., 2016). Skues et al. (2012) reported that students with higher levels of loneliness use Facebook to compensate for the lack of offline relationships. Lonely people use the internet for social compensation when not satisfied with offline interpersonal relationships (Kim & Haridakis, 2009; Lemieux, Lajoie, & Trainor, 2013). Students addicted to social media are more likely to become isolated, replacing in-person relationships with online ones (Satici, 2019); using social media as social compensation correlates with loneliness (Hood et al., 2018).

Conversely, the ‘augmentation hypothesis’ (Gross, 2004) proposes that social media use can reduce loneliness by increasing contact with familiar others and facilitating new relationships. Deters & Mehl (2012) found that social media helped maintain a sense of connectedness with others by sharing daily experiences. Social media increases social support through existing friendships away from the university’s space (Pittman, 2017). Connecting with familiar others through social media might explain why time spent on social media did not impact social adjustment to University (Whon &

LaRose, 2014). Emotional support required when transitioning to university likely needs to come from those they have an intimate friendship with and, therefore, existing relationships may be better placed to help with the transition than new ones.

Social media can connect people on and off-campus, which can create difficulties in balancing new relationships whilst maintaining old ones (Pempek, Yermolayeva & Calvert, 2009; Thomas et al., 2017). Significant but weak positive associations were found between social internet use and loneliness in students (Nowland, Necka & Cacioppo., 2018). Relationship maintenance and formation are essential in successfully transitioning to university, and social media can promote friendships (Lai & Gwung, 2013; Wang et al., 2014; Yang & Brown, 2015). Replacing offline relationships with online relationships did not result in higher levels of self-reported loneliness (Coget, Yamauchi & Suman, 2002). The contradictory findings may be due to how social media is used; broadcasting through social media increases loneliness more than using it to interact with others (Yang, 2016).

Nowland et al. (2018) suggest that the displacement and augmentation hypotheses are not mutually exclusive. Social media can enhance existing relationships and make new connections to decrease feelings of loneliness; however, loneliness determines how individuals use social media.

Specific social media sites are associated with increased loneliness. The effects of different types of social media may be explained by how they are used. There is a notable association between passive use of social media (scrolling) and higher levels of loneliness (Aalbers et al., 2019). Instagram and Twitter positively affected students' experiences of starting university (Closson & Bond, 2019). These differences may be explained by these social media apps being used for information seeking and creativity. Petrochhi et al. (2015) confirmed this when they found that Twitter users reported lower levels of loneliness than Facebook users. "Mono-users", those who only use one type of social media, reported increased levels of loneliness. They were likely to spend more time on social media overall. The intensity of social media use correlated with levels of loneliness (Thomas, Orme & Kerrigan, 2020).

Instagram use positively correlates with adjustment at university as students' use it largely to interact with on-campus friends (Yang & Robinson, 2018). It may be that features on the app help students to communicate and feel connected to others. The increased flexibility afforded through online communication may lead to increased social disinhibition. Social disinhibition makes it more likely for people to make disclosures to others, which is helpful in friendship formation (Hood et al., 2018). Existing research does not provide an understanding of how students experience use different social media applications. There is a lack of evidence that the type of social media application alone can explain differences in experiences.

**Social Capital.** A sense of community is associated with lower levels of loneliness. Through social relationships, social capital is built to enhance trust and belonging (Putnam, 2000). Higher levels of social capital correlate with lower levels of loneliness (Thomas et al., 2020). Pierce, Sarason, and Sarason (1991) found that university friends' support was the most consistent predictor of self-reported loneliness. Alongside this, a relationship between social media use and social capital is present in undergraduate students (Ellison et al., 2007; Steinfield, Ellison & Lampe, 2008; Valenzuela et al., 2009).

Those who are lonelier may use social media to increase social capital; students with higher levels of loneliness use social media to compensate for the lack of offline relationships (Skues et al., 2012). Posting on social media may also allow for small talk to develop into intimate conversation, fostering feelings of inclusion (Deters & Mehl, 2013). Thomas et al. (2017) described that students found comfort in seeing others post about experiencing the same difficulties as them when starting university. In this way, social media may enhance social capital by increasing feelings of trust.

Maintaining enhanced social capital by connecting with old friends through social media protects against loneliness (Yang & Brown, 2012). Peer relationships are critical in the adjustment process to University (Hirsch, 1980). Older research suggested 'friendsickness' may impact belongingness at university (Paul & Brier, 2001). 'Friendsickness' was coined to describe the experience of grief following the loss of closeness in existing social relationships upon moving to university. This term was developed before social media was available; therefore likely that moving to university led to different relational experiences than in the present. Students in the present day are more able to maintain connections with existing friends, which may support the transition to university. Social capital through existing friendships may be protective; increased feelings of safety can be brought about through social support from existing relationships on social media (Pittman, 2017). These findings are inconsistent as some research suggests existing social relationships may hinder the formation of new ones for some students. Currently, there is a lack of research that provides an understanding of how students balance existing and new relationships when starting university.

Conversely, social media has been found to harm social capital (Lima et al., 2017). Students addicted to social media sites report lower feelings of social safeness (Satici, 2019). Thomas et al. (2017) reported that students were worried about fitting in at university. This heightened anxiety regarding belonging may impact social capital. They reported that students engaged in lots of self-editing online to boost social capital.

Cognitive theories may help to explain why some use social media to enhance social capital, while for others, it may be detrimental. Those with low self-worth, low trust, and an external locus of control may negatively interpret social interactions and, therefore, maintain loneliness (Qualter et al., 2015). People who experienced diminished feelings of social safety restricted their social interaction and

began to use the internet more (Akin & Akin, 2015). Disappointment in their expected social interactions may help to explain this experience (Langston & Cantor, 1989). This finding is in line with the 'poor get poorer' hypothesis (Lin, 2015).

Social media may reduce the quality of social interactions, enhancing loneliness (Wang et al., 2014). People who have poor social relationships offline receive less support online than those with good offline social relationships. Students with problematic internet use were found to have poorer self-regulation skills and use social media as a distraction (Skues et al., 2016). Students who report feeling lonelier engaged in behaviours that inhibited a sense of community (Agyeman-Budu, 2012). Students using social media for entertainment had reduced interactions with others and were less involved in the community at university. Using social media in different ways may therefore impact negatively on social capital.

***Social Comparison.*** Social comparison is related to poor adjustment to university (Yang & Robinson, 2018). Students who engaged in social comparisons more frequently reported lowered self-esteem (Dickard, 2019). Social comparison moderates the relationship between Instagram use and loneliness (Yang, 2016). This may be more pertinent for first-year students, who were most impacted when viewing highly social Facebook accounts than students in other years (Whillans & Chen, 2018). Students may experience this differently due to increased social comparison when starting university.

Social information-seeking allows people to engage in social comparisons on social media. Through an interplay between offline and online communication, information-seeking behaviours on social media allow students to learn more about people around them (Ellison, Steinfield & Lampe, 2007). While information seeking may allow students to find others similar to them, it has been found to predict loneliness (Ellison, Steinfield & Lampe 2011; Thomas et al., 2020). Existing research provides no understanding of what information students are seeking about peers on social media or how they use this information.

For some, however, social comparison via social media can reduce loneliness. There is a positive, indirect association between Instagram use and loneliness via more frequent Instagram interaction with on-campus friends. The relationship between Instagram use and loneliness might be because students rely on social media to learn about new friends. Yang (2016) found that interacting with others and browsing Instagram was related to lower feelings of loneliness. Those who engage more in social comparison may be more competitive, driving them to pursue more in-person relationships (Garcia, Tor & Schiff, 2013). Social comparison may be part of a "pre-interaction" to determine if you are compatible with those around you. Students may develop an understanding of how their values fit with the values of others. Social comparison, therefore, might support feelings of connectedness to those with similar values to them, reducing experiences of loneliness.



***Social Communication.*** Social skills are developed to allow appropriate social interactions with others across different environments. Social skills are shaped by developmental experiences (Argyle, 1981). Those who interact more with friends online are likely to have better quality in-person relationships and report lower levels of loneliness (DiTommaso, Brannen & Best, 2004). Socially competent students placed value on maintaining existing connections, leading to a better adjustment to university (Yang & Brown, 2013).

Using social media is a low-risk way of practising social interaction (Lai & Gwung, 2013). Online communication allows for anonymity and control (Hood et al., 2018). Research suggests that those who report chronic loneliness have higher levels of apprehension around communication (Spitzberg & Canary, 1985). Therefore, loneliness might be maintained as a self-fulfilling prophecy.

Those who use social media to communicate with off-campus friends may experience poorer adjustment and therefore increased loneliness, as they struggle to form relationships with on-campus friends. Students may also engage in social compensation online to make up for the lack of in-person connection. Those who update their status frequently on social media report increased loneliness and poorer adjustment to university (Yang & Brown, 2013). Status updates on social media are frequently used to talk about emotional experiences, making them less attractive to others.

Older research into the relationship between social skills deficits and loneliness is inconsistent and report low effect sizes (Jones et al., 1981; Sloan and Solano, 1984). These studies were also conducted outside of the context of social media, and therefore as social media has developed, it may be this has impacted on individual's social skills, or that those who feel they are less socially skilled turn to social media, which increases feelings of loneliness.

### ***Critique***

This next section outlines some of the methodological limitations resulting in differing understandings of key factors in the relationship between loneliness and social media use in undergraduate students.

Firstly, there are issues in the language used in describing loneliness, social media and factors associated with this. A lack of agreed language leads to challenges in the way these concepts are defined and measured. Many of the studies use the same terms to mean different things. Loneliness is often used to represent a lack of belonging, social isolation, or homesickness, which are conceptually different (Spraggins, 2009). People can belong but feel lonely if they are dissatisfied with the quality of their relationships (Russell, Peplau & Cutrona, 1980).

Many measures are designed to capture participants' use of social media (Sigerson & Cheng, 2018). These may measure different aspects and concepts associated with social media use, making it

challenging to compare results across studies. A good understanding of the measure being used and in-depth reporting on the measure is vital to fully understand a study's findings.

Research in this area often focuses broadly on mobile phone or internet use (Casale & Fioravanti, 2011). Multiple constructs within mobile phone or internet use overlap with social media use. Focussing broadly on constructs of use can be helpful to gain an in-depth understanding. However, a clear focus can help to understand critical underlying concepts. Conversely, many studies focusing on social media are very narrow, concentrating on particular social media sites such as Facebook or Twitter. Often, research fails to identify the features that can lead to problematic outcomes when there is a narrow focus. A failure to identify underlying concepts leads to challenges in generalising this to other types of social media (Song et al., 2014). Research with a focus on single social media sites age as social media sites develop rapidly. Understanding the underlying concepts may be more helpful than focussing on single social networking sites (McEwen, 2009). Due to the rapid evolution of social media, longitudinal research can be challenging. It may be that throughout the data collection period, the social media type being studied changes or ceases to exist. Ramsey et al. (2013) reported differences in two cohorts, two years apart, when investigating the negative impacts of social media use on students' experiences of loneliness.

Some of the literature lacks consideration of the confounding variables. Clayton et al. (2013) identified that students with higher reported levels of loneliness used Facebook more however this research did not identify how Facebook was used by participants. Identifying whether social media was being used to scroll or connect with existing or new friends would impact the underlying mechanisms of loneliness and social media. There is often a lack of acknowledgement within research in this area regarding the personal developmental aspects of starting university. While many of these studies use student samples, this is often opportunistic (Aalbers et al., 2019; Petrocchi et al., 2015). Opportunistic samples can also lead to a lack of representation of other salient factors. Whillans & Chen (2018) found that 90% of their sample scored at the mid-point on their belongingness measure, therefore was not representative of students who were mildly or severely lonely.

Studies using student samples often recruited those across different years of study and postgraduate students. Shettar et al. (2017) utilised a sample of postgraduate students. They were likely older and had previous experience of transient loneliness when starting their undergraduate degree. The transition to university and the newness of first-year students are crucial but overlooked factors. Studies also include samples with non-UK populations from Asian and European countries (Casale & Fioravanti, 2011; Li & Kirkup, 2007; Boulianne, 2015; Shetter et al., 2017). Differing cultural norms, social media types, and access to social media may all impact results. Aalbers et al. (2019) found that social media use has a different effect on American students than European students. It is therefore challenging to generalise to a UK population.

Much of the research in this area pathologises experiences, discussing problematic or addictive use of the internet, smartphones, or social media (Shettar et al., 2017). The research also pathologises loneliness or seeks only to understand the experiences of those who are severely lonely. Using samples that experience very high levels of loneliness and social media use leaves no room to understand how those elsewhere on the continuum of these experiences may present. Further work is needed to strengthen research methodologies, allowing for more robust, reliable, and valid findings.

### **Clinical Implications**

Transitioning to university can be a challenging time for students. Current understandings of the late adolescent and early adulthood period demonstrate the significant cognitive, social, emotional and behavioural changes experienced alongside adjusting to a new environment. Throughout this chapter, it has been demonstrated that students are susceptible to increased feelings of loneliness during this period. Loneliness is consistently associated with psychosocial difficulties and mental health problems (Rönkä et al., 2013; Stravynski, & Boyer, 2001; Vasileiou et al., 2019). With this, the clinical implications are considered.

Student experiences of loneliness were highlighted as an area of concern in the government ‘Loneliness Strategy’ (HM Government, 2018). This document outlines the government’s plan to tackle loneliness within the student population through education, public health campaigns, and student support. The strategy called for further research to support the development of these interventions.

Most interventions aimed at reducing loneliness focus on adult and older adult populations (Cohen-Mansfield & Perach, 2015; Gardiner, Geldenhuys & Gott, 2018; Victor et al., 2018). There has been no consensus amongst researchers regarding characteristics that make interventions successful. Eccles & Qualter (2020) conducted a meta-analysis on interventions targeting loneliness in those aged up to 25-years-old. Moderate effect sizes were found in interventions aiming to reduce loneliness. Emotion management and social skills interventions were most helpful for young people experiencing transient loneliness, helping them reconnect with others. For those experiencing chronic loneliness, interventions focusing on anxiety reduction and changing cognitive biases were most successful. Only two of the studies included in this meta-analysis included university student populations (Mattanah et al., 2010; Zhang et al., 2018). The former was a psychological group intervention with an effect size of 0.649, and the latter was a social support group intervention with effect sizes of 0.508. This research shows that interventions could help students manage loneliness; however, further research is required to improve outcomes.

Student minds identified loneliness as one of the ‘10 Grand Challenges’ to student wellbeing (Student Minds, n.d). Universities have systems to support student wellbeing, with a 25% increase in demand for student counselling services over recent years (Royal College of Psychiatrists, 2011; Thorley,

2017). Students may seek support outside of the university setting; however, NHS services may not be appropriately set up to manage students transitioning between home and university (Randall and Bewick, 2016). Adult mental health services should be equipped with the knowledge of developmental theory. The literature provides evidence for various mechanisms through which loneliness and social media use may decrease psychological wellbeing. Psychological therapists in adult mental health services should be equipped to understand the challenges faced by students and allow space for this in their work. For some students, cognitive approaches to support attribution biases may be more appropriate, whereas, for others, a focus on social skill development, distress tolerance or anxiety reduction may be required.

Other interventions such as peer support have successfully reduced stress and low mood, and increased belongingness in students attending UK universities (Crisp et al., 2020). In an Australian university, students identified regular interaction with peers improved wellbeing (Baik, Larcombe & Brooker, 2019). The Royal College of Psychiatrists (2011) identified good practice examples of social interventions which promote wellbeing, increase self-esteem and enhance belonging. Additionally, research indicates increased levels of loneliness when starting university in those who do not have secure attachments. Attention should be given to the multitude of factors that cause and maintain loneliness when developing policy and interventions.

### **Justification of Thesis**

The present literature review draws together findings from a broad and diverse pool of literature. Starting university brings with it many challenges in young adults' lives. Factors that moderate and mediate the relationship between starting university, loneliness and social media have been identified however there are methodological weaknesses and results which present competing findings. Research findings allow us to understand the impact of early attachment experiences, personality, behaviour, cognition, and self-identity on loneliness and social media use; however, gaps in the literature remain. These gaps come from a lack of qualitative and participatory research; only three papers were identified in the literature search which utilised qualitative methodology. Available research fails to place students' lived experiences at the centre. For example, we understand that balancing new and old relationships and integrating aspects of identity online and offline may be challenging when starting university, but we know little about how students do this. It has been found that students use social media to seek information about others, but we know little about what kinds of information students are seeking and how this informs their relationships.

Current research is often led by how the researcher positions and understands these concepts, thus closing down the potential for new understandings. Thomas et al. (2017) suggested that further research focusing on loneliness in relation to student social media use could aid successful transitions in vulnerable young people. To inform policy and interventions to support students, we not only need

to understand who is most at risk, but we also need to identify how these at-risk groups experience loneliness.

My thesis aims to build upon the literature currently available. Using qualitative methods, I will develop an understanding of students' experiences and how they make sense of the relationship between loneliness and social media when coming to university. This will enhance current understanding and increase awareness of significant factors in explaining the phenomena. An in-depth understanding of individuals' experiences will help improve knowledge of why students continue to experience loneliness and consider how to support them in creating healthier relationships with social media. Development of knowledge will contribute to developing policy and intervention and ultimately support students through improved quality of life.

### **Aim**

The study aims to gain an understanding of how undergraduate students at the University of Leeds experience loneliness and its relationship to social media. My research questions are:

1. How do undergraduate students experience starting university?
2. How do undergraduate students experience social media?
3. How do undergraduate students experience loneliness?
4. How do undergraduate students make sense of their experience of loneliness and its relationship with social media?

## Chapter 3: Methodology

In this chapter, I address the methodological principles of this study. I outline the methodology considered at the research design stage and the rationale for selecting Interpretative Phenomenological Analysis (IPA) and visual methodology. Further detail regarding the philosophical principles of IPA is provided. This chapter demonstrates how the methodological procedures were selected to answer the research questions.

### Qualitative Research

Qualitative researchers often use inductive approaches to generate novel insights into phenomena through comprehensive descriptions of participants' experiences using exploratory approaches (Snape & Spencer, 2003). Unifying concepts can be developed within qualitative methodology, which might help identify behaviours, processes, and perceptions. Qualitative research sometimes aims to develop testable hypotheses or theories by understanding salient points of experiences. It also might help to develop an understanding of how two dimensions or aspects might relate to one another (Flick, 2008). The researcher's role and reflexivity about their contribution to the construction of meaning vary depending upon the epistemological stance (Willig, 2013).

Various means can be used to collect data in qualitative research, such as interviews, focus groups, reviewing documents or observations. Each method provides different types of data and are helpful in answering different kinds of research questions. As qualitative research often generates large amounts of data, it is helpful to focus on particular concepts for feasibility and to generate knowledge regarding a particular gap in research. Purposeful sampling should be adopted, choosing individuals who share a given characteristic to ensure adequate data collected adequately addresses the research question (Mason, 2017).

The literature review in Chapter 2 demonstrated the current understanding of loneliness and social media use in undergraduate students largely comes from quantitative research. The lack of qualitative research means little is understood about students' lived experiences of these phenomena. Without this, understandings of lived experiences and psychological processes that influence loneliness, social media and adjustment to university are not fully understood. Collecting rich data using qualitative methods will help develop understanding of individuals' experiences of loneliness and social media when starting university. The student voice must be central to develop an in-depth understanding of how they experience loneliness and social media. This knowledge will help improve students' experiences of university, reducing loneliness and creating healthier relationships with social media.

Whilst qualitative research is usually exploratory, focusing on the meanings within participants' accounts of a phenomenon, the epistemology of different qualitative methods determine what questions are asked, how the research is conducted and analysed and how it is presented (Holloway &

Todres, 2003). I will therefore move on to discuss the different research methodologies explored when designing this study.

### **Methodological Approaches Considered**

When designing my study, I considered different qualitative methodologies. Through exploration of these methodologies, IPA was identified as the most appropriate for the current research. Alternative methods were explored, including discourse analysis and narrative analysis (Starks & Brown Trinidad, 2007). A brief overview of these and the reasons for selecting IPA are outlined.

#### ***Discourse Analysis***

Discourse analysis (DA) was considered as a methodology for this research. DA is a qualitative method in which researchers examine how language is used to create meaning (Goodman, 2017). Through a focus on the use of linguistics, the purpose of DA is to understand how knowledge is produced within different discourses (Snape & Spencer, 2003). Through language, versions of reality are created that impact an individual's experience. DA, therefore, cannot answer questions about subjective experiences. Using DA would be appropriate if the research question focused on how being positioned as a student impacted the individual's actions or experiences. For these reasons, it was decided that DA would not be used in this research.

#### ***Narrative Analysis***

Researchers using narrative analysis (NA) aim to understand how an individual's experience is formed by the stories they tell (Willig, 2013). The structure and content of stories are examined to understand how they place constraints on experiences. Narratives can be helpful to those who have experienced difficult transitions to make sense of their experiences. It was considered whether interviews at multiple time points could be conducted in this study, for which NA could have helped understand the impact of developing stories and sequences of experiences impact upon students' experiences of loneliness. When reviewing the aims of the research and research questions, it was decided that this method and methodology would not be the most appropriate. While this study acknowledges the importance of how people make sense of their experience, it is the essence of students' experience that is of interest rather than the way participants use narratives to make meaning of their experience. Therefore, it was decided that NA would not be appropriate for this study.

#### ***Interpretive Phenomenological Analysis***

IPA helps researchers develop an understanding of the meaning created by individuals through interpretative engagement with participants' accounts of particular phenomena. Researchers using IPA hope to create an understanding of the participant's perception of the phenomena of interest through an in-depth exploration of how participants make sense of their experience (Smith, Flowers &

Larkin, 2009). The theoretical foundations of IPA come from idiography, hermeneutics, and phenomenology. These are discussed in turn below.

**Phenomenology.** Phenomenology is the study of individual lived experience (Pitkiewicz & Smith, 2012). Phenomenology positions that individuals can experience the same event differently and that multiple realities exist (Willig, 2008). As a result, phenomenological research does not seek to understand the truth but to follow the participants' meaning to see the phenomena through their eyes. Phenomenological research is inductive; it is not driven by existing theory but instead aims to develop new ideas that emerge from the data. By gaining an in-depth understanding, researchers can develop knowledge of the essence of the participant's experience: what components make up those phenomena through the participant's thoughts, feelings, and perceptions of an event. It is thought that people act based on the meaning they create due to the way they interpret events.

**Hermeneutics.** Meaning can be made through interpretation. Hermeneutics is a theory of interpretation (Bowie, 1998). Through interpretative analysis, researchers using IPA hope to make sense of what is being said and bring light to hidden aspects of experience. Descriptive accounts of the quality of experience are created through IPA. Without interpretation, researchers would not be able to make sense of the experience of participants.

It is acknowledged that the participant's experience is never directly accessible to the researcher as the researcher looks at the participant's experiences from the outside. Therefore, they must stay close to the data when making interpretations to understand the quality of the participant's experience. The researcher is seen as an active participant in the sense-making of an experience (Smith & Osborn, 2008). Participants make sense of their experience while the researcher makes sense of the participant's sense-making, a double hermeneutic (Smith, 2004). Researchers come with their own experiences and assumptions that impact the sense they make of participants' experiences (Smith & Osborn, 2003). The role of researcher reflexivity is therefore essential. Researchers must make transparent their own beliefs. Through this, new ways of understanding can be co-constructed, impacting our current understanding of phenomena (Shaw, 2010).



**Idiography.** A focus on the individual experience of the phenomena and not the phenomena itself supports the phenomenological philosophy of IPA (Eatough & Smith, 2017). As phenomenology does not seek to find a truth or reality, each participant's experience is valuable. With this, the aim is not to produce generalisable findings but to give voice to varied experiences. When working with larger samples, researchers using IPA may choose to conduct group-level analyses. Researchers must take steps to make sense of the experience of individual participants, completing detailed individual analysis whilst holding on to the essence of each participant's experience. When moving onto group analysis, interpretation is of the convergence and divergence of experience across cases are interpreted.

**Selecting IPA.** My study aimed to understand undergraduate students' experiences of their first years of university, social media, and loneliness understanding how they make sense of the relationships between these experiences. It was therefore decided that IPA would be the most appropriate methodology for this research. Due to the interpretive and hermeneutic principles of IPA outlined above, I reflect on my position as a researcher throughout this thesis with my choice of language, referring to myself as I, and using reflective boxes to make transparent my role in the research and the impact this may have. I explore further details of the IPA within my study in Chapter 4.

### ***Visual Methodologies***

After selecting IPA as an appropriate methodology for this research, I began to consider the methods I would use to collect data and gain insight into the participant's world. Visual methodologies were explored to support the phenomenological and idiographic approaches central to IPA. IPA holds that individuals are the experts in their experiences (Smith et al., 2009). Through visual methodologies, participants can guide the interview and introduce experiences that they feel are important. Topic guides used in in-depth interviews may be designed around the researchers pre-conceived ideas about a phenomenon; therefore, it can be challenging for the participant to introduce concepts they feel are important in their experience. Using visual methodology allows for participants to diverge from the line of enquiry.

Visual methodologies remain novel in research despite a 60-year history of use in qualitative research (Banks 2018; Flick, 2008). Using visual methodologies has become increasingly popular with qualitative researchers over recent years (Barbour, 2014). Visual methodology in qualitative research introduces data that does not use language, such as photographs, drawings, paintings, or films (Banks, 2018). Images can help to evoke feelings and memories (Harper, 2002). The purpose of visual methodology can vary depending upon the philosophical stance of the research. Using visual material can support understanding or create a dialogue between the researcher and participant.

Asking participants to produce visual materials gives research insight into their life that helps them create a shared understanding together (Croghan et al., 2008). Research methodologies restricted to written or spoken language can limit the understanding one can create; not everything can be said in spoken word, and visual methodology can therefore help to improve data (Mason, 2017; Pain, 2012; Willig, 2013). With this, visual methodologies allow participants alternative ways in which to make sense of their experiences. Producing visual data before a research interview allows participants to reflect on their experiences and for things to be remembered that perhaps had otherwise been forgotten (Darbyshire, MacDougal & Schiller, 2005). There is perhaps a risk that participants may curate their experience in ways they feel will be most desirable to the researcher. Therefore, I was mindful of not becoming too directive in my instructions to create visual data before the interview, embracing the benefits visual methodology can bring.

As visual methodologies are less directive than traditional qualitative methodologies, participants are afforded greater control and freedom in research interviews (Elliot et al., 2016; Noland, 2006). Increased participant control can help with engagement difficulties experienced in traditional research methods (Edmondson & Pini, 2019). Positioning the participant as the expert in their experiences can help build openness between the researcher and participants, which can help discuss sensitive topics (Lapenta, 2011; Smith, Gidlow & Steel, 2012). Through allowing participants to guide the interview by talking about the visual data they want to discuss gives them control over when and how topics are introduced (Croghan et al., 2008). Participants can choose to talk about an issue more broadly than talking directly about themselves as in traditional research interviews (Edmondson, Brennan & House, 2018). Participants may speak in the third person creating distance between themselves and their experiences (Bender, Harbour, Thorp & Morns, 2001; Helsley & Levy, 1991). Whilst speaking more broadly may diverge from the idiographic approach that underpins IPA, valuable data may be generated in how participants interpret the experiences of others that may tell researchers something about the participant's experience.

Visual methodology compliments IPA in thinking about how an individual interprets their own experiences. Researchers are given an insider perspective through images, which help understand the participant's world, a central aspect of IPA (Willig, 2013).

Current understandings of loneliness and social media use in undergraduate students is primarily created through quantitative research. This knowledge is therefore guided by researchers and narrowly focussed through an academic lens. Collecting data using visual methodologies gives power to participants, allowing an insight into students' worlds and lived experience. Participants are given space to talk about what matters to them using a visual methodology. I, therefore, chose to use visual methodology alongside IPA to support the development of novel understandings of the research questions.

## Chapter 4: Method

In my study, I aimed to understand how undergraduate students experience loneliness and make sense of the relationship between loneliness and social media. In this chapter, I outline the design and method for my study. Ethical considerations, sampling and recruitment procedures, data collection and analysis will be outlined. I will also introduce the assessment of quality in qualitative research I used when designing and conducting this study. Finally, I present two training interviews conducted which helped to refine the method before recruitment commenced.

### Design

In my study, I employed a cross-sectional design to understand how undergraduate students experience loneliness and make sense of its relationship to social media in their first two years of university. Participants were invited to take part in interviews through the completion of an online screening survey. Through this survey, I collected demographic details of participants to situate the sample. Data was collected using standardised measures of loneliness, and social media use to aid purposive sampling. In-depth interviews employed participant-led, visual methodology to collect data about participants' individual experiences.

### Ethics

I conducted this research within a university setting, and the research was, therefore, subject to ethical procedures. Ethical approval was sought from the University of Leeds School of Medicine Research Ethics Committee on 9<sup>th</sup> March 2020 (Appendix 1; Ethics Reference number: MREC 19-036). One further amended ethics application was submitted due to changes required because of the coronavirus pandemic and challenges with recruitment. The committee granted ethical approval on 3<sup>rd</sup> July 2020. The ethical considerations are outlined below.

#### *Informed Consent*

Undergraduate students were recruited to discuss their experiences of starting university and loneliness, a potentially sensitive topic for some participants. When recruiting participants, the broad aims of the research were explicitly outlined, allowing them to give their informed consent. Participants were informed that the research might be written up for submission to a published journal. The consent and data withdrawal parameters were clearly outlined in the participant information sheet (PIS) and consent forms (Appendix 2). Participants were informed of their right to withdraw from the research and how to do so. On the online survey, if participants closed the webpage without completing the survey, their data was withdrawn. Participants could also request that their data was withdrawn if they provided a valid email address at the end of this survey or within two weeks of completing the survey by emailing the researcher. If data was submitted anonymously without providing a valid email address, participants could not withdraw their data as it was not possible to identify individuals. At the start of the research interviews, participants had an opportunity

to discuss any questions. Participants were audio-recorded, giving their informed consent for this stage of the research.

### ***Confidentiality & Anonymity***

Researchers must protect participants' anonymity when completing research. On the online screening survey, participants could choose to submit their data without providing any identifiable information when completing the online screening survey. All questions about their demographic information were optional, and participants were not required to submit an email address.

Interviews were planned to be completed in person; however, due to COVID-19, interviews were completed on online video-conferencing platforms such as Microsoft Teams or Zoom, depending upon the participant's preference. As the interviews took place online, it was not possible to control the location or environment of the interviews. Before arranging interviews, participants were reminded that interviews might discuss topics of a sensitive nature to ensure participants could participate in the interview whilst feeling safe and protecting their confidentiality. Due to time constraints, interviews were transcribed by a paid transcription service. The transcriber was an internal member of the Leeds Institute of Health Sciences, and they signed a confidentiality statement. Once transcribed, I removed identifiable information to ensure anonymity, such as names and locations and replaced them with placeholders. My research supervisors viewed only anonymised transcripts. Information about participants in the pen portraits, quotations and images by participants in the write up of this thesis was carefully considered to ensure the identity of participants were not exposed. As there are unique ethical challenges in protecting participants' confidentiality and anonymity in using visual methods, these are explored below.

### ***Potential for Distress & Safeguarding***

Due to the nature of this research, there were questions in the survey where participants disclosed high levels of distress. A non-clinical population was used, and the measures on the online screening survey are diagnostic tools. The online screening survey PIS (Appendix 2) made clear the nature of this research; participants were, therefore, able to decide whether to take part knowing about the potential for distress. The PIS and the thank you page of the survey clearly stated that survey responses were not monitored and that participants would not be contacted because of responses provided to the survey. Participants were provided with contact details of support services, including what to do in an emergency as part of the PIS and thank you page.

The participant-led methodology of the research interviews allowed participants to have control over the information they disclosed within the interview. When participants disclosed distressing information, I ensured to attend to this at the level the participant wished to, discussing whether they had received support for this and signposting them to services such as their GP as appropriate. The interview PIS (Appendix 3) provided information on support services available to participants. The

PIS clearly described the circumstances under which confidentiality would be broken and verbally explained to participants at the start of the interviews. A procedure for responding to participants disclosing risk to themselves or others was created but did not need to be utilised.

### ***Photo Elicitation***

There are unique ethical challenges when employing visual methods in research. Issues of consent, anonymity, and copyright (Edmondson & Pini, 2019) regarding participant produced images were carefully considered. These issues become challenging when there has been sparse use of visual research methods previously. Researchers have to find ways to navigate these challenges (Balmer, Girffiths & Dunn, 2015).

By asking participants to bring images to the interview, I hoped this would redistribute power between participant and researcher. Participants had time before the interview to consider which images to present. Participants guided the interview in that they chose the order in which they discussed photographs and what they disclosed about the images.

Participants were asked to send their images to me before the interview. Images were shared through participants' university email addresses, or a one drive folder shared by the participant. Once received, images were electronically transferred to my university drive. Images were deleted from my email as soon as the transfer to my university drive was completed.

Gaining consent from participants to share images for my research and dissemination in public or professional settings was considered. At the end of each interview, the participant completed a signed consent form, choosing which images they consented to be used. I discussed how the images would be used with participants if they gave consent. Whilst it was not possible to identify every way this research may be disseminated, participants were made aware of the general ways this would be shared.

Some participants shared images with other people in them. It was not possible to explicitly gain consent from these people. In the photo-elicitation guide for participants (Appendix 4), they were asked to discuss the use of images of others with those people. Consent to use images of others was discussed in the consent process at the end of the interview. Despite this, it is not possible to know whether others in photographs had consented. I decided not to use images of others in this write up of this thesis. Participants also shared images of themselves. Consent was given to use these images by some participants. During the write up of this research, the inclusion of such images was carefully considered, and faces were pixelated or covered.

Being mindful of issues regarding copyright is essential when using visual methods. As participants could bring any images to the interview, some were downloaded from the internet. Participants were asked to identify images they have created themselves and images they had brought to the interview

that others have created during the image consent process. Images not created by the participant or not copyright-free are not used in this thesis without the artist's written permission.

### ***Data Storage***

Consideration was given to data storage, given the importance of ensuring participant confidentiality and anonymity and the sensitive nature of the research. All the data was treated as confidential and stored securely. Pseudoanonymised unique identifiers were generated by online surveys when downloading the data to identify participants whilst protecting their anonymity. Downloaded survey data was not linked to any personal identifiable information. Participants' email addresses, if disclosed, were stored separately from the data. All data from the online survey was transferred to a Microsoft Excel spreadsheet to aid data management. This data was stored on my password-protected university storage drive and was only accessible by me. The anonymised data was shared with the research supervisors when discussing the research.

The interviews were audio-recorded on an encrypted dictaphone. Immediately after the interview, these were transferred to password-protected university storage drives. Once transferred, the original recording was deleted from the dictaphone. Recordings were shared with the transcriber via my encrypted University of Leeds Microsoft OneDrive. After verbatim transcription, permissions to access these files were removed from the transcriber. Only research supervisors were able to view the data after it had been anonymised.

## **Participants**

### ***Inclusion and Exclusion Criteria***

When using IPA, it is essential to identify key informants to allow detailed accounts of the individual experience of the phenomena to be generated (Smith & Osborn, 2003). The aim is not to produce generalisable findings but to give voice to varied experiences. Samples in IPA studies should be homogenous to allow for the assessment of convergence in the experiences of participants. Within student populations, some diversity and variance may be present. Therefore, inclusion and exclusion criteria were designed to allow for the recruitment of an appropriate sample to answer the research questions (Table 1). These criteria were decided based on evidence from the literature; for example, mature students and international students were excluded due to the difference in their experiences (Dickinson & Karzunina, 2019; Li & Peng, 2019; White, Williams & Green, 1999). I identified that home students completing their first undergraduate degree would allow the sample to have a shared experience of loneliness and social media use at university. Whilst I planned to recruit students in the first year of their degree, due to COVID-19, the inclusion criteria were amended to include those in their second year. When sampling, gender, ethnicity, sexuality, and disability were considered to ensure marginalised students' voices were heard. Students were sampled to include a range of faculties, levels of wellbeing, and levels of psychological distress. The diversity achieved was

dependent upon the characteristics of those who volunteered for the interview. Further information regarding this is presented in the results section.

**Table 1**

*Inclusion and exclusion criteria for research interviews*

<b>Inclusion Criteria</b>
<ul style="list-style-type: none"> <li>• Students currently enrolled on a full-time undergraduate bachelor's degree.</li> <li>• Students in their first or second year.</li> <li>• Students aged 21 and under at the time of commencing their current undergraduate degree.</li> <li>• Students enrolled at the University of Leeds.</li> <li>• Students scoring in the average (20-39) or severe (60-80) range on a measure of loneliness (UCLA Loneliness Scale).</li> <li>• Students scoring in the low or high range on both measures of social media use (MTUAS (Rosen et al., 2013) &amp; SMUIS (Jenkins-Guarnieri, Wright, &amp; Johnson, 2013)).</li> </ul>
<b>Exclusion Criteria</b>
<ul style="list-style-type: none"> <li>• Mature students (&gt;21 at the time of starting their current undergraduate degree).</li> <li>• Students in year 3+ of study.</li> <li>• EU &amp; International Students.</li> <li>• Students enrolled on foundation, postgraduate, part-time or short course programmes.</li> <li>• Non-Students.</li> <li>• Students scoring in the high range (40-59) on a measure of loneliness (UCLA Loneliness Scale Revised (Russell, Peplau &amp; Cutrona, 1980)).</li> <li>• Students whose scores across measures of social media use (MTUAS (Rosen et al., 2013) &amp; SMUIS (Jenkins-Guarnieri, Wright, &amp; Johnson, 2013)) differed (e.g low on one measure and high on the other).</li> </ul>

To support purposeful recruitment to my research, I used an online screening survey. I wanted to ensure the sample allow the research questions to be answered. The online screening survey collected demographic data and indicated the participants' level of loneliness and social media use (Appendix 5). Recruiting participants who reported different levels of loneliness and social media use supported a broader understanding of students experiences to be developed. Recruiting participants in this way allowed me to look for the convergence and divergence across individuals' experiences, providing a broader understanding of loneliness and social media use than was present in the literature.

**Reflective Box 1.**

I was cautious using standardised measures to recruit participants to a study using IPA. The focus on individual experience in IPA is distinctly different from standardised measures of psychological constructs. The screening survey and sampling framework ensured the sample was purposeful, but I was careful not to hold tightly to preconceived measures. I chose to not be aware of participants' scores on measures before I interviewed them, so as not to influence our interaction in the interview with these preconceived ideas about them. When analysing the data, I was aware of participants' scores on the measures. I used this to consider disparities between the participants descriptions of their experiences in the interview and scores on standardised measures. This helped me to develop an understanding of how an individual's experience may be different to the concepts measured by standardised measures.

***Sampling***

Appropriate sample sizes in IPA studies are decided on a study-by-study basis. They should be big enough to address the research questions and are based on the complexity of inquiry, the level of analysis and reporting, the richness of individual cases and constraints of the research (Smith and Osbourn, 2003). Smith and Osbourn (2003) recommend a sample size of five or six for a student project, and Smith et al., (2009) recommend four and 10 participants for a professional doctorate. When using IPA, reaching data saturation is not possible due to the focus on individual experience. I discussed and reviewed this regularly with my research supervisors. I ended recruitment after interviewing 12 participants as I noticed similar experiences were being discussed by participants and felt this size would still allow me to complete individual analysis adequately.

***Recruitment Procedure***

All recruitment was conducted online due to COVID-19. Participants were recruited through posts on social media pages, the University of Leeds psychology department research list, and email invitations to students registered to receive information about student mental health and wellbeing projects. The participant journey is outlined in the flowchart in Figure 1 below. All participants who completed the screening survey could enter their email address for a prize draw to win one of three Amazon vouchers (two £10 and one £20). Participants who attended the interview were reimbursed £10 in shopping vouchers.



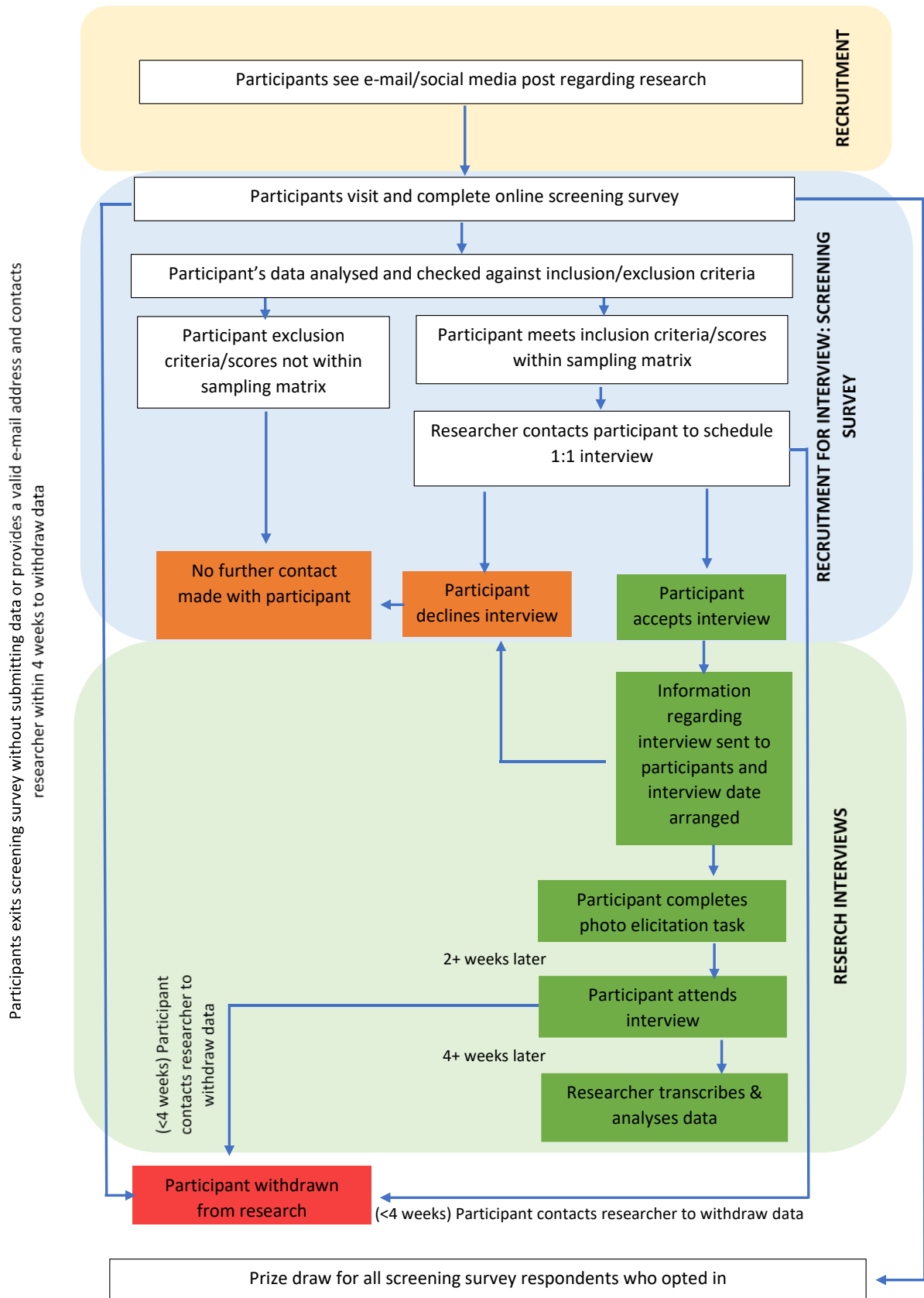


Figure 1 Flow chart of participant journey: recruitment and data collection process

## Measures

The standardised measures completed by participants on the online screening survey to recruit them to research interviews are introduced in this section.

### *Loneliness*

***UCLA Loneliness Scale.*** The UCLA loneliness scale revised (Russell, Peplau & Cutrona, 1980) (Appendix 6) is recommended by the Office of National Statistics in their guidance for measuring loneliness (Office for National Statistics, 2018a). This measure is a reliable and valid measure of loneliness with good psychometric properties (Cronbach's alpha 0.89-0.94) (Russell et al., 1980; Russell, 1996). Scores are split into three categories: average, high and severe, detailed below in Table 2.

**Table 2**  
*UCLA Loneliness Scale Revised interpretation of scores*

<b>Score</b>	<b>Level of loneliness descriptor</b>
20-39	Average Level of loneliness
40-59	High level of loneliness
60-80	Severe level of loneliness

Previous research has found that students score higher on this measure when compared to the general population (Russell, 1996). Students' scores have been found to range from 20-74, with a mean of 40. The aim of my research was not to solely focus on those who were very lonely but rather to understand the experiences of students. Therefore, I wanted to ensure participants were not all within one descriptor for loneliness, allowing for varied experiences to be heard. For my research, students were purposefully selected to be interviewed who scored in the “average” and “severe” ranges for loneliness.

### *Social Media*

Selecting an appropriate measure of social media use was challenging. There is a lack of an agreed measure of social media use across the literature. Numerous scales exist, which all measure different constructs thought to influence the psychological experience of social media use. The scales described below were selected based on their psychometric properties, availability of normative data in a student population, and because they measure social media use.

**Media and Technology Usage and Attitudes Scale** Participants completed the Media and Technology Usage and Attitudes Scale (MTUAS) (Rosen et al., 2013) (Appendix 7). The MTUAS is a 60-item questionnaire with 15 subscales. This questionnaire is extensive and looks at usage and attitudes to different types of media and technology. The MTUAS is the most validated and reliable measure of social media use (Sigerson & Cheng, 2018), with Cronbach's alpha reported between 0.83-0.97 in different populations (Rosen et al., 2013). Due to the aims of this research, the three social-media subscales were used to identify participants: general social media usage, online friendships, and social media friendships. The means and standard deviations reported in student populations are outlined below in Table 3. This data was collected using a non-UK student population (Rosen et al., 2013).

**Table 3**  
*MTUAS mean scores and standard deviations (Rosen et al., 2013).*

<b>Subscale</b>	<b>Mean</b>	<b>SD</b>
General Social Media	4.82	2.21
Social Media Friendships	4.92	1.94
Online Friendships	1.89	1.17

As this data was from a non-UK sample, I expected those taking part in my research might score differently. For this reason, I reviewed how best to understand the responses of the population within this study. I did not aim to solely focus on those for whom social media use was problematic, but to understand the experiences of students; therefore, I wanted to ensure a variety of experiences were represented. Responses to this questionnaire were reviewed, and participants scoring with three or more items 7-10 on the Likert scale were classed as high social media users and those with three or more items scoring 1-5 on the Likert scale as low social media users. This decision for categorising students into low and high social media use allowed for a broader understanding to be developed than in previous studies where all participants were “problematic social media users”.

**Social Media Use Integration Scale.** A second measure of social media use was selected as it measured different concepts. The Social Media Use Integration Scale (SMUIS) (Jenkins-Guarnieri, Wright, & Johnson, 2013) (Appendix 7) is a 10 item measure consisting of two subscales of social media use: Social Integration and Emotional Connection (SIEC) and Integration into Social Routines (ISR).

This measure has demonstrated good psychometric properties (Cronbach's alpha .79) (Maree, 2017). It has been used in research looking at different types of social media and in different populations (Berryman, Ferguson & Negy, 2018; McDougall et al., 2016; Ophir, 2017; Trott et al., 2021). The

means and standard deviations from a study using a student population are outlined below in Table 4. As with the MTUAS, the SMUIS, the means and standard deviations were taken from a non-UK student population, and therefore scores may not generalise to the sample in my study. Again, I considered with research supervisors how to best ensure the broad experiences of undergraduate students could be represented in this study. Responses were reviewed, and those responding 1-2 on the Likert scale for three or more questions were classed as low social media users, with those 4-5 on the Likert scale for three or more questions as high social media users.

**Table 4**  
*SMUIS mean scores and standard deviations (Maree, 2017)*

<b>Subscale</b>	<b>Mean</b>	<b>SD</b>
Social Integration and Emotional Connection	2.41	.860
Integration into Social Routines	3.38	.822

### ***Warwick Edinburgh Mental Wellbeing Scale***

The Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) (Tennant et al., 2007) (Appendix 8) is a 14-item scale measuring mental wellbeing. It is a reliable and valid measure and has been found to have good psychometric properties. Cronbach's alpha was reported as 0.89 within a student sample (Tennant et al., 2007) and has been shown to have high correlations with other mental wellbeing scales (0.71-0.77) and lower correlations with overall health scales (0.43). It has good test-retest reliability (0.83). The median score within a student population was 50 (Tennant et al., 2007).

Scores range from 14 to 70, with higher scores indicating higher levels of mental wellbeing. Cut-off scores are not available for this scale as it was not designed to identify exceptionally high or low positive mental health. Previous research using the WEMWBS in student populations revealed a median score of 50 and an interquartile range of 45-55 (Warwick Medical School, 2021). For this study, scores of 45 and above were used to represent higher levels of positive wellbeing. I invited participants to the research interviews that represented a range of responses on this questionnaire.

### ***Clinical Outcomes in Routine Evaluation 10***

The Clinical Outcomes in Routine Evaluation 10 (CORE-10) (Barkham et al., 2013) is a 10-item self-report measure of psychological distress (Appendix 9). The CORE-10 is a well-validated and reliable measure of distress. Within a clinical sample, Cronbach's alpha was reported as 0.9 and correlated with the Clinical Outcomes in Routine Evaluation Outcome Measure (CORE-OM) at 0.92 in a non-clinical sample. Normed data from a student population is not available for this measure. In a clinical sample, the mean score was 17.1. For psychological distress, the clinical cut-off score was 11, and the reliable change index was 6 (90% CI). Scores of 11 and higher are split into four categories,

outlined in Table 5 below. For this research, scores of 16 and above were used to indicate elevated psychological distress.

**Table 5**

*CORE-10 interpretation of scores of psychological distress (Barkham et al., 2013)*

<i>Score range</i>	<i>Level of distress descriptor</i>
11-15	Mild
16-20	Moderate
21-25	Moderately severe
26-40	Severe

## **Data Collection**

### ***Screening Survey***

Those who were interested in participating in research interviews were invited to complete the online screening survey. The online survey outlined the research aims, sought informed consent and asked for demographic information. This screening survey also included the measures of loneliness, social media use, psychological wellbeing and distress. Following completion, data was analysed against the inclusion and exclusion criteria to identify participants for the research interviews. Once I identified participants who met the inclusion criteria, their scores on measures were not reviewed until after the interviews. The process of not reviewing the scores until after the interviews was to minimise bias during the interview.

### ***Interviews***

As outlined in Figure 1, participants were contacted by email once identified participants met the exclusion criteria (Appendix 10). Participants were sent the PIS and consent form (Appendix 3) and photo-elicitation task information (Appendix 4). Participants were given an opportunity to ask further questions about the research and photo-elicitation task. If the participant accepted the interview, a mutually convenient date and time was arranged. Participants were given a minimum of two weeks to collect images and asked to send these a minimum of 24 hours before the interview. Before the interview, I added participants' images to a word document and numbered each image to support the participant to talk about their images.

Participants were invited to talk about the photos in any order they wished and were told they could return to photos if they wanted to. Some participants wished to have the photos on a shared screen via the video conferencing platform, but others requested to have the document of images open themselves. The topic guide (Appendix 11) was designed to support participants in discussing the images they had brought to the interview without leading them to discuss the topic areas of interest

directly. Follow up questions were asked to prompt participants who struggled more to talk about their experience, for example, "was that important?", "how did that feel?". An alternative topic guide was developed (Appendix 12) should participants attend the interview without any images; however, this did not happen. One participant brought one image, and therefore this alternative topic guide was utilised with this participant at points during the interview. Interviews lasted between 57 minutes and 145 minutes, with the mean at 84 minutes. Consent was sought to contact participants in the future regarding this research to clarify anything unclear during the analysis process. The photo consent form in Appendix 13 was also discussed with participants following the interview.

## **Data Analysis**

### *Survey Data*

Data from the screening survey was analysed to support the purposeful selection of participants for the photo-elicitation interviews. A spreadsheet was created using Microsoft Excel with formulas to score and manipulate data. This Excel spreadsheet identified participant scores that fell into high and low social media use and average and severe loneliness.

### *Interview Data*

The interview data was analysed using IPA. The research team discussed the process, interpretation, and conclusions for the data throughout the analysis process. IPA is not prescriptive in the way data is analysed. There are variations in the way in which data can be analysed in IPA. Smith et al. (2009) outline a six-stage analysis method (see Table 6). This approach is used widely in IPA literature and is therefore considered robust. Below I discuss how I completed each stage. After each interview, I captured my responses to the participant and reflected on my sense-making of the participants' experience. I also listened to the audio recording of each interview immediately after and created mind maps of how I perceived the participants' experience. I discussed interviews with research supervisors and my initial thoughts and reactions regarding interviews.

**Table 6**

*Stages involved in IPA analysis adapted from Smith, Flowers & Larkin (2009)*

<b>Stage</b>	<b>Description</b>
<b>1</b>	Reading and re-reading
<b>2</b>	Initial noting
<b>3</b>	Developing emergent themes
<b>4</b>	Searching for connections across emergent themes
<b>5</b>	Moving to the next case
<b>6</b>	Looking for patterns across cases

Stage one: Following transcription, I listened to each recording whilst reading the transcript to identify any errors in the transcript and anonymise the data. I created a table for each transcript, with space for emergent themes in the left-hand column, the transcript in the middle column, and the exploratory comments in the right-hand column. Following this, I listened to the recording, whilst reading the transcript several times, to immerse myself fully into that participant's individual experience.

Stage two: Next, I started to make notes in the right-hand margin of initial thoughts and observations whilst reading the transcript before moving on to a line-by-line analysis, recording descriptive, linguistic, and conceptual comments (Smith et al., 2009). Descriptive comments describe the content of what is being said by the participant, linguistic comments describe the language being used or the way the participant was speaking, and conceptual comments describe my understanding of what is being said at a deeper, conceptual level. I discussed these with my research supervisors. An example of a section of transcript is available in Appendix 14.

Stage Three: This stage involved turning notes into emergent themes for each participant individually. I worked on the transcript described above, reading through the comments I had made and the quotes that supported the comments. Focusing on sections of the transcript, I began to note emergent themes. This was an iterative process as I moved between focusing on sections of the transcript and the transcript as a whole. As new themes emerged, I revisited others to understand if they represented the same underlying concept for that participant. In the left-hand margin, I noted emergent themes. These were discussed with research supervisors. When this felt satisfactory, emergent themes were listed.

**Reflective box 2.**

When completing the analysis, initially I was very concerned with 'getting it right'. Using IPA was new to me and the uncertainty this left me with was challenging, especially with the earlier transcripts. As I became more confident with the analysis, familiar with the steps used and in my own skills in interpretation, I noticed how rigidity could be unhelpful. When producing emergent themes on the initial transcripts, for example, I noticed I was concerned with getting the right wording to label each theme. At later stages in the analysis, when completing the group analysis, if I had held tightly onto the labels for themes, this closed down my thinking. Through supervision and writing in my reflective diary about this I was able to hold the principles of phenomenology and idiography in mind when completing the analysis.

Stage four: Through searching for connections across emergent themes, sub-ordinate themes were developed. With the list of emergent themes listed, my first step was to cluster them, understanding how they related to each other. Throughout the process, I revisited and amended the individual analysis as my confidence interpretation and analysis improved. Smith et al. (2009) described processes of abstraction and subsumption, polarisation, contextualisation, numeration and function to

support bringing together emergent themes to create sub-ordinate themes. Contextualisation, for example, supported the development of emergent themes concerning cultures described by participants.

Stage five: After completing these four stages for each participant, pen portraits were written to capture some of the individual experience before moving onto the following transcript. The first four stages of the analysis process were completed for each participant in turn before moving onto the following transcript. Focusing on each transcript individually helped to view each participant as an individual and ensure their experience was represented in the analysis and write up, in line with the idiographic nature of IPA.

Stage six: I began to look for patterns and connections across cases once all 12 individual analyses were complete. Initially, I recorded all emergent themes for each participant onto a word document. There were 181 emergent themes, some of which were easily identifiable as the same underlying concept from their title. I clustered these together within a separate word document, creating tables for each theme to ensure knowledge of how the final themes were developed. The table also identified the section of the transcript it belonged to for each participant. I then moved on to the remaining emergent themes, looking for convergence and divergence across participants. I used the methods described earlier, such as abstraction, subsumption, and polarisation, to bring together a list of themes. Through this, the initial 181 emergent themes became 29 themes. These were discussed in supervision and helped me to identify where perhaps a deeper level of interpretation was required or where themes could come together to represent a higher-order concept. '*Curating an identity*', became a superordinate theme through subsumption of themes: '*conforming to connect*', '*the old me and the new me*' and '*part of who I am*'. Discussing with my research supervisors also supported quality checking, which is described in more detail below. Thirteen themes were identified, which I then worked to bring together. A conceptual map supported this process. Five superordinate themes were identified where commonalities in experiences across participants were identified. Eight subordinate themes represented different experiences within specific aspects of superordinate themes.

## Quality Checks

Qualitative research is subject to a thorough consideration of quality but requires different forms of measurement than quantitative research methods. There are several different frameworks for quality checking in qualitative research to ensure rigour. I used Elliot, Fischer and Rennie's (1999) seven-stage quality check framework as it draws on previous discussions of quality and rigour in qualitative research. In this framework, emphasis is placed on owning one's perspective to increase quality. This means that qualitative researchers must maintain a reflexive stance throughout the research process. I use reflective boxes throughout this thesis as a means of ensuring data quality.



Rigour and research quality was considered throughout the research design and data collection and analysis process. Further exploration of how this quality framework was used is outlined in Chapter 6.

### **Training Interviews**

As IPA is a reflexive process, I was first a participant in a training interview with my research supervisor acting as the researcher. The research supervisor set a comparable photo-elicitation task, with the question:

*"How does being a trainee clinical psychologist have a positive and negative impact on your relationships with the people around you and society in general?"*

This training study allowed me to reflect on the experience of being a participant. I also developed my own experience of what it is like to engage in this research. Whilst the research question was different, it required me to disclose personal information and a degree of vulnerability, which is likely to be experienced by participants in this research. Following this, I spent time with my supervisor and reflected on this experience, considering adaptations to the procedure. When I was initially sent the question, I noticed that I was keen to think of abstract ways to portray this to make it interesting for the researcher. Before sending the photos to my supervisor, I spent some time going through them to make sure I did not have too many photographs and that I would feel able to talk about them. I found I was nervous about sending some images, considering how it might feel to talk about them or what my supervisor might think. While my experience may not represent the experiences of all participants, I was mindful of this when completing research interviews with participants.

At the interview, I found it helpful to have the research question on the table in front of me to refer to. My supervisor was not making notes during the interview, which made me feel as though they were interested in what I had to say. I noticed that I could be tangential in the things I spoke about. I thought about how it may be challenging to keep on the topic during the interview. Whilst this may have brought up new and novel ideas, there was a possibility that it may go too far away from the question. As I was talking about my photographs, I was conscious that I did not want to give too much information or talk too much. Having all my photographs on the table was helpful to me in moving between photographs and considering how they all linked together. Having all the photographs out made me aware of how much I had to talk about, and I wanted time to cover all photographs. I hoped to take this into the research interviews for this study; however, I had to consider how to do this differently online. I, therefore, gave participants a choice about how we viewed the images. I was aware of the power dynamic between the researcher and me. There are things that I did not want to discuss and having control over what I spoke about helped with this.

Following this, I conducted a second training study, this time where I acted as the researcher with an undergraduate student, Rachel,<sup>1</sup> who was a family friend. Rachel completed the research process from start to finish, allowing me to be confident about all aspects of the research and hear the opinion of an undergraduate student participating in the research. This training study also gave me the experience of conducting photo-elicitation research, an interview technique new to me. This was explained to Rachel, and she consented to take part. Rachel asked to complete the photo-elicitation task using the same information given to participants. The interview lasted for 75 minutes. Following this, Rachel was asked for her feedback on the process and how things might be changes to help participants in the study.

Rachel discussed her worries when completing the photo-elicitation task. She suggested that the guidance should be altered to say that there are no right or wrong photographs and that I did not have any ideas about what participants should bring. Rachel also suggested I write on the photo-elicitation instructions that participants can contact me with any questions regarding photographs before the interview. This guided the development of photo-elicitation instructions for participants in this study.

Rachel reflected on how it had been helpful to collect the images before the interview as it had given her time to think about what she would talk about. Having the photographs to hand helped her to remember specific events which she talked about during the interview. This helped me feel confident that the research methodology would support my research aims. She had also spoken to friends about the research whilst collecting the images and reflected on the discussions she had with them regarding loneliness and social media. I felt this added another dimension to the understanding created, in that Rachel's understanding was also constructed through her interpretations of others, whilst also allowing for her experiences to be central.

I reflected on how I found completing this interview. At times I noticed I was trying to guide her back to my research aims. I was mindful of this in the research interviews. Whilst I knew Rachel before this research as a family friend, I did not know much about her personal life. I noticed how I was careful regarding how I asked questions as I did not want her to feel she had to give more information than she was comfortable with. I was surprised by some of the things Rachel discussed that I had not previously considered. She talked about choosing a university not too far away from home as being close to family was important to her. She also has an older sister who had been to university who could advise on things like this. I had not previously considered the impact of these things as my experience of starting university was very different to hers. Being aware of the difference in our experiences and reflecting on these in my reflective diary and supervision was essential to ensure I

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<sup>1</sup> Pseudonym used

stayed as close to her experience as possible. Noticing my biases and the impact this could have, I saw the importance of taking the reflective diary into participant interviews.

## Chapter 5: Results

In this chapter, I present the results of the analysis exploring undergraduates' experiences of loneliness and how they make sense of the relationship to social media. To situate the sample within the broader context, I give a brief overview of the online screening survey and present the demographic data and data from standardised measures. Next, I go on to discuss the results of the interviews. I outline the demographic data for the 12 participants who took part in interviews, followed by pen portraits. I present a diagrammatic overview of the themes that emerged through the IPA analysis using a conceptual map. Finally, I explore each theme in detail, providing direct participant quotes to support the reader to see the relationship between the raw data and the themes that emerged, providing context and meaning.

### Screening Survey

I recruited participants to the research interviews through an online screening survey, aiding purposeful sampling. In total, 151 students from the University of Leeds completed the online screening survey. Whilst it is not the intention of this thesis to analyse this data in depth, I present an overview to situate the interview sample within their broader context.

Table 7 provides an overview of the demographic data for those who completed the online screening survey, including the 12 participants who took part in interviews. Their ages ranged between 18-53, with a mean of 21. Most students identified as female (74%), and White students made up the largest proportion of responses (83%). Under half of those who completed the survey were in their first or second year of study (41%). One-fifth of the responses were from participants who disclosed a disability. Those who completed the survey represented all faculties within the University of Leeds, although some faculties are more represented than others; for example, 27% are from the faculty of medicine and health and only 5% from the faculty of environment.

**Table 7**  
Demographic information collected through online screening survey

	<b>Overall sample<sup>2</sup></b>	
	<b>n</b>	<b>%</b>
<b>Gender</b>		
Male	31	21
(of Males, number self-identified at Transgender Male)	1	1
Female	112	74
Not specified	8	5
<b>Age</b>		
Mean (SD)	21 (3.56)	
Range (Min, Max)	18-53	
<b>Year of undergraduate study</b>		
1	38	25
2	24	16
3	60	40
Other	19	13
<b>Faculty</b>		
Faculty of Arts, Humanities and Culture	31	21
Faculty of Biological Sciences	14	9
Faculty of Business	12	8
Faculty of Social Sciences	12	8
Faculty of Engineering and Physical Sciences	22	15
Faculty of Environment	8	5
Faculty of Medicine and Health	42	28
Not Specified	11	7
<b>Disability</b>		
Dyslexia	1	1
Dyspraxia	2	1
Mental Health	12	8
Long Term Condition	3	2
Autism	3	2
Wheelchair/Mobility	1	1
Chronic Pain	1	1
Other	4	3
<b>Ethnicity</b>		
White - English/Welsh/Scottish/Northern Irish/British/Irish/Any other	125	83
White background		
Mixed/Multiple ethnic groups - White and Asian	2	1
Asian/Asian British: Indian/Pakistani/Chinese/Any other Asian	15	10
background		
Black/African/Caribbean/Black British – African/Caribbean	5	3
Not Specified	4	3
<b>Relationship Status</b>		
Single	92	61
In a relationship	46	30
Cohabiting	7	4
Married/In a Civil Partnership	2	1
Prefer not to say	5	3

<sup>2</sup> This overall sample data is inclusive of the 12 participants interviewed.

In Table 8, the scores from standardised measures of loneliness, social media use, psychological wellbeing and distress are presented. Of the entire sample, including those who took part in the research interviews, the mean score on the UCLA Loneliness Scale revised (Russell, Peplau & Cutrona, 1980) was 43, in the moderate range. Most participants scored in the moderate range (38%), with 35% reporting average levels of loneliness and 27% reporting severe levels of loneliness.

On social media use measures, of the entire sample, including those who took part in the interviews, 76% scored within the high range on the MTUAS (Rosen et al., 2013) and 45% in the high range on the SMUIS (Jenkins-Guarnieri, Wright, & Johnson, 2013). Across all three MTUAS subscales, the means in this sample were higher than the means observed in student populations in previous research. Conversely, means in this sample across the two SMUIS subscales used in this study were lower than means collected in previous research utilising student samples.

On the measure of psychological wellbeing, WEMWBS (Tennant et al., 2007), 54% of participants in the high range, indicating positive psychological wellbeing. On the measure of psychological distress (CORE-10, Barkham et al., 2013), 17% of participants scored in the moderate, 16% in moderately severe and 55% in the range of severe psychological distress.

**Reflective Box 3.**

When reviewing the overall sample throughout the recruitment process, I noticed that scores on measures of psychological distress were higher than would be expected within this population. Whilst the focus of my research was not psychological distress, I considered the impact this may have upon participants when starting university. Whilst previous research into psychological distress at university is mixed (Atkinson, 2020; Verger et al., 2009), this was certainly not at the levels found within my study. It is important to acknowledge that when participants completed the screening survey, they were living through a global pandemic, and for most participants living within a level of lockdown restrictions. It is likely this impacted feeling of distress. Noticing this perhaps impacted upon the way I experienced participants in the interview, and the way I interpreted their experiences when analysing data.

**Table 8**  
*Screening survey data: scores from standardised measures*

	<b>Overall sample</b>	
	N=151	
	n	%
<b>Loneliness (UCLA Loneliness Scale, Russell, Peplau &amp; Cutrona, 1980)</b>		
Mean (SD)	43 (5.6)	
Range (Mix, Max)	28-60	
<i>Level of loneliness</i>		
Average (0-39)	53	35
Moderate (40-50)	58	38
Severe (50+)	40	27
<b>Social Media (SMUIS, Jenkins-Guarnieri, Wright, &amp; Johnson, 2013)</b>		
SMUIS SIEC Mean (SD)	1.94 (0.81)	
Range	0-3.83	
SMUIS ISR Mean (SD)	2.32 (0.73)	
Range	0.17-3.67	
<i>Level of social media use</i>		
Low (3+ items 1-2 on Likert scale)	88	
High (3+ items 4-5 on Likert scale)	63	
<b>Social Media (MTUAS) (Rosen et al., 2013).</b>		
MTUAS general SM Mean (SD)	5.36 (1.37)	
Range	1-10	
MTUAS SM friendship Mean (SD)	6.0 (2.0)	
Range	1-9	
MTUAS online friendship Mean (SD)	2.0 (1.12)	
Range	1-8	
<i>Level of social media use</i>		
Low (3+ items 1-5 Likert scale)	46	
High (3+ items 7-10 Likert scale)	105	
<b>Psychological Wellbeing (WEMWBS) (Tennant et al., 2007)</b>		
Mean (SD)	44 (8.8)	
Range (Mix, Max)	20-70	
<i>Level of psychological wellbeing</i>		
Low (0-45)	70	46
High (46+)	81	54
<b>Psychological Distress (CORE-10) (Barkham et al., 2013)</b>		
Mean (SD)	24.7 (6.8)	
Range (Mix, Max)	10-45	
<i>Level of psychological distress</i>		
Low (0-15)	13	9
High (16+)	138	91

## Interviews

In this section, I discuss the research interviews conducted for this study. I start by explaining how the participants were selected to participate in the research interviews and then discuss the sample, presenting pen portraits and data from the online screening survey for the 12 participants. Next, I move on to the themes identified through IPA. First, I highlight each participant's thematic contributions to the themes that emerged through the group analysis before presenting the themes

diagrammatically in a conceptual map. Finally, I discuss each theme in turn, providing participant quotes and images to illustrate the themes and analysis.

All participants who completed the online screening survey and met the inclusion criteria were contacted by e-mail, inviting them to participate in an interview. Figure 2 provides details regarding participants I approached and those who did not consent or were not eligible to participate in the interviews. Of these 25 students invited to interview, 14 responded to arrange interviews, one asked not to be contacted further regarding the research and ten did not respond to e-mail contact. Fourteen interviews were arranged however, two participants did not attend pre-arranged interviews, and did not respond to further contact. Through reflections after each interview and discussion within the research team recruitment ceased identified after 12 participants.

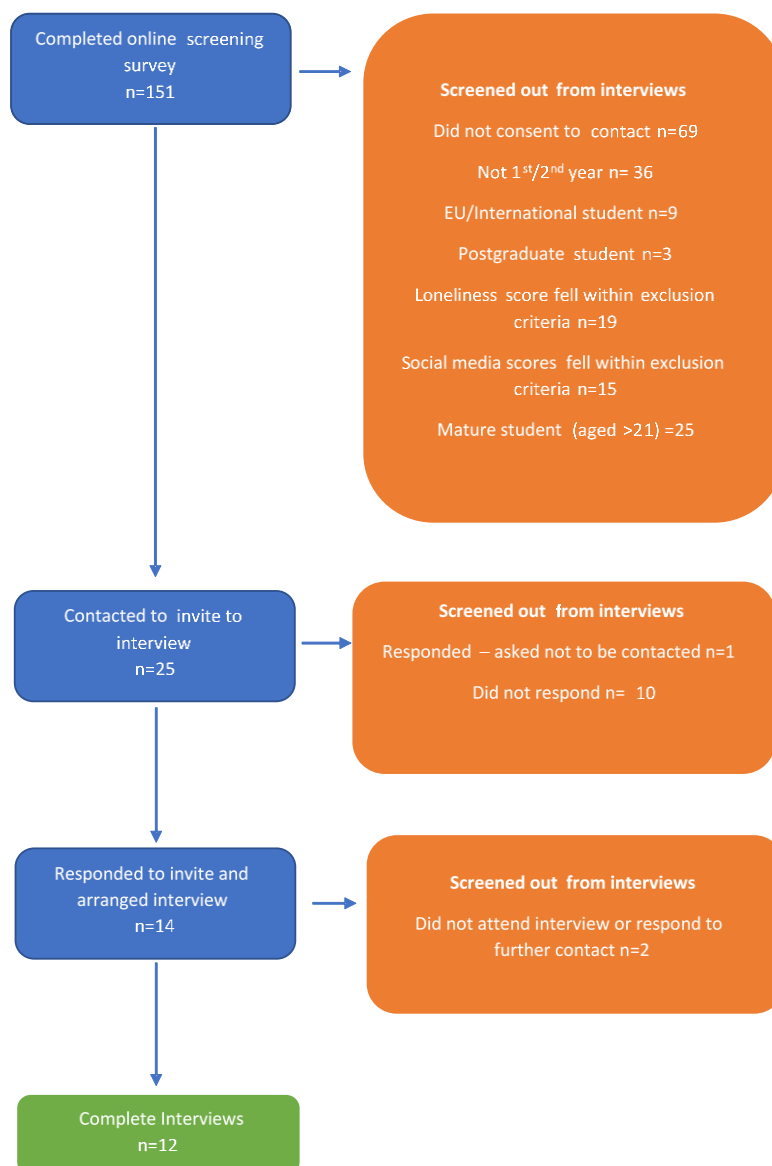


Figure 2 Flowchart invite to interview



### *Pen Portraits*

Within the philosophy of IPA, I wanted the analysis and write up of my thesis to represent the experiences of participants as individuals. Pen portraits effectively represent participants in qualitative analysis (King & Horrocks, 2010). I therefore introduce each participant as a unique individual through pen portraits in alphabetical order. Care was taken considering how to represent participants, omitting information that may be identifiable and using pseudonyms to protect participants' anonymity.

*Adam.* Adam was a second-year undergraduate student. He was a 21-year-old White British male. He disclosed having a disability on the online screening survey. His scores indicated severe psychological distress and low levels of psychological wellbeing. Adam scored in the high range on both social media measures and in the severe range for loneliness. I heard from Adam that he had tried hard to become involved in many things that he thought would help him feel connected to others but continued to feel lonely. It sounded like he felt this was due to him being different to other students. Trying to fit in and connect with others also led to Adam spending large amounts of time on social media. He described finding this exhausting.

Adam sent 17 images for the interview, a mixture of screenshots, photographs he had taken, and images he had found on the internet. This interview with Adam was the longest at 2 hours and 25 minutes. He was very open about his experiences, discussing his life and the difficulties he had experienced starting university.

#### **Reflective box 5.**

Adam brought lots of images to the interview, which I found interesting but challenging. I allowed space for Adam to describe his experience through the photographs but noticed I became concerned by how much time we spent talking about individual photographs. At times it felt that the conversations could be unrelated to the topic, but I was also mindful of the stance of IPA being about participants' experiences therefore I wanted to allow space for this. Despite my concerns, I found through the analysis the experiences I had viewed as unrelated during the interview added to my meaning making of how Adam experienced starting university and his connections to others.

**Alexandra.** Alexandra was a second-year undergraduate student. She was 19 years old and identified herself as a White British female. On the screening survey, Alexandra scored as a high social media user and in the average range for loneliness. In the interview, Alexandra said she did not use social media as often as those around her. For Alexandra, social media was a way to stay connected to those she was far apart from, such as her group of friends from home, her boyfriend, and her family. Her scores indicated high levels of psychological wellbeing and low levels of psychological distress.

Alexandra sent eight pictures. They included pictures of her, screenshots from her social media and objects that were important to her. The interview lasted for one hour and 45 minutes. Alexandra was engaged in discussing her photos throughout, and I felt that we established a good rapport, allowing her to share her experiences.

**Chantelle.** Chantelle was a 19-year-old first-year undergraduate student. She identified herself as a Black African female. Chantelle scored in the high range for social media use and the average range for loneliness when completing the online screening survey. Chantelle described using social media for many purposes: when bored, to distract from difficult feelings, to fit in with different groups and for financial purposes. Her scores indicated high levels of psychological wellbeing but moderately severe levels of psychological distress. Chantelle shared one image. The interview lasted for one hour and 19 minutes.

**Reflective Box 6.**

Converse to the experience described with Adam, I worried about the challenges of completing an interview with only one image. The image Chantelle brought had been created following a traumatic event experienced when starting university. This impacted how she experienced many aspects including herself, other people, social media and university. I was surprised the impact that one image could have and how it could be so helpful to Chantelle in letting me into her world and creating a deep understanding of her meaning making.

**Claire.** Claire was a 19-year-old first-year undergraduate student. Claire completed the online screening questionnaire, where she identified herself as a White British female. Claire scored in the high range for social media use and the severe range for loneliness. Claire described the strengths and challenges of seeing old friends on social media having a great time whilst she was grappling with forming new connections in unfamiliar territory. Claire's scores indicated high levels of psychological wellbeing and moderate levels of psychological distress.

Claire sent 13 images; most were photographs she had taken herself and were of groups of her friends. The interview lasted for just over one hour. During the interview, I found that Claire appeared relaxed. She was chatty and very open about her experiences of starting university. She talked about

realisations she made around the importance of integrating different aspects of her life instead of the initial view that she would start again once leaving home.

**Craig.** Craig was a second-year undergraduate student. He was a 21-year-old White British male. During the interview, Craig spoke of how being part of the LGBTQ+ community was a big part of his identity. On the screening questionnaire, his scores indicated low levels of psychological wellbeing and moderate levels of psychological distress. Craig scored in the high range for social media and severe range for loneliness, although this was not my perception of him during the interview. Craig said he had been a big social media user, but this changed during the first term of university when he broke his phone. He talked about being more present when with others and how this impacted him positively.

Craig was engaged from when I first contacted him to arrange the interview. During the interview, he appeared very relaxed and open. This interview lasted for 90 minutes. Craig sent ten photographs, all of which had taken himself. Some pictures were of him alone, some with friends and some of his surroundings, such as his bedroom.

**Elizabeth.** Elizabeth was a 19-year-old second-year undergraduate student. She identified as an Asian Chinese female. Her scores on the screening questionnaire were in the high range for social media use and the severe range for loneliness. Her scores indicated moderately severe psychological distress and low psychological wellbeing. Elizabeth sent 19 images, all but one she had downloaded from the internet. This interview lasted 1 hour and 50 minutes.

She lived in halls of residence and cited this, and alcohol had helped her make friends quickly. During the interview, it was apparent there was a definite "before" and "after" starting university for Elizabeth. She intended to leave the past behind and create a new identity for herself. She talked about the difficulties this created when returning home to her old friends and old life. Elizabeth also spoke about her identity to her Chinese heritage. She was feeling different to those around her in many ways. Throughout the interview, there were instances of Elizabeth describing feeling out of control: with social media use, of others' perceptions of her and her ability to live the life she had imagined.

**Gabby.** Gabby was a 21-year-old, second-year undergraduate student. She identified as a White British female. Gabby did not disclose a disability on the online screening survey but spoke about her experience of mental health problems during the interview. Gabby's scores indicated moderately severe psychological distress but high levels of psychological wellbeing.

Gabby's score was in the average range for loneliness, and her social media use scores were in the low range. While her reported levels of loneliness were low, her connections with peers from her back home buffered this. For Gabby, the relationship between social media when starting university was impression formation, validation and communication to friends and family that she was normal and

okay. I interviewed Gabby six months after completing the online screening survey as she replied to a follow-up e-mail some months later. Gabby sent eight images before the interview; these were pictures she had taken and were mainly of people or objects. The interview lasted for around an hour.

**Julia.** Julia was a first-year undergraduate student. She was 21-years-old and identified as a White British female. Julia was not a mature student but took a different route to university and spoke of how this shaped her identity. Her scores on the online screening questionnaire indicated she was a low social media user who scored in the average range for loneliness. Her scores indicated low psychological wellbeing and moderate psychological distress. Julia sent four photographs. The interview with Julia lasted for just over one hour.

**Lia.** Lia was a 19-year-old first-year undergraduate student. On the online screening survey, she identified as an Asian female. Lia's scores on social media measures indicated she was a low social media user, and on the measure of loneliness, she experienced severe levels of loneliness. Despite scoring low for social media use, Lia described herself during the interview as addicted to social media. Lia often described feeling consumed by social media and not having any control over this. Her responses to the online survey indicated low levels of psychological wellbeing and moderate levels of psychological distress. Although Lia did not describe having a disability on the screening questionnaire, she disclosed a history of mental health difficulties during the interview.

Lia provided eight images. All of Lia's images were downloaded from the internet. The interview lasted for 90 minutes. Lia appeared preoccupied with giving right or helpful answers and apologised several times for talking too much. After the first few images, a rapport was established, and Lia appeared more able to engage and be open.

**Ross.** Ross was a 19-year-old first-year undergraduate student. He scored in the severe range on the measure of loneliness and in the low range for social media use on the online questionnaire. Ross' description of his experience was in contrast with his scores on the screening questionnaire. He described feeling that he had not felt worried about starting university and saw himself as somebody who could talk to anybody. His score indicated mild psychological distress and high psychological wellbeing. He sent ten images before the interview. All the images were photographs he had taken himself and were urban landscapes in Leeds. Many of his pictures represented his exploration of the city, which he shared on social media. The interview lasted for just over an hour.

**Reflective Box 7.**

I noticed thinking the photographs Ross had provided were photographs he liked and wanted to show me, rather than photographs he thought would be helpful in talking about his experiences in the interview. When asked about why he had chosen a picture, or what he wanted me to understand about him, he would say that there is no deeper meaning other than what it was of. I wondered whether this was because he did not have the language to talk about his experiences, whether he struggled with the emotional aspects of his experience and perhaps we did not have a good enough rapport, or whether there was something else influencing this.

**Tom.** Tom was a first-year undergraduate student. Tom was an 18-years-old White British male. Tom completed the online screening survey, where he scored in the low range for social media use and in the severe range for loneliness. Tom came across as a very sociable person who highly valued the social aspects of university. His scores indicated low psychological distress and high levels of psychological wellbeing. Tom sent seven images before the interview, some of which he had taken himself, others he had found online. The interview lasted for just under an hour. He discussed the impact of the pandemic on his first year at university.

**Reflective Box 8.**

The interview with Tom was the first interview I completed. I experienced Tom as quite shy and reserved during the interview. I found that Tom struggled to talk about experiences at a deeper level, exploring his emotional experience. As this was my first interview, I wondered about the impact this may have had on my confidence, the types of questions I asked or the way I asked. I shared the recording of this interview with one of the research supervisors and considered whether any amendments needed to be made. Through this I was able to develop a more open way of being with participants during the interviews.

**Yasmin.** Yasmin was a first-year undergraduate student. Yasmin identified as a White British female. She took a year out before starting university due to health problems and was 19-years-old when I interviewed her. She did not disclose a disability on the online screening survey but discussed her experiences of mental health problems during the interview. Her score for social media use was in the high range and loneliness in the severe range. Her scores indicated a low level of psychological wellbeing and psychological distress.

The interview lasted for just over one hour. Yasmin had sent five photographs, which she had taken herself, for the interview. During the interview, Yasmin described how being authentic with her friends was difficult when she felt vulnerable in sharing parts of herself.

### Overall Sample

Demographic information and scores on standardised measures of loneliness, social media use, psychological distress and psychological wellbeing for the sample who took part in the research interview are presented in Table 9 below to situate the sample.

**Table 9**

*Interview participants screening survey data: demographics & standardised measures*

	<b>Interview</b>	
	N=12	
	n	%
<b>Gender</b>		
Male	4	33
Female	8	67
<b>Age</b>		
Mean (SD)	19.6 (1.08)	
Range (Min, Max)	18-21	
<b>Year of undergraduate study</b>		
1	5	42
2	7	58
<b>Faculty</b>		
Faculty of Arts, Humanities and Culture	2	17
Faculty of Business	2	17
Faculty of Social Sciences	1	8
Faculty of Engineering and Physical Sciences	1	8
Faculty of Environment	1	8
Faculty of Medicine and Health	5	42
<b>Disability</b>		
Mental Health	2	17
<b>Ethnicity</b>		
White: English/Welsh/Scottish/Northern Irish/British/Irish/Any other White background	9	75
Asian/Asian British: Indian/Pakistani/Chinese/Any other Asian background	2	17
Black/African/Caribbean/Black British: African/Caribbean	1	8
<b>Relationship Status</b>		
Single	9	75
In a relationship	3	25
<b>Loneliness (UCLA Loneliness Scale, Russell, Peplau &amp; Cutrona, 1980)</b>		
Mean (SD)	40.2 (5.5)	
Range (Min, Max)	36-53	
<i>Level of loneliness</i>		
Average (0-39)	4	33
Moderate (40-50)	0	0
Severe (50+)	8	67
<b>Social Media (SMUIS, Jenkins-Guarnieri, Wright, &amp; Johnson, 2013)</b>		
SMUIS SIEC Mean (SD)	2.0 (1.74)	
Range	0.83-3	
SMUIS ISR Mean (SD)	2.31 (0.53)	
Range	0.74-3.5	
<i>Level of social media use</i>		
Low (3+ items 1-2 on Likert scale)	4	
High (3+ items 4-5 on Likert scale)	8	

	Interview	
	N=12	
	n	%
<b>Social Media (MTUAS) (Rosen et al., 2013).</b>		
MTUAS general SM Mean (SD)	4.73 (1.40)	
Range	3.67-8.1	
MTUAS SM friendship Mean (SD)	5.5 (1.97)	
Range	3-7.5	
MTUAS online friendship Mean (SD)	1.54 (0.40)	
Range	1-2	
<i>Level of social media use</i>		
Low (3+ items 1-5 Likert scale)	4	
High (3+ items 7-10 Likert scale)	8	
<b>Psychological Wellbeing (WEMWBS) (Tennant et al., 2007)</b>		
Mean (SD)	50 (10.5)	
Range (Mix, Max)	39-70	
<i>Level of psychological wellbeing</i>		
Low (0-45)	4	33
High (46+)	8	67
<b>Psychological Distress (CORE-10) (Barkham et al., 2013)</b>		
Mean (SD)	24 (5.7)	
Range (Mix, Max)	10-30	
<i>Level of psychological distress</i>		
Low (0-15)	1	8
High (16+)	11	92

### ***Group Analysis Results***

I first completed individual analysis for each participant before synthesising the data and moving onto a group analysis. In this section I present the results from the group analysis.

In total, five superordinate themes were identified, along with eight subordinate themes. These themes are represented below in Figure 3. Table 10 highlights which participants experienced each theme.

Whilst some themes had broader coverage of participants, such as '*finding a community*', other themes were represented by a smaller group of participants, such as '*monitoring the give and take*'. It was essential to represent the salient themes within the data without focussing solely on the amount of coverage within each theme.





The development of this conceptual map was guided by the individual and group analyses. It was an iterative process in that developing the map helped me to develop the themes further. I utilised this map to consider the convergence and divergence between individual experiences across the data. I hoped to outline my understanding of how the themes relate to one another with this map.

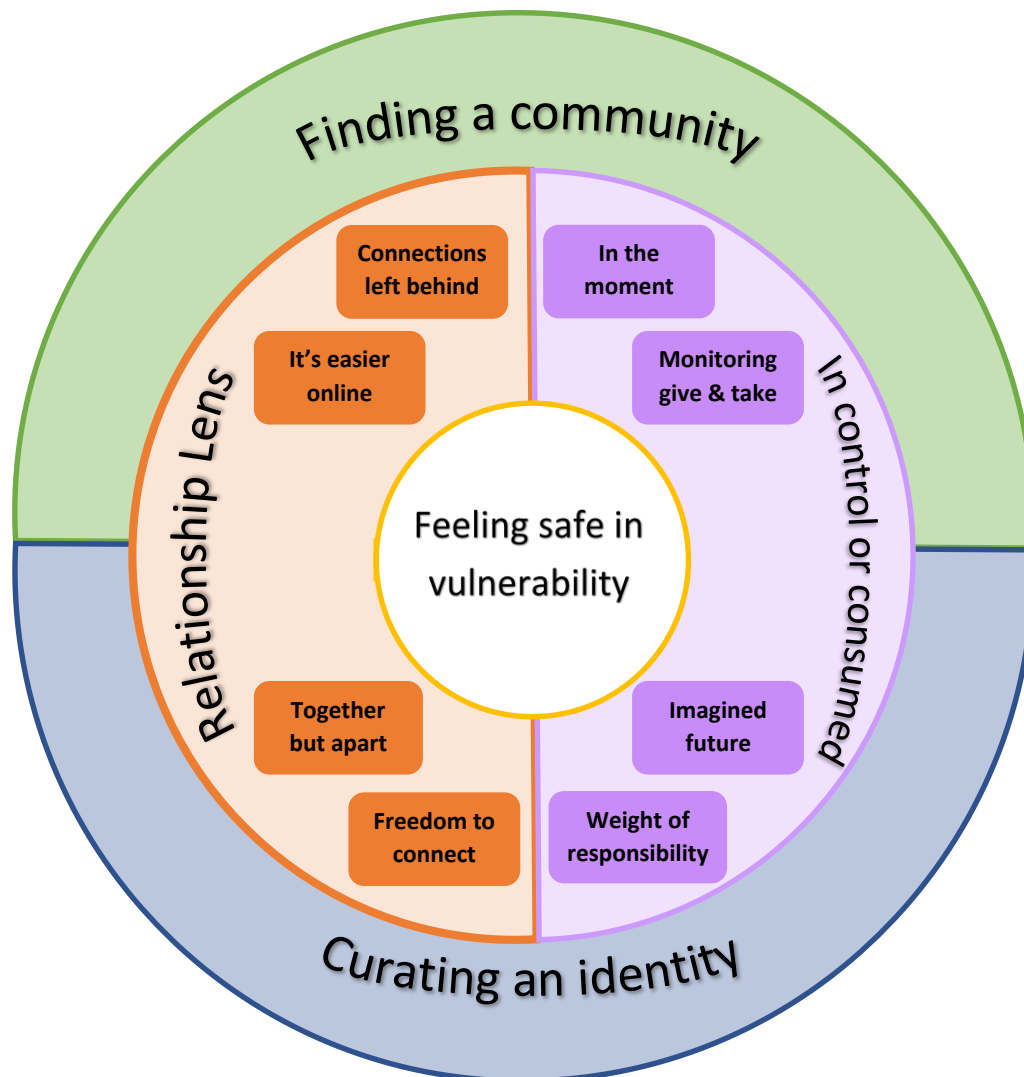


Figure 3 Conceptual map of the experiences reported by participants

The map illustrates that participants explained their experiences across two significant aspects of their transition to university: 'finding a community' and 'curating an identity'. These themes encompass the other themes, both impacting them and being impacted by them. Through this 'relationship lens', participants viewed relational aspects of forming and maintaining connections with others, both past and present, and the added social media element. The way participants viewed their social relationships before and during university was fundamental in supporting feelings of belonging to a

community. The level of control participants felt over themselves and their relationships shaped how they felt they should curate their identity. Participants talked about their sense of being ‘*in control or consumed*’ related to these. Central to all experiences was a sense of ‘*feeling safe in vulnerability*’ when moving to university in an unfamiliar place with unspoken rules and norms. When participants felt a sense of safety in sharing who they were, this positively impacted how they related to other people and their sense of self. When participants felt unsafe, there was a sense of instability across all aspects of their experience.

***Finding a Community.*** When starting university, all participants described being motivated to connect with others and find a place to feel they belonged. Moving to university was often their first experience of living independently. Their sense of being disconnected from familiar others and independence appeared to bring about feelings of vulnerability. Participants were motivated to connect with others, increasing feelings of safety. It seemed participants longed to know they mattered to others. For many, this was their first experience of seeking out a place where they felt they belonged, without a safety net of trusted people around them, having moved away from family and long-standing friendships. Participants described their desire to find people similar to them with shared interests and values. Seeking others with shared values led participants to better understand what mattered to them. Craig described connecting with people at university who held similar political views in the extract below. Growing up in a rural area, his prior experience of sharing values was through social media. At university, he described connecting with a community of people who shared values with him as affirming.

*"Growing up I got a lot of my politics from Twitter. It was good cause I always felt like a bit of a black sheep and then I came to uni. Listening to someone else explaining their view and be like, yeah, I've literally been saying that for years. It's really kind of affirming and really comforting." (Craig)*



Figure 4 Craig's photo of a protest outside the University

Finding people and places where they felt they belonged often started before moving to university. Participants described ways in which they had planned or prepared to find their community through researching to *"try and learn from what might have made a good experience and then plan ahead"* (Tom). Social media allowed participants to seek out people they felt they would connect with before moving to university. In addition, connecting with people through social media often reduced feelings of anxiety and loneliness before arriving at university. In the extract below, Claire described the experience of connecting with others. She described how having formed a connection with somebody like her before moving to university had been helpful when feeling lost in a large cohort of students.

*"There's 250 in a year so, I think you were gonna feel like you were really alone in there. It's harder to meet people from your course because you're all over the place. I met one of the girls from [subject] through social media over the summer before we started uni. I put it on my social media that I was going out to do a [interest] and she messaged me saying aren't you doing [subject]. And we're still friends now, because we met through social media"*  
(Claire)

Claire used the words "you" when describing how she felt. Participants often used second and third-person language when describing their experiences during interviews. Whilst it appeared that participants were describing their individual experience, the use of language may have created a distance for them to protect from challenging experiences.

When using social media to seek others before starting university, participants described feeling connected or disconnected with others based on their social media profiles. Participants would often find others on their course or in their accommodation through groups on social media and look at their profiles. They described seeking out information about others to reduce worry about not fitting in. Yasmin described looking at people's social media profiles to decide whether they were her 'cup of tea' in the extract below.

*"That's a chat that had been made on Facebook for all of the people studying the course that I was doing. This was very helpful for me. You go through the group chat just seeing the kind of people who are on your course. There are a few annoying people who would post a lot of things you think, all right, maybe they're not my cup of tea. It was quite a good way of just having a look at who's on your course before you went. I'd never let it impact the way I first meet someone. You knew what you were getting into a bit more"* (Yasmin)

Getting to know people through a social media profile was a shared experience described by participants. Knowing people through a social media profile brought about further disconnection for some, especially those who experienced exclusion previously. Increased feelings of disconnection were also experienced by those who saw themselves as having different interests from others and

described themselves as introverted. Feelings of exclusion from communities were often brought about by seeing those around them having formed relationships through social media before university. In moving into halls of residence, Claire described her new flatmates met through social media before starting university in the extract below. Through social media, seeing friends forming connections, along with her self-described introversion, led her to feel a step behind and perhaps an experience of constantly working to catch up with the crowd.

*“I’m quite introverted, I think, so I don’t tend to reach out to people before they reach out to me. When I got to uni a few of my flatmates had already spoken to each other before we’d got there. They’d already met through social media. I almost feel like a step behind all the time because people have already met and when you get there, you’re still the new person, even though everybody’s new” (Claire)*

Alongside using social media before starting university, considering which societies they would join was seen as necessary in feeling part of a community *“cause you meet like like-minded people that share your interests” (Craig)*. Societies increased feelings of belongingness as participants connected with those who shared interests with them. Ross described seeking out universities that he considered athletic as this was important to him *“it was a factor, like, are they like athletic university? Have they got good sports?” (Ross)*. He was involved in a particular sport for years before university and spoke of the impact on his identity. He described planning to join a particular sports society before starting university and was reflecting on the impact joining this society had on his feelings of connectedness.

*“I mean I have friends older, younger, from different courses, from different places of life. It [society] gives you a good understanding of things; cause everyone does it for different reasons. It was really important to make friends outside my course. It really expanded my friendship group; it gives like an extra set of friends” (Ross)*

Claire also spoke about how she had planned to join a society before university that had been a lifelong interest. She explained that she found this group less sociable upon starting university. With encouragement from new peers, she joined a more social sports society. Claire reflected the positive impact this had on her feeling connected to a community.

*“This was good for me because it made me see people on a regular basis when I wouldn’t normally have done. It’s another group of friends but within uni that you have like separate pockets. It wasn’t like you had one set of friends, and if they weren’t free you were on your own you could revert into different places. Societies were really helpful in making friends and not being felt as such on your own” (Claire)*

As described in the extracts from Ross and Claire above, having an extra set of friends was an experience consistently described as necessary by participants. There was a sense that they should belong to multiple different communities. This was a way of ensuring different parts of their identity was recognised and protecting them from feelings of loneliness. In the extract below, Alexandra described a conversation with her mum where the importance of having multiple groups to protect from difficult feelings was reinforced. For Alexandra, this appeared to be protective from loneliness

*“I’ve got different groups of friends and different places at uni. She’s [mum] saying, ‘Oh, you know it’s good to have a few groups,’ she was quite worried ‘I’m not sure if she’s gonna make loads of friends.’ She was always wanting me to make loads of friends and have different groups. If one of them I found I was drifting away I wouldn’t be upset by it and I could just go to a different group” (Alexandra)*

As participants planned ways to feel part of a community, many expected this to be difficult. Participants discussed what they saw as a student culture: expectations, rules or norms about what it means to be a student, such as drinking alcohol, taking drugs and partying. In the extract from Claire below, she described her perception of herself as different from other students. Her perception of difference led to increased anxiety regarding how she would be viewed by others and perhaps influenced her feelings of connectedness.

*“I tend to worry about what people think. I’m like ‘oh, are they going to think I’m boring’. Or are they going to think I’m really weird or crazy? When uni came, because I’m quite a chilled, laid-back person, that doesn’t really like going out, I thought they were not going to like me cause I wasn’t some crazy party animal” (Claire)*

Concerns about difference from others were also informed by participants before university. The extract below from Alexandra demonstrates how she has started to think about the process of finding her community before starting university and her reflections on how she thought she might be too different from other students. She had experienced feeling different from others before, where she found others less accepting of her interests.

*“I think because of my slightly more strange hobbies [chuckles] I thought that people might think I was a bit weird at first. Everyone’s got different preferences of how they want a university experience to be. Trying to find someone who shares those same ones, it’s quite difficult.” (Alexandra).*

Participants with marginalised identities described feeling they had to work harder in social relationships or tolerate abuse from others to feel they belonged. In the extract below, Elizabeth described her housemates making racist comments and feelings of being “stepped” on to be accepted.

*“My housemates can be very stupid with what they say in terms of race. With the idea of belonging, I let them basically trample me, being stepped over. Because of that feeling of wanting to be part of a group, which is quite sad actually. I didn’t want to ruin that by saying ‘you can’t say that to me’” (Elizabeth)*

The feeling of being too different from those around them played out again in participants feeling disconnected from those with whom they lived. Participants universally described an expectation that felt strongly connected to people in their halls of residence. When participants were not connected to those they lived with, this led to decreased social opportunities in connecting with the wider student community. Alexandra described a feeling of difference from her flatmates in the extract below. She discussed the impact of this on feelings of loneliness.

*“I just didn’t feel very connected to them at all. They didn’t end up being my best friends. I’d always been under the impression that like your flat mates are gonna be some of your like good friends. It felt very lonely ‘cause all my friends are getting on with their flat mates” (Alexandra)*

Participants who described feeling connected to those they lived with appeared to be more comfortable embracing differences between them and others. In the extract below, Ross talked about the process of choosing halls of residence that he thought would allow him opportunities to meet a range of different people. He appeared to seek out differences, which positively shaped his experience of feeling part of a community.

*“Ross: I stayed in [halls] on campus; the international one. It was ideal for me, just got to meet a whole bunch of people from everywhere, it was great. Loads of different personalities and interests. I’m quite an open person, I like meeting people. I thought it’ll be quite an experience. It was nice to get their perspective on things*

*Interviewer:: how do you think that shaped your experience?*

*Ross: Definitely made us more open. It was nice getting to know people from a different area in the world” (Ross)*

Participants’ feelings before ‘*finding a community*’ were discussed throughout the interviews. Before feeling they belonged, participants felt anxious and after, they described feelings of relief. There was a sense from participants about being alert to how connected they felt to others around them, searching for evidence of whether they had found a place to belong. Although all participants acknowledged to themselves, it was something that remained unspoken with others. In the extract below from Craig, he described remembering when he felt he found his “*tribe*”.

*“After a month in I remember going on specific nights out with people and thinking, ‘these, these are the people that I’ve been like waiting for. This is my tribe” (Craig)*

This experience of paying attention to how connected they felt to others was perhaps informed by expectations placed on them by others in how and when they should have found people with whom they felt connected. There was a sense of being solely responsible for this for most participants, feeling at fault when this did not happen, or feeling they were behind others in the trajectory to find this if they had not formed connections to others through social media before coming to university. Some described barriers to connection, the role of others, or the opportunities available to them. For some, this meant changing who they were to find a place to fit and for others, which affected their mental health. Working to fit in was also wrapped up in the process of change and growth as an individual.

***Curating an Identity.*** Moving to university was experienced by participants as a time to find out who they were and wanted to be. Finding out who they were involved selecting which parts of themselves to leave behind, parts to bring with them and parts they wanted to foster and amend. Forming an identity is a normative experience for participants at this stage in their life. Participants transitioned to university during a critical point in their development, coupled with an intense period of forming new connections. Selecting which parts to present to others was organised around their perceptions of others identities and presenting themselves in a way they felt would enhance others acceptance of them. Their anonymity and unfamiliarity to others at university allowed them this experience of curating their identity. In the extract below, Yasmin described her experience of choosing who she wants to be. Yasmin compared this to experiences before university, where people had witnessed her growing up. Yasmin described the sense of discomfort that came with this experience in the second extract below.

*“It was quite nice in a way, reinventing yourself, into the person you want to be. When you live in a town, people know who you are, people know your story. They’ve kind of seen you go through the ugly stages. When you’re going somewhere that no one knows you, you can be the best person you’d like to be. If you pretend to be that the first day you walk in, they don’t know any different, that’s kind of who you become” (Yasmin).*

*“I definitely needed university to grow as a person. If I hadn’t have gone, I’d never would’ve moved out of my town. I would’ve stayed near my parents forever. I think I needed to go through the uncomfortableness...” (Yasmin).*

Participants thought others would view them differently, depending upon how they chose to present themselves. They described a feeling of discomfort when they were not perceived in the way they hoped. Grappling with which parts of themselves to present to others was easier for some participants.

It was particularly challenging for students with marginalised identities. These participants described their struggle with the push and pull of staying true to who they are but longing for acceptance and connection when coming to university. Elizabeth reflects on her experience of feeling constrained in her identity due to her race. She explained that social media allowed an outlet to be perceived as popular, compared to in-person relationships where she experienced discrimination and was not accepted by others.

*“I think race has got a lot to do with this topic in general, social media, loneliness and belonging. I just felt like maybe I wasn’t as popular. I wanted to prove to people that I can be popular and be from a different race, which is what I wanted from social media, cause I couldn’t get that in real life” (Elizabeth)*

Elizabeth uses the words “*real life*” to describe her experiences off of social media. Describing in-person interactions as “*real life*” was something I noticed other participants use. This language implied there was something that felt unreal about their online world. It was clear that participants’ use of social media and experience of their online world influenced how they experienced the wider world and the meaning they created about themselves and others. The impact of viewing their online world as less genuine perhaps influenced their sense of self. For example, the above extract from Elizabeth indicates her attempts at gaining online popularity due to difficulties with in-person popularity, and a perception that achieving popularity online was perhaps more accessible or different to ‘real life’ experience.

Social media added an extra dimension of picking and choosing which parts of themselves participants displayed. As previously described, participants used social media before starting university to connect with their new peers. Participants reported using social media to inform their perceptions of others; they also recognised that others would do this to them. The impact of social media on perceptions meant participants curated identities through social media started before coming to university. In the extract from Lia below, she explained that she wanted to appear similar to others on her course before starting university. Lia described how she adapted her social media profile to look more like others, ultimately to try to impact how they perceived her. It appeared she hoped to be accepted by others through conforming.

*“I felt like I had to make my social media look more appealing or something. I went on holiday, I was like right, I’m gonna post pictures from here, make it seem like I’m well-travelled [laughs]. A lot of people on my course do a lot of travelling, quite a few people would go on a gap year and just travel. These people are so interesting cause they’ve done so much more than me. I try not to compare myself, but it was hard” (Lia)*



Participants experienced social media as a façade, only giving a small snapshot of who they were. They highlighted how easily this could be curated. Many participants described their social media as a way to present a version of themselves that became disconnected from their humanness, feeling their “*personal life has become a business or like a brand.*” (Elizabeth). In the extract from Ross below, he talked about his Instagram account being faceless. Whilst his Instagram profile reflected parts of his identity, it became a profile that could belong to anybody. It appeared the purpose of social media was acting as a front, to invite people in, to want to know more and connect with him.

*“It transpired into a full Instagram account of me not showing my face at all! I’m not a one for selfies. It’s got to a point where I like my theme too much, it just keeps the rhythm of the Instagram going. It looks nice, it aligns with the interest of travel, where I am, what I’m doing.” (Ross)*

Through curated social media profiles, participants became concerned by others viewing old and undesirable aspects of themselves. Participants described “*archiving photos from the past*” (Elizabeth), almost in a way of archiving different identities. Archiving identities connected with participants’ experiences of belonging. In the extract from Chantelle below, she described wanting to be accepted when meeting a new group of friends. She feared they would reject her if they knew about the parts of herself presented on social media.

*“I think my social media’s a reflection of my personality. I know that people can be very superficial and hide their truths. I met this new group of people after going through the phase where I felt like I had to sexualise myself. I had a lot of respect for [them] and I was too afraid to add them to social media until I’d deleted all the pictures I had that I sexualised myself with“ (Chantelle)*



Figure 5 Chantelle’s photo of a diary extract about self-acceptance

A great deal of effort and energy was required in curating identities on social media through the stories that could be created about participants. Both finding out who they are and how they presented themselves online appeared to run in parallel with one another. Choosing which parts to present online could become confusing as participants experienced different communities, ways of being and identities. Chantelle described the narrow and limited version of herself social media allowed her to present in the extract below.

*“They [social media platforms] give you a small platform to present your personality. That’s not all of me. I like jazz, I like black British grime music, but it’s not the whole personality that I have. Social media only give you a narrow parameter to work around to showcase your personality. It’s really hard to pick and choose what you want to present because different things that you present have different perceptions for different people.” (Chantelle).*

Social media became *“an extension of the personality” (Julia)*, which was somewhat negatively experienced by participants. Through having to present different aspects of their ‘self’ to different people, participants described a sense of not knowing who they were anymore. In the extract from Elizabeth below, she described how experimenting with her identity when starting university led her to feel like she was pretending to be a different person. She had initially welcomed this experimentation, but the lasting impact of uncertainty left her feeling confused about who she was.

*“I don’t know if that’s got anything to do with me being quite experimental at the beginning of university, just trying to find like who I am. To be honest I don’t actually know who I am. I literally don’t know my normal self. I’ve been pretending to be different people with different people.” (Elizabeth)*

***In Control or Consumed.*** Participants described their perceived level of control in different aspects of their experience. Feeling out of control was salient when talking about experiences of starting university and social media. Participants appeared to feel consumed, meaning *“it’s quite easy for people to get burnt out on it” (Lia)*. Participants explained that social media could often be intrusive, *“it’s often group chats, unfortunately! Group chats are very intrusive” (Adam)*.

It appeared that participants felt an expectation from others always to be available. They feared others might judge them negatively if they were unavailable and were concerned with the impact this may have on their relationships. Always being switched on was motivated by a fear of being excluded or missing out. In the early days of forming new connections, there was a risk that their new peers may not accept them if they had not been involved in an experience. In the extract below, Elizabeth described working hard not to feel that she was missing out, which motivated her to join in all social events she could.

*“Missing out is a big thing. The feeling of missing out, being oblivious, is just not fun for me. In school I was left out. At university I wanted to change that. I wanted to be involved in every social situation possible. If people were going out on the Wednesday, I would go out on Wednesday and Friday” (Elizabeth)*

The impact of always seeing what everyone else was doing through social media contributed to the fear of missing out. Seeing others connecting on social media could exacerbate feelings of loneliness, sadness and jealousy. Lia described the impact on her mental health when consumed by social media posts about others enjoying their experiences in the extract below.

*“Everyone posts so much of their freshers’ experience on social media. I kinda felt a bit left out. The aspect of like FOMO, just seeing how everyone else is enjoying their experience, and then I was up in my room just doing nothing. It definitely impacted my mental health, it just made me feel extra lonely.” (Lia)*



Figure 6 Lia’s picture to represent a fear of missing out (Chan, n.d)

Using social media was described by some participants as being addictive. They explained their understanding of addiction to social media in the context of receiving validation through social media when they felt lonely. Gratifying this need for connection and validation, participants described increased social media checking and felt social media was taking over their thoughts. In the extract below, Gabby explained that her use of social media changed when starting university, seeking validation that she may have previously sought from in-person interactions.

*“I have always used Instagram. What I was posting changed. I was probably relying on the validation of it more because I was feeling a bit like insecure on myself, more than I would when I was like at home” (Gabby)*

Furthermore, using social media to avoid or escape complex thoughts and feelings was perhaps due to a lack of emotion regulation skills. Turning to social media as the only means of doing this reinforced a lack of control. In the extract below from Adam, he described the feeling of social media being addictive as it allowed some relief from negative emotions related to feelings of loneliness.

*“It is addictive. At the time it was the only way I could get some relief for difficult emotions, processing different, difficult experiences” (Adam)*

Participants also talked about their relationship with social media as being one that was negative or unhealthy, whilst describing the underlying nature of their use of social media as being one to seek out connection with others *“I think it’s probably bad for you” (Claire)*. Below, in the extracts from Lia, she described constantly checking Snapchat as a means of wanting to feel others wanted to connect with her. Her perception of having a poor relationship with social media further demonstrates the negative connotations of social media use.

*“I think I had quite an unhealthy relationship with Snapchat. I’d be constantly checking it to see like if I got a message from someone I’d met or if my friends from home had posted or something” (Lia)*

*“I’ve acknowledged that I do have a bit of a problem; a bit of a bad relationship with social media. I think when you don’t realise how like engulfing it is, it just takes over a lot of your thoughts” (Lia)*

This experience of feeling consumed left participants questioning what they would do or who they would be without social media. They felt controlled because they did not feel able to choose whether they had social media accounts to form new connections and maintain existing ones. In the extract from Chantelle below, she discussed using social media to feel others were aware of her existence. This idea that social media defines somebody exacerbates an experience of being out of control when forming new connections.

*“I wish I didn’t have to have Instagram. People use it as a way to figure out who you are and your personality. I would want get to the point to delete Instagram completely. But how are these people gonna know that I exist without my Instagram” (Chantelle)*

Participants described ways they had found to cope with feelings of being consumed by social media. The most common way they talked about this was by deleting social media applications. For some, deleting applications was about taking a break, whereas, for others, it was about reducing the temptation. Deleting social media was also explored when trying to reduce uncomfortable feelings after posting on social media if people did not engage with their post in the way they had hoped. Participants talked about setting screen time limits on their devices to remove their responsibility in imposing limits on themselves. In the extract below from Ross, he talked about finding ways to control his relationship with social media by deleting applications to decrease the ease of habitual use.

*“I’ll limit it a lot, to the point where I don’t have the app on my phone. I have to go onto the browser and type in Facebook” (Ross)*

In some participants' accounts, this sense of control was discussed in areas of their life away from social media. Participants described their choice to come to university, and a lack of autonomy led them to feel out of control. Claire described feeling “*there was no escape*” and went on to talk about feeling “*stuck*” in the extract below.

*“Everything’s new and you don’t know if you’re gonna get on with your flatmates. If you don’t you’re kind of stuck between a rock and a hard place because you don’t get on with the people here, but you can’t go back to the people at home because you’re here in [city]”*  
(Claire)

Some participants talked about a global sense of destiny; if things were not meant to be, they could not control it and therefore should accept it. In the extract below from Lia, she talked of disappointment in not feeling connected to others as she had hoped. She explained that this felt out of her control.

*“Lia: I realised I really have two close friends at uni! The others wouldn’t really keep in touch. It’s just you have to put in effort to maintain a friendship. I would try but some people wouldn’t.*

*Interviewer: How does that feel when you put the effort in and it feels like other people don’t?*

*Lia: It is disappointing. At the end of the day it might just be because they’re just not destined to be like good friends with me!”* (Lia)

***In the Moment.*** Participants described a preoccupation with past experiences and future expectations, as well as intense self-focus. Difficulties with being present appeared to impact the lack of control participants felt, in that the internal and future focus was with the hope to feel more in control. Focusing on their own internal experience seemed to hinder participants’ ability to enjoy experiences and focus on genuinely connecting with others. Social media also created difficulties with being in the moment. Upon moving to university, participants described consciously trying to be present by spending less time on social media and being open to enjoying new experiences. They were motivated by a desire to form good first impressions and not appear to others as somebody who would spend much time on social media. It appeared that participants desired to have a different relationship with being present. This was related to wanting to be more in control, choosing where to focus their energy. Gabby reflects on her first year of university in the extract below, wishing she could be more present and less internally focussed on her worries.

*“When I look back at myself then I just wish I could be like ‘it’s going to be fine, don’t worry’. I wish I’d gone out more and just enjoyed it while I could, not worrying. It would have been more fun. At the time I was just caught up in worry that things are going to go wrong” (Gabby)*

Social media was often used purposefully by participants to not be in the moment at times. As participants did not have their usual support networks in place, being able to get out of the moment and escape to a place where they could quickly feel a sense of connection helped them cope. In the extract from Chantelle below, she talked about using social media to escape the present moment when feeling lonely to distract herself from negative feelings.

*“There was a lot of loneliness. I was posting a lot more because I was trying to get attention from people. I had to sit in my feelings. I would use social media as a way to escape those emotions. That’s a better example of me not sitting in the moment and deflecting. Anytime I was feeling sad, I’d just go on social media and distract myself and not think about it, which is very stupid” (Chantelle)*

Being present was challenging for participants as they existed in an environment where social media made everything temporary. When together with others, there was a sense they were not fully together as they did not want to miss out on other things. There was a pull to post content for others to see they were having a good time. Yasmin described her experience of feeling the need to capture moments whilst recognising that she could not be present whilst doing so. She felt this was motivated by a need to influence others perceptions of her.

*“We take too many photos. We kind of forget to live in the moment. When you go to a party the amount of people you see Snapchatting about 90% of it. If you are enjoying a moment, why do you have to take a photo of it constantly.” (Yasmin)*

There were a small group of participants whose experience of being present diverged from this. Participants who described feeling able to be in the moment appeared to be more comfortable with their identity and have a stronger sense of self. Ross, for example, reflected on his own needs and responding to them, regardless of how this could be perceived by others and potentially affect future interactions. In the extract below, he talked about feeling relaxed in being aware and responding to his own needs.

*“A nice mix isn’t too bad. When you do have to be by yourself, at least you’re happy being by yourself. It gets to a point where sometimes I do want someone to chat to or be with. It’s nice to know that you took the time out that you need” (Ross)*

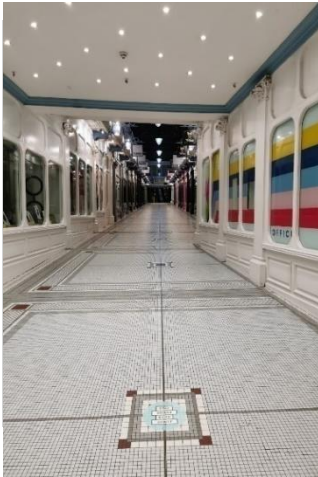


Figure 7 Ross's photo of an empty location in the city

**Weight of Responsibility.** Starting university also came with a heavy sense of responsibility. Moving to university was the first experience of moving away from their family for most participants. With this independence also came a realisation and often discomfort in the responsibility participants felt for themselves. Increased responsibility brought feelings that there would be nobody there to help them. With this greater sense of responsibility for their actions, feelings of guilt arose. Guilt was pertinent in the interview with Chantelle, where she felt an increasing sense of personal responsibility. Chantelle's described feeling unsupported in the extract below. The change in her experience of support led to her taking a position that she had to learn ways to support herself.

*"It becomes more potent especially now I'm more responsible. You don't have the comfort of going back home to your family to them to reassure you. You realise in an adult world you've only got yourself and validation is not good enough. When you come to university you realise there's a lot of you have to do it yourself; you have to be the one looking after yourself"*  
(Chantelle)

As well as the feeling of responsibility for the more everyday aspects of starting university, participants described a broader sense of responsibility for their future. Many participants had high expectations around their academic performance and what this would mean for their future. There was an increased feeling of pressure that came with this. Participants described how they managed this sense of pressure, often by withdrawing and going into themselves. Even when struggling with this heavy sense of responsibility, participants felt they could not reach out for support. In the extract below, Gabby talked about being unsure about the prospect of staying at university throughout the three years but felt responsible for making the decision and that she should stick to it.

*“I just feel really nervous. I’ve got to go back to all the stress. It was the prospect of having to live there for three years, what if I can’t get on with it. All the money that I’d invested, I’ll have wasted all that money. I just find it really hard, like being away from home with the responsibility like solely on me” (Gabby)*

An ever-changing relationship with responsibility also impacted this. Transitions between home and university when visiting for holidays made this more challenging for some participants. Participants moved between feeling fully responsible at university and going back to their family homes, where they experienced their parents being responsible for them. Coming back to university after time away was experienced as a challenge to this. Gabby discusses in the extract below that she wanted to feel less pressure and responsibility, going back to her family home regularly to manage this.

*“I could just sort of like sit and hold it [teddy bear] and feel sorry for myself. I could just regress into being like young and like no responsibilities. There is a lot of pressure and you need something to keep you going otherwise I probably would have had to drop out” (Gabby)*

**Monitoring the Give and Take.** Participants described measuring what they gave and received in their relationships. It seemed this was used to regain a sense of control. By utilising social media tools and data, participants weighed the costs and benefits of relationships. The number of likes on an Instagram post, mutual following on social media profiles, or seeing that somebody had added them to their private story on Snapchat determined the kind of relationships they felt they had with others. Based on this analysis, participants decided which relationships they should continue to engage with or distance themselves. In the extract below, Alexandra described a friend adding her to their ‘Close Friend’ story on Snapchat. Acknowledgement of their relationship in this way increased feelings of security.

*“Alexandra: When someone puts you on their private story, it feels like an acknowledgement; that it’s like I feel like I know you enough to be a bit more real with you. Acknowledging that you are friends enough with me where I can share these more personal things with you, you’re part of my friendship group.*

*Interviewer: What does that mean to you when someone does add you to it?*

*Alexandra: A lot [chuckles]. When you see that little lock, you’re like, oh! It felt really good. Yeah. Felt really nice. Felt like I had more friends than I realised” (Alexandra)*

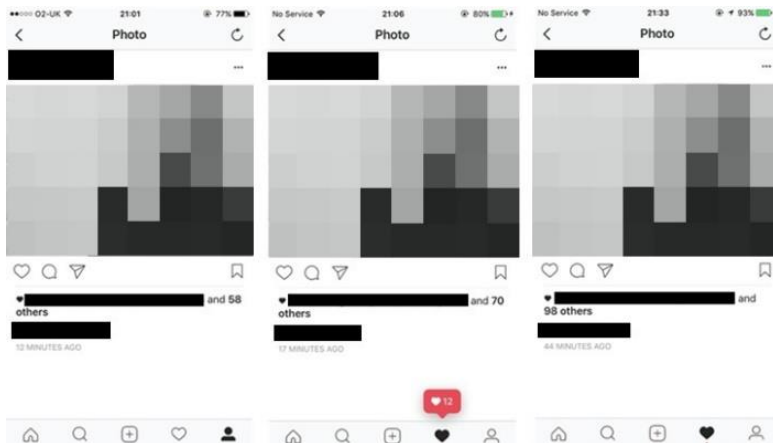
For Alexandra, this way of measuring friendships through social media was passive. Other participants engaged in this more actively. In the extract below, Elizabeth described using applications that monitor social media connections to inform whether she continued online relationships with others. Elizabeth perhaps perceived others as taking responsibility for continuing their relationship.



*“Elizabeth: I use that app to see who’s unfollowed me. If they unfollow me, then I’m just gonna click unfollow cause I don’t really care*

*Interviewer: What if it was someone you did care about?*

*Elizabeth: It’s just interesting to know who has unfollowed you so you know what to do with your own account cause if they’re not worth following then you might as well unfollow them. There’s no point in keeping in contact with them if you don’t” (Elizabeth)*



*Figure 8 Elizabeth’s picture of her monitoring likes on a picture over time*

Participants were concerned about how others perceived their social media metrics. They imagined others would monitor their social media metrics and make assumptions about them. In the extract from Chantelle below, there were arbitrary values and limits which she had set that were used to monitor another person’s worth through social media engagement. Placing value on social media metrics made it appear that online connections were unidimensional transactions. There was no room for nuance or difference in this.

*“They had over 1,000 followers but they were only getting 200 likes I’d be like, they’re not that liked. If they had 600 followers and they were getting 200 likes then I’d be okay, they are valuable” (Chantelle)*

*“I would determine people’s worth off of that and that’s why likes matter so much. I was putting that worth on people based on their likes” (Chantelle)*

***Imagined Future.*** Becoming a university student did not take place in a vacuum. Participants described coming to university with expectations of the experience they would have. Expectations were shaped by various perspectives, from siblings and parents, friends and teachers, or people they followed on social media. The expectations they created influenced how participants approached the transition to university. When preparing to transition to university, participants described collecting information from others to build up a picture of their imagined future. The experience of imagining their future life at university influenced their choices, based on how much they expected to match their expectations. Tom described in the extract below the influence of others on shaping his imagined future.

*“I think I choose to go to [uni] because obviously, it’s quite a social uni, all the stuff to do, lots of opportunity for me to meet people. I know people that went, they all said it’s really social and that I’d have a good time. What would set me up for a good future, but I’ll also need to have a good time while I’m there otherwise there’s not really much point” (Tom)*

It appeared that participants hoped developing expectations would ease their transition. However, imagining their future seemed to increase concerns. Participants described worries about being accepted before coming to university. In the extract below, Tom described thinking about whether others would accept him before moving to university.

*“I guess like before moving to uni I think what if no one likes you; what if you get lonely, depressed and have a rubbish time there” (Tom).*

Participants mainly described that their experience was not as they had imagined upon moving to university. Differences between their expectations and lived experiences left some participants feeling disappointed. They struggled to talk to friends who they saw on social media experiencing university differently from them. Viewing others’ positive experiences led to internalising their experience as something wrong with them. It also increased feelings of disconnectedness from others. In the extract below from Adam, he explained that when the future he had imagined did not align with his lived experience of starting university, he felt isolated. Disappointment in not achieving what he had imagined and witnessing others enjoying themselves through social media made this more difficult.

*“It [social media] contributes to a sense of isolation because everyone else in first year is enjoying themselves. University’s quite isolating, when you put social media on top of that you get more isolating. Sometimes you have an experience that doesn’t match up to the expected experience, which you’re always told about at open days and stuff. When you combine all that together it makes for a messy picture” (Adam)*

The disappointment felt regarding their imagined future further impacted some participants. Those with long term experiences of differences between their hopes and experiences of social relationships noticed impacts upon their mental health. Lia described this experience in the extract below. Both the impact of her expectations of the university experience not coming to fruition and the reinforcement that others had the experience she wanted through social media impacted feelings of loneliness.

*“Seeing everyone else is enjoying their experience, and I was in my room just doing nothing. It just made me feel extra lonely. Every time I’d go through social media, I’d just feel feelings of disappointment. Especially cause before you go everyone talks about how freshers week is so good. Then I got there and it wasn’t” (Lia)*

Experiences of starting university were linked to ‘student culture’, *“I think it’s a really special nightlife and I think, yeah, like student culture is really like founded on that” (Craig)*. For some participants, this is not how they had imagined university. In the extract below, Claire discusses that she had come to university to get a degree, and it was hard for her to understand student culture around prioritising socialising when she started. As others had the view, *“that’s how you kind of bond with your, with your flatmates initially is by, you know going on nights out” (Craig)*; this may have increased Claire’s feelings of being disconnected from others.

*“I don’t like alcohol. Therefore, by default, I don’t like going out. It just seems that the culture of university nowadays is more about socialising, going out, than it is the actual degree which was hard for me to get my head round because I was going to uni to get a degree; not go out and get drunk!” (Claire)*



Figure 9 Gabby’s photo of a vodka bottle

Participants found different ways to manage this through concepts discussed in some of the other themes, such as curating a different identity, turning to social media to distract from negative feelings, or maintaining connections left behind.

*“It is disappointing but at the end of the day it might just be because they’re just not destined to be like good friends with me” (Lia)*

**Relationship Lens.** When participants moved to university, they reflected on the quality of their relationships with others. It appeared that participants struggled with understanding how their expectations around connecting with others aligned with those around them. The alignment with expectations of relationships appeared to exist along a continuum of the depth of connections. Some participants described being satisfied with relationships that appeared to be very surface level, about going out and ‘having a good time’ at university. Other participants sought out deep, meaningful and long-lasting relationships. Both experiences could leave participants feeling dissatisfied in their relationships if they did not feel others wanted the same kinds of relationships as they did. Participants described the importance of having others who they felt they could share this experience. In the extract from Alexandra, she reflects on the impact she felt through having a good quality friendship during the first year of university. The strength of this connection allowed her to feel she had somebody to support her and share her feelings with.

*“Alexandra: I think it just looks quite triumphant and confident. It shows the difference that feeling like you have an established friend at uni can make*

*Interviewer: Why is that important?*

*Alexandra: Having an established friend can feel like you’ve got a solid base; you’ve got somebody that you can go to if you’re feeling sad or lonely, you know you can go and tell them, and they’ll listen” (Alexandra)*

Some participants described feeling disappointed when the quality of their relationships was not fulfilling them. In the extract from Adam below, he described a desire for others to know him deeper than he found others wanted to. For Adam, this misalignment further exacerbated feelings of difference and disconnection.

*“I had this overwhelming feeling to explain to people my background or my existence or my pain or my suffering” (Adam)*

There seemed to be a feeling of superficiality to connecting with people through social media described by participants. Despite being connected to many people on social media, they felt the quality of these relationships was unsatisfactory. In the extract below, Lia reflected on the disparity between quality and quantity of friendships in exacerbating loneliness.

*“It’s weird because you have all these virtual friends but you’re not really connected with them. A lot of people care too much about how many people they have following them. And we’re even more disconnected than we used to be” (Lia)*

For another group of participants, connecting with others and forming friendships appeared to be viewed through a lens of having fun rather than the deep and meaningful connections described previously.

*“We formed bonds quite quickly, it was really easy to just get on with everyone. I could talk to any of them for a while. I guess they’re all social people as well so it’s just easy to get along with them” (Tom)*

**Connections Left Behind.** In navigating the transition to university, participants considered connections they had left behind. Moving to university meant a separation from strong and established relationships with friends and family for most. For many, they experienced this separation as a loss, and a process of grief followed. The extract below from Claire’s interview demonstrates the feelings of loss and difficulties felt around this. Claire had a large friendship group at school with whom she described strong, trusting relationships.

*“There was a group, 50 of us, all socialised together at school, outside of school, we did everything together. I’d grown up with these people since I was 11. I’ve never moved school or moved house, I’ve always been with these people it was hard for me coming to uni and leaving everyone” (Claire)*

This sense of loss and grief was felt even when participants maintained existing relationships. This sense of closeness and loss of friendships exacerbated worries that they would never find connections with the same meaning and strength again. It was common that their friends were also starting university. The disruption to their relationship was met with feelings of anxiety and reinforced feelings of instability. Alexandra explained in the extract below the feelings of loneliness when social relationships with school friends were disrupted.

*“The group chat went quite quiet when I first started ‘cause everyone was doing their own thing. I kinda felt quite sad. You felt like you were drifting away from your friends at home but you didn’t really have anyone at uni yet. You make friends slowly. You do feel really lonely when you start uni at first, it’s like a big pond and you’re like a tiny fish in the middle of it and you don’t really know where you’re going” (Alexandra)*

Participants described learning to negotiate this new way of connecting with old friends. Despite it bringing up difficult feelings, maintaining connections allowed them to feel understood. In the extract below, Lia described increasing feelings of jealousy when seeing school friends on social media

having a different, often better, experience than the one she was having. Despite this, maintaining these connections allowed her to feel supported.

*“Lia: At the start of uni I spoke to them like a lot, it just helped me. Sometimes I’d be a bit jealous of seeing them and how much they’d be going out but it did still help me cause they would reassure me that it would get better*

*Interviewer: Was that important?*

*Lia: I think it really helped me. It’s just nice having people to talk to that are really like you and understood me, rather than speaking to people at uni that didn’t know me well” (Lia)*

Navigating new ways of connecting to people they had left behind, participants turned to social media. Seeing their friends’ experiences of starting university through social media, participants described comparing their experiences and enhanced feelings of difference and exclusion. Claire described her feeling left behind when her group of friends from school went to the same university. Through social media, she watched them all start university as a group, reinforcing her feelings of disconnection and loneliness.

*“Claire: A lot of my friends all went to [uni in north]. I was almost jealous of that because they’d kept the same friends. I was happy to go somewhere on my own, but I think it was more difficult seeing them not have to go through the process of meeting new people and being on your own.*

*Interviewer: How did you see them have the different experience?*

*Claire: Social media. It was [hard] at the start because I think you almost felt left out.”*  
*(Claire)*

As well as grieving for losses of friendships, some participants found the disconnection in family and romantic relationships challenging. Whilst this related more strongly to homesickness, this disconnection could also impact participants’ motivation to connect with others. Being apart from established and valued relationships appeared to increase a focus on the past and form a barrier to new connections, thus exacerbating loneliness. In the extract below, Julia discussed feelings of guilt when moving away from her family. Whilst Julia’s situation was unique in that she had caring responsibilities, the underlying feelings of worry, guilt and loss were the same for other participants.

*“That connection is a lot harder than people with siblings that don’t have any disabilities. I think I feel a bit responsible; I am really involved in looking after him. There is that extra element of not just missing your family I feel guilty about leaving as well” (Julia).*

Conversely, leaving connections behind was experienced positively by some participants. When they experienced feeling disconnected from others before starting university, there was a sense of being glad to move on. These participants found comfort in new connections. In the extract from Elizabeth below, she explained that she did not want to stay in the past. She worried how staying in the past might impact her ability to connect with others in the present.

*“I was happy with the present and I didn’t wanna linger too much in the past and have people from my past. I was finding my feet, trying to do well in my subject and not wanting to leave the city for the weekend, and miss out as well” (Elizabeth)*

The new connections formed at university also became connections left behind for participants when moving back home for summer or moving home due to COVID-19 restrictions. In the extract below from Elizabeth, she discusses how the new group of friends she had made at university strengthened; she did not want to leave them.

*“At first, like oh, I don’t know how this is gonna turn out. But then to the end of like second semester I got very like sentimental and sad and didn’t want to go back and see my old friends.” (Elizabeth)*

**Together but Apart.** The role social media played in allowing participants to feel connected to those they were not physically present with was prominent throughout the interviews. Participants described that sharing aspects of their lives with existing friends supported the transition process. In the connections with people they had left behind, there was familiarity through social media that brought feelings of comfort. A window to the everyday, sharing and seeing the mundane parts of others’ everyday lives, helped with feelings of predictability when everything else felt new and felt uncertain. In the extract from Yasmin below, she described how sharing small parts of her day with friends and family helped her feel less lonely.

*“I’d send her like what was happening for dinner and she’d send me pictures back, and just things like that made you feel less alone and like they were still [there]” (Yasmin)*

These everyday interactions likely helped participants feel less like they had been forgotten and eased them to quickly transition between different parts of their lives. Alexandra described below how using Snapchat to share part of her day allowed her to feel a part of her friend's life, even when they were miles apart.

*“Just random things in our day, part of our shared humour, that we’d send each other. I think that’s why I really like Snapchat, you can just send each other like random parts of your day, and it feels like you know you’re keeping up with them” (Alexandra)*



Figure 10 Alexandra's photo of a Snapchat and text conversation

Participants' use of social media to feel connected to people when apart helped enhance new connections. By connecting with new friends through social media, participants felt closer to them despite not seeing them as regularly as friendships at school. In the extract below, Ross talked about posting pictures on social media to update friends on his life. It appears that posting on social media allowed him to feel connected to people without having to have more intense or formal interactions.

*"I thought I should pop by and take a picture for the sake of being there really, just to send to a few friends; er, just give them a bit of an update really"* (Ross)

For some participants, connecting with people online was not enough. They described it as being easier to be less authentic online. When struggling, they felt they had to hide difficulties on social media and show others everything was okay. In the extract below, Gabby spoke about sharing images of her having a good time at university on social media, hoping that her parents would think she was having a good time.

*"I probably sent it to my parents as well, just to like show that I was alright and you know like having a good time"* (Gabby)

Participants described the importance of working to maintain relationships when apart. There was a sense from some participants that they hoped they would protect them from feelings of loneliness when returning to their family homes. Tom talked about his balance between moving on when starting university but needing to maintain a connection to friendships from home.



*“It’s kind of like moving on from what you’re comfortable with. At uni you’re completely out of your comfort zone, and you’ve just got to try and get on with people, but make sure you remember you’ve still got the people at home you’re in contact with so you’re not stuck at home on your own” (Tom)*

First-year participants reflected on the impact of this with their second semester cut short due to COVID-19. Connections and friendships had begun to form at university, however many participants moved back to their family homes; this prompted the need to navigate new ways of feeling connected with new peers. Julia reflects in the extract below that she felt she was missing out on the social aspects of university life due to COVID-19 and that social media helped them stay in contact but was not enough.

*“I do think close friendships are a lot stronger when you can see each other and connect more. I’ve felt a bit isolated almost but obviously because you’ve got social media you still keep in contact. I suppose it’s the same for everyone, missing out on a lot of social aspects of the university life” (Julia)*

Much like the initial transition to university, this unexpected pivotal point in newly established friendships was testing. Chantelle described her experience of moving back to her family home at the start of COVID-19 and the impact on feeling disconnected from friendships she had established whilst at university.

*“At the beginning there was a lot of loneliness, where I’ve been thinking wow, these people that I made friends with are only my friends when I’m around them and not when we’re apart. I started to get upset” (Chantelle)*

**Freedom to Connect.** Participants described a sense of freedom in the way they connected with others. Moving to university allowed new possibilities in the ways they connected with others, both in-person and online. Participants made comparisons between their sense of autonomy in connecting with others before and when starting university. They described their experiences of being at school, sixth form, or college, where they saw the same people every day. There was a sense that some participants felt constrained in connections before university. They experienced university as a place where there were opportunities for something different. In the extract below, Craig reflects on the feelings bought up through forming new connections. He made a comparison between things feeling solid at school and more open at university.

*“I didn’t know if I was doing anything right or if the people that I knew I’m gonna stay in contact with. When you come from school, it was very much like you had your group and it was solid. It was kind of everyone was a bit more open and everything was up in the air”*  
(Craig)

Participants from marginalised groups experienced this sense of freedom in connecting positively. Starting university, they were able to connect with a range of people. Their experience was one of greater acceptance. In the extract from Chantelle below, she talked about connecting with a range of different people. In the broader context of discussing experiences of racism coming from a small town and a small school, she found she did not have to tolerate behaviours when coming to university due to choice and freedom.

*“There’s forty thousand people, you don’t have to stay friends with the same person or you don’t have to tolerate certain behaviour because there’s definitely someone out in that forty thousand that is going to fit you a lot better than the person you’re around. Coming from a small town, being with one person is almost like being friends with everyone.”* (Chantelle)

The change in frequency of connecting in-person impacted how participants connected with peers. Social media made it possible to enhance and maintain connections with a range of people, where there was a decrease in the frequency of in-person contact. Whilst frequency reduced, social media allowed an enhanced quality of connection. Participants described social norms around social media use at university, such as adding people on Snapchat or Instagram before giving their phone number. They described connecting with a wide range of people on social media and feeling able to connect with those whom they had perhaps only met once. Therefore, this allowed them to widen their pool of contacts, which could reduce feelings of loneliness. Ross described in the extract below his expectation that people would connect through social media when they meet to allow them to stay in touch more openly.

*“It wasn’t vital but prominent, like what’s your Instagram name or follow us on Instagram. On a night out or just kinda general day-to-day. If you meet someone and you wanna stay in touch with them, like ‘Oh, what’s your Instagram?’* (Ross)”

Environmental conditions at university enhanced the increased sense of freedom. Moving away from home and being away from parents who may impose boundaries were highlighted by some participants. In the extract from Tom, he spoke of his choice of university, one that allowed him to be apart from his family. Chantelle also described this in the extract below, feeling she could meet up with people without seeking permission.

*“I guess I choose to go to [uni] cause I live in [place] and it’s, it’s far enough away to be able to be apart from the family” (Tom)*

*“Now I have the freedom of talking to any boy and meeting up with them at any time without telling anyone or informing my parents where I’m going” (Chantelle).*

Other conditions helped to increase a sense of freedom. Increased alcohol use and social media use, for example, appeared to increase feelings of disinhibition which helped participants to feel freer to connect. In the extract below, Elizabeth talked about how she feels a greater sense of connection to others when drinking alcohol.

*“I feel like there are times when I drink and I just feel like I belong with these people. I’m with great people; we’re having an amazing time, you just feel content when I’m drinking. I feel like I’m more in touch with my emotions” (Elizabeth)*

Whilst participants experienced this freedom positively it also came with challenges. Challenges in forming social relationships brought about feelings of uncertainty and instability. In the extract below, Craig talked about feeling overwhelmed and stressed by the number of people he met during the initial transition. The lack of security he usually experienced when he has familiar people around him heightened this.

*“The rate that you’re meeting new people is actually really crazy, a bit overwhelming. The first month at uni was equal parts amazing and extremely stressful. You find a lot of people that you like, but you don’t like have a solid friend group or it, it’s too early for like, to have kind of bonds with people. I remember being really, really stressed and overwhelmed.”*  
(Craig)

Similarly, Lia reflected on the increased level of anxiety that came with not being around people she knew. She discussed how new experiences exacerbated this, having felt her parents gave her less freedom before coming to university.

*“I miss the feeling of familiarity. I missed knowing what to expect. I was quite anxious, cause like growing up, she’s [mum] quite strict. So, I was quite sheltered, I think” (Lia)*

***It's Easier Online.*** When participants compared connecting online and in person, there was a sense that face to face connections can be more difficult, awkward and burdensome. Participants talked about how socialising with others in person required increased effort. With social media, participants described the stimulus for connection was in front of them. A post on Snapchat or a story on Instagram gave them something to talk about, a way to connect. It appeared to feel less risky for participants to connect in this way. They knew they were responding to something the other person was interested in and also felt more informal. Chantelle described how a social media post could generate a conversation that feels easy in the extract below. She reflects on how she feels this was lazy.

*“It’s easy to interact. They put something on their story and I know that I want to speak to them, but I couldn’t think what to say. I can just reply to their story or just comment on their Instagram post to connect. Compared to if I gave them my number, everything has to think of ourselves to have a conversation. So, I just think it’s a lot easier. I think it’s kind of lazy, like an effort.” (Chantelle)*

Participants experienced friendships as more effortless to maintain online, requiring less effort into constantly keeping in touch with somebody. There was a sense of commenting on a social media post equivalent to bumping into a friend in the street. Tom talked about how social media posts trigger connecting with others in the extract below. The possibilities of connecting allowed by social media reduced loneliness when starting university.

*“If someone posts something on their story and I could message them, that’d start a conversation. I did put a few photos about that [picture being described], and it’d start a conversation. It’ll be mostly people who I talk to, sometimes people who I might not used to talk to but still like half in contact with, might message” (Tom)*

The ease of connecting online supported the initial transition. Participants described having formed connections with people through social media before starting university, removing the awkwardness in initial connections by having done this online prior. The online part of getting to know somebody was comparable to making small talk. Once participants met those they had connected with on social media, they felt more at ease in person. Participants described feeling this would be much more difficult, or even impossible, without social media. In the extract from Alexandra below, she discusses how forming a connection with somebody through social media before starting university made it easier to connect with people face to face when moving to university.

*“I was really quite upset but one of the girls I'd been talking to prior to uni, she Facebook Messaged me like, ‘Do you want to come out with me and my friend in the flat’ and we did. I'm so glad that we had that initial Facebook group chat because I wouldn't have known them without that so it was really important” (Alexandra)*

Online connections felt more artificial to participants. There was a sense participants' experienced difficulties in understanding when a moment of connection online was genuine. Participants questioned the authenticity of their online connections. In the extract below, Adam described that despite social media being an easy means for coping with feelings of loneliness, it was not a replacement.

*“Social media's a good way of coping with isolation. Sometimes there's no substitute like a good catch up in person with a cup of tea. You can try to emulate, but yeah, it's an interesting one” (Adam)*

Julia reflects on authenticity in online connections in the extract below. She discusses how she felt it was essential to maintain relationships in person despite it being easier to connect online.

*“You can get into a habit of knowing someone through social media rather than knowing them really. You could tag your friend in something every day, but have you spoken to them, seeing how they are? I think it's important to work on relationships outside of social media as well as using it” (Julia)*

Despite uncertainties around this, participants continued to connect with people online. Participants described gaining satisfaction in these quick and easy moments of connection online. They could quickly gain a feeling of validation from others without connecting with somebody on an individual level. An online connection was seen by some as a coping mechanism when in-person connections felt challenging. In the extract below, Gabby acknowledges that social media is an easy way to seek validation and connection from others.

*“I think I posted it [picture] on Instagram. I suppose it's sort of like validation, people like it and you think ‘oh people like me’ [laugh]. You are away from home, away from your normal friends, and it's that sense of connection to home and they can see you what you are doing” (Gabby)*

In the extract below from Adam, he reflects on how difficult it was for him, as a commuter student, to connect with people in person and the strengths of having an alternative format to connect with people.

*“Adam: Social media has been quite a big part of it. You’re quite isolated as a commuter student. You can’t participate in the same kind of socials because you don’t live with people and that’s how you do your socials really. The reality is relationships and friendships take time to form and trust. I tried to make the best of social media to maintain some sense of sanity. But it’s very isolating” (Adam)*



Figure 11 Adam’s picture of an event on Facebook

As well as social media being an easy way to maintain relationships and distract from difficult feelings, participants also discussed the added discomfort when meeting people in person. In the extract from Lia below, she discussed using social media when she felt uncomfortable during in-person interactions.

*“Lia: In social situations when no one’s really saying anything, a lot of people lean on their phones. People go through Instagram or TikTok instead of speaking to each other. I try to stop doing that, but I just find I’m a bit awkward.*

*Interviewer: Why do you feel awkward?*

*Lia: Sometimes it’s hard to think of stuff to start a conversation but in those social situations when you have nothing else to say to each other it’s much easier to go on your phone, rather try to make more conversation if you feel a bit awkward” (Lia)*

***Feeling Safe in Vulnerability.*** When starting university, participants experienced uncertainty and greater feelings of vulnerability. Grappling with trying to find out who they were and how they would belong in this new environment, participants described vulnerability in feeling different to others around them, thus increasing their sense of disconnection. Participants discussed feelings of embarrassment in that they felt they should have managed this transition better, further enhancing their perception of difference and making them feel vulnerable.

Participants described thinking that others were coping much better than they were and found it hard to mentalise that others may be experiencing the same feelings as they were. In the extract below from Gabby, she discussed feeling she had to post images on social media of her having a good time, despite struggling with the transition to university and not wishing to continue at university. She explained that she felt ashamed of her struggle and was concerned with how others would view her if they were aware.

*“I feel ashamed if people knew that I was really like struggling. Everyone else seems to cope. I felt like oh if I couldn’t do that then I don’t know” (Gabby)*

Participants described ways of managing feelings of vulnerability, withdrawing from others or conforming to perceived social norms. Participants also managed this through existing relationships. Sharing with familiar others felt like a less risky way than sharing these parts with new connections that felt more unstable and uncertain. In the extract from Claire below, she discusses withdrawing from social interaction when starting university and feeling very alone in her struggle. Claire reflects on her experience of withdrawing from others when she experienced increase feelings of difference from others that she felt too vulnerable to share.

*“Claire: You’ve been plonked in a place you don’t know by yourself. You feel completely alone, you just go in within yourself and you hibernate. You go to your room and you feel like you’re the only one who feels like that. I didn’t realise that she [friend] also felt like that, because neither of us showed it to each other. When we started talking to each other about it, we realised that we were both the same. We were alright if we talked about it together*

*Interviewer: Why do you think you didn’t talk about it?*

*Claire: I think because of social media. All you see on social media is ‘happy’. Everyone’s going out, got loads of friends. No one every shows that they’re upset, missing everyone. I think you get the perception that either it’s not okay or no one else is like that” (Claire).*



Figure 12 Claire's photo of the countryside at home

Social media seemed to exacerbate feelings of vulnerability and make participants feel unsafe in sharing vulnerabilities. Enhancing difference, rather than highlighting ways in which their experiences were similar, participants described *“it’s hard to remember that Instagram is the highlights of someone’s life”* (Yasmin). Despite knowing *“that people can be very superficial and hide their truths”* (Chantelle), feeling alone in their experience persisted. While they questioned the authenticity of what people posted on social media, social media reinforced feelings of loneliness when starting university. Participants reported that this decreased their ability to share vulnerabilities with others. There were risks brought about by being vulnerable when trying to find where they fit. In the extract from Lia below, she explained that comparisons made to others through social media increased feelings of vulnerability that came with sharing her experiences of struggling with connecting with school peers.

*“It might have been exacerbated by seeing what other people were experiencing, comparing myself. I spoke to my friends at home about how I felt and they obviously didn’t mean to like make me feel like that, ‘Oh, sorry. If I’d known you were feeling like that I probably wouldn’t have gone on about it as much’”* (Lia)

A lack of trusting relationships made some participants feel less able to join in. It seemed participants felt on alert to present themselves in a way that would not make them look different. Presenting as different made them more vulnerable to rejection from a group, and therefore at risk of exclusion and increased loneliness. In the extract below, Alexandra described fears of what could go wrong and how this may be perceived. Making herself vulnerable through lowered inhibitions drinking alcohol was risking embarrassing herself in front of others.



*“You don’t know the people that you’re with that well. You’re really, really vulnerable. I think being in that position would be really hard; it [being drunk] would be both embarrassing and I’d feel really vulnerable. I kinda felt like a really small person”*  
(Alexandra)

As participants got through the initial weeks and months of university and some students started to feel a sense of connection, they felt an increased sense of safety in sharing who they were. Participants began finding their communities and feeling connected, increasing their confidence in sharing authentic parts of themselves. Being authentic helped lessen the experience of loneliness. Participants described sharing parts of themselves that made them feel different strengthened connections. Yasmin discussed disclosing a mental health condition several months into university to a friend once feeling safer, sharing this in the extract below. Whilst she felt able to share this, part of her worried sharing this vulnerability may lead to her rejection from her friend.

*“I didn’t tell her at the start, definitely not. I waited until five months in and we’d already asked each other to live together before I kind of brought it up. I just kind of opened up to her and went, if you want to run away and call me a crazy person, fair dos, you’re entitled to that, but this is what I am, this is what I went through”* (Yasmin)

Almost all participants described this dilemma of vulnerability within the first few weeks and months of starting university. For some, however, feeling unsafe in sharing vulnerabilities or their authentic self was long-lasting. Long-lasting threats to their ability to be authentic decreased their ability to feel connected and part of a community. There was a strong sense that participants struggled to mentalise how others felt and whether they were genuinely wanted by those they had begun to connect with. In the extract below, Gabby discusses never reaching a point of feeling comfortable with new peers, as she had with friends from home. Her concerns around saying the wrong thing appeared to maintain this discomfort.

*“I just didn’t feel as comfortable as I would have with my friends from home that I’ve known for ages. It seems forced with them people, you don’t know what they like, you don’t know whether you’re gonna say the wrong thing”* (Gabby)

In the final chapter of my thesis, I discuss these themes in relation to the research questions and existing literature.

## Chapter 6: Discussion

In this final chapter, I discuss the results of my study, answering the research questions set out in Chapter 2. I discuss the findings of my study in relation to the literature on undergraduate students' experiences of loneliness and social media, presented in Chapter 2. Next, I highlight the unique contribution my research has made to the literature. A quality assessment is presented before outlining the strengths and limitations of the study. Finally, I consider the clinical implications and directions for future research.

### Summary of Findings

#### *How do Undergraduate Students Experience Starting University?*

My research first aimed to understand how undergraduate students experienced starting university. Previous research has shown that adjusting to university poses numerous challenges (Giddan, 1988). Alongside this, many students start university while continuing to go through significant cognitive, social, and emotional development (Coleman, 2011; Hagel & Shah, 2019).

During late adolescence and early adulthood, young people develop a sense of who they are and how others perceive them (Erikson, 1968). Participants in my study discussed experiences consistent with Erikson's theory (1968). The motivation to belong to a community at university started long before participants moved to university. Participants put effort into building belonging through their choice of university, developing an imagined future through the advice of others and using the internet to seek out information. While for some, planning and preparation supported the transition, others experienced increased apprehension and anxiety. Through meeting new people, new possibilities emerged regarding participant's experience of their self-identity. A sense of anonymity supported this as participants were unknown to others. As well as this, increased independence due to being away from their families supported identity development.

Findings from my study add to this literature. Participants described increased independence at university but continued to experience a lack of control over their own or others' actions. Participants spoke of their vulnerability and feelings of embarrassment that came with this as they felt unable to manage this as they had expected to. Across all participants, a description of a normative experience of struggle through a transition emerged. Some internalised this as something that made them different to others.

Curiosity and anticipation regarding the transition were described. Alongside this came sadness and fear about simulating the closeness felt in existing relationships. Participants' existing relationships acted as a template for their expectations of others when starting university. While investigating homesickness was not the purpose of my study, the impact of the anticipatory anxiety around separation from secure social relationships must be acknowledged. Homesickness can induce a

preoccupation with home and associated people and impact functioning (Shal et al., 2011; Thurber et al., 2007). For some participants, this negatively impacted adjustment to university.

### ***How do Undergraduate Students Experience Social Media?***

The second research question asked how students experienced social media. Previous research suggests that problematic social media use is prevalent in students (Yu, Wu & Pesigan, 2016). However, little was known about how students experience social media.

Identity formation is a critical developmental process for young adults (Erikson, 1968). Developing an identity now takes place partially online. Previous research suggests that opportunities to change who you are through social media could be harmful, leading to poorer quality social interactions with others (Turkle, 2011). Participants in my study described the possibilities social media created in exploring and expressing their identity. The implications of developing an identity through social media left participants grappling with the differing online and in-person aspects of identity. By considering how their old and new selves came together, participants actively curated their identity through creating content or deleting and archiving old posts. Although not always reliable, social media features that provide metrics of engagement allowed participants to feel knowledgeable about others approval of them. This negatively impacted loneliness when others were not responding in the way they hoped.

Information-seeking behaviour on social media has been suggested to support students to learn more about those around them (Ellison et al., 2007). 'Pre-interactions' in this way help determine compatibility with others and allow for more intimate conversation, increasing inclusion (Deters & Mehl, 2013; Garcia et al., 2013). However, information-seeking can increase social comparison, with detrimental effects on self-esteem and adjustment (Dickard, 2019; Yang & Robinson, 2018). In my study, participants described how social media helped them learn about other students before starting university. Discovering the similarities between them and others provided them with a feeling of security, seeing others like them. For some, this brought about social comparisons, which led to editing their social media profiles to align more with the communities they desired to belong to. Perceptions of difference from others lowered participant's sense of belonging and therefore increased anxiety. Participants reported how connecting through social media before moving to university was seen as 'small talk'. It helped them to feel closer to those around them when moving to university.

Thomas et al. (2017) described that students found comfort in seeing others post about experiencing the same difficulties as them when starting university. Social media enhanced social capital by increasing feelings of trust. Other research suggested that sharing emotional experiences may be perceived negatively by others, impacting adjustment and loneliness (Yang & Brown, 2013). The power of social media to induce negative feelings about oneself and negative mood states is seen in

existing literature (Shettar et al., 2017). In my study, participants felt unable to share vulnerabilities with others as they did not see others sharing difficulties. The absence of publicly expressing struggles was a form of impression management around new and existing relationships. Participants described how the *'highlight reel'* presented on social media exacerbated difference and feelings of vulnerability. Seeing others manage through social media reduced their self-esteem and increased feelings of anxiety. When moving to university, there is a lack of social and emotional support without using online communication. There is an apparent dilemma between the impact of sharing and not sharing on social media during this transition for students that should be considered further.

Maintaining existing relationships through social media can help students when starting university; existing relationships enhance social capital, which protects against loneliness due to increased feelings of safety (Ellison et al., 2007; Hirsch, 1980; Nyqvist et al., 2016; Pittman, 2017). Maintaining these existing relationships through social media may also be more successful than other forms of interaction, as research suggests picture-based apps mimic in-person interactions, which may increase feelings of closeness with others. Social media supported participants to maintain their existing social relationships in my study. For those in the 2019/20 cohort especially, this may have been important in enhancing the new relationships they had begun to form at university before COVID-19 prevented in-person interaction.

The temporary nature of social media led participants to feel they always had to be switched on, or they risked missing out. Whilst there is some literature available on the fear of missing out created by social media, little is known about the impact on student populations. Fear of missing out was a salient factor in students' experiences; they felt social media was part of student culture and therefore had no power over their use of it. These findings are consistent with previous research that found that perceived self-efficacy of reducing social media use predicted participants' ability to reduce their social media use (Yu et al., 2016).

### ***How do Undergraduate Students Experience loneliness?***

Developing an understanding of how undergraduate students experience loneliness was the next research aim. Loneliness is a critical factor in the adjustment process when starting university (Nicpon et al., 2006). It is a normative part of the transition, with 75% of students reporting feelings of loneliness in the first two weeks (Cutrona, 1982). However, for some students, loneliness is not a transient experience; chronic loneliness has a detrimental impact on functioning in students (YouGov, 2016). Almost all participants in my study reported experiencing feelings of loneliness in the first few weeks of university, thus suggesting this is a normative experience within this sample. There were a few students who described experiencing long-standing feelings of loneliness. Those who reported long-standing feelings of loneliness described feeling left out, falling behind others and that they did

not belong. These participants discussed functional and psychological impacts, such as withdrawing from social situations and feeling anxious about social situations.

Evolutionary theories of loneliness state that human beings have developed the need to belong to a group as a survival mechanism (Brewer, 2004; Cacioppo et al., 2014). In my study, most participants experienced feelings of loneliness which motivated them to connect with others. Participants described their desire to belong to a community leading to increased attention to opportunities for belonging to a group and evidence of their success. Enhanced feelings of loneliness were described by participants who experienced marginalisation due to racism or ableism before university. Their experience of loneliness was not due to a lack of motivation to connect with others but could perhaps be explained as a protective strategy. Participant experiences suggest that through previous rejections, they have developed ways to protect themselves, thus impacting their attributions and behaviours in social relationships.

Expectations created about the depth of connection participants would have with others when starting university impacted feelings of loneliness. Whilst maintaining existing social relationships was helpful, constant comparisons between new and existing relationships were harmful in establishing social relationships at university. These findings are inconsistent with findings from previous research, where students were more likely to rate existing relationships lower than new ones because they had higher expectations of existing friends (Tsai & Reis, 2009). In my study, those who were highly satisfied with existing relationships maintained them through social media and valued their support. Those who were highly satisfied with existing relationships felt dissatisfied with the depth of connection and emotional support provided by newer social relationships. Participants who reported differences between their imagined and experienced social relationships at university described increased personal responsibility. It may be that previous research, before social media was accessible to students, found different results because of the way students were connecting with others.

Consistent with previous findings of cognitive and behavioural explanations of loneliness (Anderson, Horowitz & French, 1983; Marangoni & Ickes, 1989; Peplau & Perlman, 1979; Revenson, 1981), those who described themselves as lonely in my study were more likely to view themselves as passive victims, attributing loneliness to uncontrollable factors. Participants who described feeling lonely and explained this as uncontrollable were more likely to describe feeling relationships were out of their control and expecting others to engage with them rather than proactively engaging with others.

Past research has suggested that young adults can protect against rejection from others by creating distance (Arnett, 2007). Having to be different people in different settings is harmful to the development of self-identity (Turkle, 2011). In curating an identity, participants described uncertainty

about their self-identity and changing sense of self in relation to loneliness. When uncertain about who they were, participants described frequently changing how they presented themselves to fit in. This increased loneliness as they lacked acceptance from others and belonging to a group. Experiences of vulnerability prevented participants from being authentic with others. Participants described feeling alone in their emotional experiences, thus enhancing feelings of disconnection and difference. Due to the research methodology, it is not possible to understand the direction of the relationship between loneliness, sharing emotional experiences and authenticity. Several explanations for this have been hypothesised in previous research, for example, the impact of early developmental attachment experiences (Argyle, 1981; DiTomasso et al., 2003; Erozkhan, 2011; Hazan & Shaver, 1987; Pakdaman et al., 2016), personality traits (Marangoni & Ickes, 1989) and social skills (Burholt et al., 2017).

### ***How do Undergraduate Students Make Sense of Their Experience of Loneliness and its Relationship With Social Media?***

Finally, my research set out to understand how undergraduate students make sense of their experience of loneliness and its relationship to social media. The existing literature on the relationship between loneliness and social media use in students is mixed (Ryan et al., 2017; Wang et al., 2014). Students' experience of starting university, social media and loneliness are not linear and will fluctuate depending on different factors (Stirling, 2016). Many theories exist which propose factors that may predispose or maintain feelings of loneliness when starting university (Bernardon et al., 2011; Dumas et al., 2017; Ellison et al., 2007; Erozkhan, 2011; Gross, 2004; Kraut et al., 1998; Nowland et al., 2018; Nyqvist et al., 2016; Pelling & White, 2009; Peplau & Perlman, 1982 Peter et al., 2005; Ramsey et al., 2013; Ye & Lin, 2015).

In my study, participants described feeling overwhelmed with the desire to find a community where they belonged whilst existing in a large university environment; social media was utilised to cope with this in several ways, through distraction, connecting with existing friends, seeking information about new friends, or turning to online communities. For some, the overwhelming sense of trying to fit in at university led them to turn to existing relationships through social media. Multiple possibilities motivated other participants towards exploring different communities, utilising social media to maintain friendships with multiple groups. Whon & LaRose, (2014) found that existing relationships were best placed to provide emotional support required when transitioning to university. Social media has previously been found to augment existing relationships, which was apparent in my study (Deters & Mehl, 2012; Gross, 2004; Pittman, 2017).

Poor self-identity is associated with experiences of loneliness and social media use when transitioning to university (Pelling & White, 2009). Gardner and Davis (2013) found that young people are

purposeful in how they present themselves on social media, which can be time-consuming, thus preventing them from engaging in social relationships. Participants in my study described that multiple aspects of self were challenged by the narrow possibilities afforded by social media regarding self-presentation. The confusion between this narrow experience online and the broad experience of being whoever they wanted to be when starting university led to challenges in connecting. Participants felt a more significant disparity between themselves and others during this period, and social media exacerbated this.

Identity is constructed through interactions with others (Benson & Elder, 2011). As participants in my study made choices about how they presented themselves on social media, being authentic in in-person interactions felt uncomfortable. Social media provided participants with tools to understand how others viewed them. Young adults assess the consistency between what the role means and how they appear to others. Increased social comparison helps individuals to understand the social norms and expectations of their environment. In some of the experiences described by participants, they appeared to struggle to mentalise the behaviours and feelings of others.

It has been suggested that there is no difference in the quantity of social relationships in lonely people compared to non-lonely people; instead, lonely people are thought to perceive less intimacy in friendships (Jones, 1981; Ouellete, 2004). Cognitive theories of loneliness hypothesise that differences in attribution of the causes of loneliness may explain this (Anderson, Horowitz & French, 1983; Marangoni & Ickes, 1989; Peplau & Perlman, 1979; Revenson, 1981). In my study, those who expected and sought out relationships that appeared quite surface level and temporary were protected against feelings of loneliness. Participants who desired to be understood on a deeper level and imagined lifelong friendships being formed at university could be left feeling disappointed and lonely. Those who described less depth in relationships described how the conditions of university and social media allowed for greater freedom in connecting, thus reducing loneliness. The student culture of increased alcohol use, for example, helped participants to feel disinhibited and connect more easily. Those who desired deeper connections and saw others on social media thriving in the way they hoped increased anxiety. Previous research has suggested that those with increased anxiety use social media more, becoming a maintaining cycle (Spraggins, 2009).

In previous research, loneliness attracted people to use social media more (Casale & Fioravanti, 2011). Deficits in social skills negatively impacted loneliness in previous studies (Hood et al., 2018; Lai & Gwung, 2013). Participants in my study positively and negatively described the ease of connecting with others when starting university due to social media. Participants described their experience of social media as similar to bumping into friends in the street or small talk. Features on apps, such as posting stories on Instagram or Snapchat, led participants to reply to others in a way that felt risk-free. Social Media could therefore enhance relationships without the same effort required as

in-person connections. The reduced effort required of them through social media allowed participants to maintain multiple friendships, protecting against loneliness. However, in-person connections felt effortful compared to social media connections, acting as a barrier to offline relationships. A dearth of stimuli in offline connections decreased confidence in how to engage with others away from social media. In-person interactions could feel awkward and emotionally challenging, threatening their sense of belonging. My study suggests that because communication on social media is less demanding, it reduced participants' confidence in their communication skills.

It has been argued that lonely students use social media more frequently (Clayton et al., 2013; Kim & Haridakis, 2009; Skues et al., 2012; Twenge et al., 2019; Whon & LaRose, 2014). Liu & Ma (2019) found that a fear of missing out mediated the relationship between social media use and psychosocial needs. Participants in my study also made sense of their experience of loneliness and its relationship to social media through a fear of missing out. They explained feeling they had to always be online and therefore saw a highlight reel of others thriving, resulting in an experience they described as burnout. Burnout left participants feeling socially and emotionally exhausted and therefore impacted their motivation to connect with others. The lack of choice about if and how social media was used was significant; participants felt if they wanted to belong, this was something they had to accept. This became a self-fulfilling prophecy as described in previous research (Spitzberg & Canary, 1985). Participants in my research worried they would be rejected, so they spent more time on social media, leading to burnout. Burnout further impacted social relationships and increased loneliness, therefore turning to social media to satisfy relational needs. For some participants, turning to social media when feeling lonely, sad, or anxious appeared to be an ineffective protective strategy.

Participants who described feeling more in control of their social media use also described feeling more in control generally. They felt more able to manage the challenges they faced when starting university and described being more present and less distracted, and preoccupied with what others were doing on social media. Being present appeared to support them to both use social media less and feel less lonely. While it is not possible to understand what made these students feel more in control and more present, it could be hypothesised they have better-developed emotion regulation skills, as found in previous studies (Skues et al., 2016).

My thesis makes a distinct contribution to the literature. It is the first study investigating loneliness and social media use in undergraduate students using a qualitative, visual methodology. It improves on previous quantitative studies by providing insight into the experiences of students. My study also moves away from previous pathologised understandings of loneliness to understand the normative experiences of students. The normative understanding of loneliness generated in my study could be used to support more generalised, whole university approaches and develop interventions for those most at risk. These will be discussed further in the clinical and research implications below.



## Quality Check

The results of my study should be considered within the context of its strengths and limitations. I will start by presenting the strengths of my study before discussing the limitations. As discussed in Chapter 4 to ensure rigour in this qualitative study, guidelines for quality were utilised (Elliott, Fischer, & Rennie, 1999). Steps taken to ensure quality in my study are outlined below, in line with these criteria.

***Owning One's Perspective.*** The theoretical, methodological, and personal stance should be made explicit before the research and continue to reflect on this throughout. In Chapter 3 I made clear the theoretical and methodological orientation of my research. I kept a reflective journal (Brocki & Wearden, 2006) throughout the research, writing in this through each stage as new information from reading literature, or interviewing participants, changed or challenged my biases.

When commencing this research, I expected my experience of being an undergraduate student to impact how I conducted this research; therefore, when participants discussed experiences very different to mine, I was curious about the impact my lens had. I used research supervision to reflect on, discuss and make sense of this. To make transparent the impact I had on this research, reflective boxes have been used throughout this thesis.

***Situating the Sample.*** To assist the reader in understanding for whom and in what contexts the research is relevant, the sample should be situated. In my study, descriptive data about participants was collected and presented to situate the sample. Pen portraits were also presented to allow for a greater understanding of individual experiences and contexts. Detailed individual-level analysis was not presented in this thesis; however, individual experiences were exemplified using quotes when presenting the group analysis.

***Grounding in Examples.*** Extracts from the research should allow the reader to assess whether the interpretations given by the researcher connect with participants' data. I hope to have made transparent how interpretations were made through a description of the analysis process, providing participant quotes when presenting the results, and an example of the analysis in the appendices.

**Credibility Checks.** There are several ways in which credibility checks may be carried out, such as discussing the results with participants, using multiple analysts, comparing multiple perspectives, or triangulation with additional data. It was felt that member checks might not be consistent with the methodology used as a central aspect of IPA is about researcher interpretation (Larkin and Thompson, 2012).

Whilst conducting the interviews, research supervisors were consulted regarding any potential issues, such as challenges with the visual methodology and the number of photographs brought and how this may impact the data and analysis. The analysis was discussed with researcher supervisors who have expertise in the methodology and research area. Although the images presented by participants were not part of the analysis, I hoped they would also provide credibility to the findings and participant-led methodology.

**Coherence.** Demonstrating how the data fits together and represent differences provides coherence. In this thesis, a conceptual map was presented to explain my sense-making of how the themes come together. The themes and conceptual map were discussed in supervision to identify overlapping themes. When presenting each theme, I made sure to make apparent nuances across the different participants' experiences.

**General vs Specific Task.** In my study, I set out with a specific task of understanding the phenomena of loneliness and social media use in undergraduate students. By focussing on this particular group of people, I acknowledged the differences in these experiences for others outside of their first years of undergraduate study. This allowed a thorough understanding to be developed. Throughout this thesis, I hoped to provide detail in which the reader could make informed decisions about who these findings may apply to whilst not making claims beyond the scope of my study.

**Resonating with Readers.** Research must be presented in a way that allows the reader to accurately understand the subject and clarified or expanded their understanding of it. The presented thesis, and results of my study were discussed within the research team and with fellow psychologists and peers outside of the field. Hearing the opinions of others allowed me to understand where my results may not fulfil this criterion and make adaptations to the understanding and clarity of the research.

From this, it can be judged that my research was in line with the seven criteria for quality qualitative research (Elliott et al., 1999) and is therefore of good quality.

### ***Strengths and Limitations***

My study was conducted during the COVID-19 pandemic; it may mean participants' experiences differ from those in previous or future years of study. COVID-19 somewhat impacted the

sample. Whilst I initially planned to recruit participants in their first year from the 2020/21 cohort, it was recognised that the 2020/21 cohort would have a significantly different experience of starting university than the 2019/20 cohort. The 2020/21 cohort were therefore excluded from the study. While the accounts given by participants in the 2019/20 and 2018/19 cohorts did not appear to be different, their social relationships were impacted differently. The 2019/20 cohort, for example, had only experienced six months at university before on-campus teaching and socialising was paused. It is not yet possible to know how COVID-19 will impact university life going forwards. Perhaps the blended experience of in-person and online teaching and socialising might apply to students over the next 12 months, especially.

As outlined above, the well-defined focus of my study is a methodological strength. The inclusion criteria meant that the sample shared key characteristics, allowing for an understanding to develop of the phenomena of interest. Whilst those in the 2018/19 cohort may have experienced more difficulty recalling their experience starting university, the use of visual methodologies allowed participants the opportunity to reflect on these experiences before the interview and appeared to support participants in giving detailed descriptions of their first year of university. It may be that second-year participants in the 2018/19 cohort were more able to reflect on their journey due to the distance from this experience. This was felt to be a strength of the research. The knowledge provided by these students may support an understanding of the change over time.

Findings in qualitative research are not widely generalisable but may be considered within the context of the sample population. Although representative of gender, sexuality, ethnicity, and disability, the sample in my research consisted of students who all attended the same university. The university is a Russell Group university; therefore, the participants in my study may not represent students from different universities.

As the study employed a cross sectional design, no inferences can be drawn regarding the long-term impact of loneliness when starting university. While certain links between experiences before university and starting university may be hypothesised due to students' accounts and existing literature, no conclusions can be stated regarding the impact of those who experience loneliness before university and starting university. A longitudinal design could have helped understand changes throughout university to understand the mechanisms and long-term impacts. This was, however, beyond the scope of the time available to conduct my study.

Finally, whilst my study did not employ mixed methods, the online screening survey collected data to aid purposeful sampling. There was a discrepancy between some responses on loneliness and social media use measures and participants' accounts during interviews regarding their experience of this. Some participants scored within the average range of loneliness on the screening measure but gave

accounts describing increased loneliness and vice-versa. The study did not set out to look at the measures used. The measures selected were all robust tools with good validity and reliability, including within a student population. Multiple factors may explain the discrepancy. For example, there may be differences in the way people talk about their experiences compared to completing a questionnaire, there may be an element of social desirability, and participants may have different experiences of loneliness when starting university when completing the questionnaire, and when taking part in interviews.

## **Implications**

### *Clinical Implications*

Existing research provides us with an understanding of the relationships between loneliness and social media in undergraduate students. There is a focus on pathological understandings of loneliness in previous research, whereas my study sought to develop an understanding within the context of the experiences of undergraduate students. Highlighting the similarities, rather than differences between those impacted more by loneliness and those who are less impacted, suggests that whole university approaches may be helpful since profound differences across individual experiences were not apparent. My study, therefore, deepens the current understanding of students' experiences.

Student experiences of loneliness were highlighted as an area of concern in the government Loneliness Strategy (HM Government, 2018). This document called for further research to support the development of student support, public health campaigns and education. In a recent meta-analysis, Eccles & Qualter (2020) found only two papers where interventions to support students experiencing loneliness were researched. My findings suggest that the normalisation of challenging experiences would go a long way in supporting students to navigate the challenges in starting university. One of the significant barriers for participants in feeling connected to others was the exacerbation of believing others were managing better due to social media. Participants explained that once they spoke to others about feelings of loneliness, they felt more able to manage. Talking to others about challenges also made participants feel less lonely, as they started to feel seen and understood by others. Reducing the stigma of loneliness when starting university could support students in sharing the challenges. There are many ways this could be achieved, through public health campaigns, education, or community-based approaches, such as peer support.

Some participants reported extra difficulties. In line with the 'poor get poorer' hypothesis (Lin, 2015; Peter et al., 2005), those who had experienced exclusion in the past faced additional challenges figuring out where they fit when starting university. Therefore, it is imperative to focus on systemic factors, such as the impact of marginalisation, when considering how to support students with transitioning to university. Identifying those who may be most at risk and offering targeted

interventions could be effective. Conversely, campaigns to reduce racism, ableism and sexism may go further in creating long-term, sustainable change.

Social media was used to escape or avoid experiencing emotions participants found challenging. Targeted interventions for those most at risk, such as those with attachment difficulties, heightened anxiety or low self-esteem, may support students to experience emotions safely. Interventions to develop emotional literacy, distress tolerance, and being present, such as acceptance and commitment and compassion-focused approaches, may support students with social media use and loneliness.

Many participants described feeling burnt out from constantly being switched on. Participants suggested that greater awareness of the impact of social media should be in the curriculum. They felt education around the psychological impact of social media would support them to develop 'healthier' relationships with social media.

### ***Implications for Future Research***

Areas of future research have been identified. My study brought attention to the challenges of loneliness and social media experienced by students when starting university. While this was a global experience described by all participants, it impacted participants' psychological, social, and emotional functioning more than others. In Eccles & Qualter (2020) meta-analysis, they identified very few evidence-based, effective interventions to support students experiencing loneliness at university. Of the studies available, they focussed on psychological or social skills interventions. The Royal College of Psychiatrists (2011) provided several descriptive case studies regarding universities' approaches to wellbeing, focusing on increasing belongingness or using peer-support mechanisms. In my study, the theme of feeling safe in vulnerability was at the heart of students' experiences. Participants experienced this as feeling alone in their challenges, exacerbated by social media images of others thriving at university. Future research may look at the impact of peer-support mechanisms in universities for coping with challenges during the transition, such as loneliness and problematic social media use. Programmes to reduce stigma could also be investigated to identify their effect on improving students' transition.

My study also identified the impact of marginalisation on students' experiences of loneliness and social media when starting university. Whilst for some this was positive, and they found a place to belong where they had not previously, for other students, their experience of discrimination exacerbated disconnection. There is some evidence regarding creating an inclusive educational experience, however, this is limited (Gale & Mills, 2013). Future research is needed which focuses on students who have marginalised identities related to ethnicity, class, disability, gender, and sexuality. Of note, one participant in my study was a commuter student, and one student had caring responsibilities; the significant challenges this group of students face should be investigated. Further,

my study did not include students from other backgrounds, such as mature or international, due to differences in their experience (Donaldson & Townsend, 2007). Further research may seek to replicate the current study, with a focus on students from these backgrounds.

There remains a lack of longitudinal research regarding students' use of social media and loneliness. My study started to provide some context for how these phenomena change or impact students differently at different times through the sample, including second-year students who could reflect on the fluidity of these experiences. Research that focuses on students' use of social media and experiences of loneliness longitudinally could provide us with a deeper understanding of the different experiences, and therefore different needs students have throughout university. In my study, students spoke of how anxiety about connecting with others drove their behaviours before starting university. Following their journey when choosing, starting and during the first year of university would add to this knowledge and could provide enhanced support during the transition.

Finally, my research took place during the COVID-19 pandemic, which saw students have their learning and social aspects of university move entirely online. The pandemic will have undoubtedly impacted participants' experiences of starting university. As universities are working towards offering in-person teaching, models of blended learning are being considered. There is some evidence regarding experiences of loneliness in distance learners; this is historical and not part of a shared experience across students (Kaufmann & Vallade, 2020; Vakoufari, Christina, & Mavroidis, 2014). The impact of the pandemic and distance learning on students' experiences of loneliness and social media should be considered further.

## **Conclusion**

The purpose of my study was to gain an understanding of how undergraduate students experience loneliness and its relationship to social media use. Interviews employed visual methods to understand the experiences of 12 undergraduate students. The research showed that multiple factors led to students experiencing loneliness when starting university. Social media relieved these feelings, both in distracting from the unpleasant feelings that arise with loneliness and finding a place to feel understood, whether through existing relationships or people with shared interests. By connecting with those who are familiar, increased feelings of safety were brought about.

Conversely, this acted as a further barrier to forming new connections, therefore maintaining feelings of loneliness. Seeing others on social media curating an image of thriving in their experience of starting university and connecting with others only increases negative internal experiences. This led students to feel out of control and disappointed they did not have the experience they expected. The experience of finding out who they were whilst also thinking about how they were in relation to others in a new and unfamiliar environment was challenging. Social norms and cultural expectations from

their old life and new life could often compete, and at the same time could restrict their sense of their ability to move forwards. This left them with the sense of having no autonomy as they had to conform to fit in, whilst also feeling the freedom that comes with their first experience of living independently.

My thesis has provided innovative insights into previously understudied but important phenomena of loneliness and social media use in undergraduate students. Being led by what was important to students themselves through visual methodology, I provided a novel contribution to the literature through accounts of participants' experiences. My research findings set out a foundation from which students can be supported to navigate the challenges they face in an important transition in their lives.

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## Appendices

### Appendix 1: Ethical Approval

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**From:** Medicine and Health Univ Ethics Review  
**Sent:** 03 July 2020 13:55  
**To:** Bridgette Bewick  
**Cc:** Lucy Rigley [hs17]jr; Medicine and Health Univ Ethics Review  
**Subject:** RE: MREC 19-036 Amd 2 June 2020 - Approval  
**Importance:** High

Hi Bridgette and Lucy

**MREC 19-036 Amd 2 June 2020 - How do undergraduate University students make sense of their experience of loneliness and its relationship with social media?**

**NB: All approvals/comments are subject to compliance with current University of Leeds and UK Government advice regarding the Covid-19 pandemic.**

I am pleased to inform you that the above research ethics application amendment has been reviewed by the School of Medicine Research Ethics Committee (SoMREC) Committee and I can confirm a favourable ethical opinion based on the documentation received at date of this email.

***Please retain this email as evidence of approval in your study file.***

Please notify the committee if you intend to make any further amendments to the research as submitted and approved to date. This includes recruitment methodology; all changes must receive ethical approval prior to implementation. Please see <https://leeds365.sharepoint.com/sites/ResearchandInnovationService/SitePages/Amendments.aspx> or contact the Research Ethics & Governance Administrator for further information ([FMHUniEthics@leeds.ac.uk](mailto:FMHUniEthics@leeds.ac.uk)) if required.

Ethics approval does not infer you have the right of access to any member of staff or student or documents and the premises of the University of Leeds. Nor does it imply any right of access to the premises of any other organisation, including clinical areas. The committee takes no responsibility for you gaining access to staff, students and/or premises prior to, during or following your research activities.

***Please note:*** You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, risk assessments and other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited.

It is our policy to remind everyone that it is your responsibility to comply with Health and Safety, Data Protection and any other legal and/or professional guidelines there may be.

I hope the study continues to go well.

Best wishes  
 Rachel

***On behalf of Dr Naomi Quinton and Dr Anthony Howard, co-Chairs, SoMREC***

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**From:** Medicine and Health Univ Ethics Review  
**Sent:** 09 March 2020 13:03  
**To:** Lucy Rigley [hs17]r  
**Cc:** Bridgette Bewick; Simon Pini; Medicine and Health Univ Ethics Review  
**Subject:** RE: MREC 19-036 Study Approval  
**Importance:** High

Dear Lucy

**MREC 19-036 - How do first year undergraduate University students make sense of their experience of loneliness and its relationship with social media?**

I am pleased to inform you that the above research ethics application has been reviewed by the School of Medicine Research Ethics Committee (SoMREC) and on behalf of the Chair, I can confirm a favourable ethical opinion based on the documentation received at date of this email.

***Please retain this email as evidence of approval in your study file.***

Please notify the committee if you intend to make any amendments to the original research as submitted and approved to date. This includes recruitment methodology; all changes must receive ethical approval prior to implementation. Please see <https://leeds365.sharepoint.com/sites/ResearchandInnovationService/SitePages/Amendments.aspx> or contact the Research Ethics Administrator for further information [FMHUniEthics@leeds.ac.uk](mailto:FMHUniEthics@leeds.ac.uk) if required.

Ethics approval does not infer you have the right of access to any member of staff or student or documents and the premises of the University of Leeds. Nor does it imply any right of access to the premises of any other organisation, including clinical areas. The committee takes no responsibility for you gaining access to staff, students and/or premises prior to, during or following your research activities.

*Please note:* You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, risk assessments and other documents relating to the study. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited.

It is our policy to remind everyone that it is your responsibility to comply with Health and Safety, Data Protection and any other legal and/or professional guidelines there may be.

I hope the study goes well.

Best wishes  
Rachel

***On behalf of Dr Naomi Quinton, co-Chair, SoMREC***

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Rachel de Souza, Lead Research Ethics & Governance Administrator, The Secretariat, Room 9.29, Level 9, Worsley Building, Clarendon Way, University of Leeds, LS2 9NL, Tel: 0113 3431642, [r.e.desouza@leeds.ac.uk](mailto:r.e.desouza@leeds.ac.uk)

## Appendix 2: Online Survey Participant Information Sheet and Consent Form

School of Medicine & Health



UNIVERSITY OF LEEDS

### Understanding Your Social Media Use and Loneliness

You are invited to take part in a research study. The purpose of this research is to study the relationship between loneliness and social media use in students. The first part of this study involves completing a survey. Not everybody who completes the survey will be invited to the next part of the study.

Everyone who completes the survey and provides their contact details will be entered into a prize draw, where first prize is a £20 Amazon voucher, 2<sup>nd</sup> and 3<sup>rd</sup> prize are £10 Amazon vouchers.

Further information about the study is provided on the next page.

-----page break on OnlineSurvey-----

#### **You are being invited to take part in a research project.**

Please take the time to read the following information carefully to help you decide whether or not you would like to participate in the study. It is important to understand why the research is being done and what it will involve.

#### **What is the purpose of the study?**

We are interested in understanding more about your experiences of using social media and feeling lonely. The following survey is your opportunity to tell us about your own experience of social media and of loneliness. Your responses will help us to select who we invite for interview.

#### **Why have I been invited to take part?**

All first year undergraduate students at the University of Leeds have been invited to complete this survey.

#### **What will be involved if I agree to take part in this study?**

This study involves two stages. During the first stage you are invited to complete this survey, which will ask you questions about your social media use, feelings of loneliness and wellbeing. The survey takes around 15 minutes to complete. We'll use this information to select and invite people to take part in the second stage of the study (i.e. an interview).

Everyone who completes the first stage of the study can opt to give their email to be entered into a prize draw to win an amazon voucher (1st prize £20, 2<sup>nd</sup>/3<sup>rd</sup> prize £10). Whether or not you complete the second stage of the study will have no effect on your chances of winning this prize draw.

If you choose to complete this survey you will have opportunity to give your consent to be invited by email to participate in an interview. Not everyone who volunteers will be invited to interview. If you are invited, the interview will last between 60-90 minutes. The interview will take place somewhere private at the University of Leeds at a date and time convenient for you. *[online alternative: If you decide to take part in the study, the researcher will contact you to arrange a date and time to participate in an online interview. Online interviews will take part by electronic means (e.g. Microsoft Teams (via MS Office 365) WhatsApp, Skype).]* Before the interview you will be asked to take photographs or collect screenshot or images that will help you to talk about your experiences with the researcher. If you are invited to take part in the second stage of the study, you will receive more information about this task by email. Students who consent to being involved in the collection of images and the interview will receive up to £10 for their participation.

#### **Do I have to take part in the study?**

Taking part in this study is voluntary, participants can withdraw at any time without giving a reason.

If you do decide to take part in the survey, but then change your mind, you can withdraw from the survey at any time by using the exit button on your internet browser. You do not have to give a reason

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for this. Once you have submitted your survey data, any anonymous responses cannot be withdrawn. If you have provided an email address then, up to two weeks after you completed the survey, you can email [hs17ljr@leeds.ac.uk](mailto:hs17ljr@leeds.ac.uk) and ask for your data to be withdrawn. After this time it will not be possible to withdraw your data.

If you are invited to take part in the interview you are under no obligation to do so, taking part in the interview is voluntary. You do not have to give a reason for not wanting to take part.

#### **What will happen to the information obtained by the study?**

Your answers on the questionnaires will be used to determine your eligibility for taking part in a research study. All the data obtained will be treated as confidential and stored securely as is required by the Data Protection Act. The data collected at both the first and second stage of the study will be used as part of a Doctoral thesis and may be written up for publication. No identifying information about you will be included in the report.

If you are interested in the second stage of the study, we ask that you provide contact details so that we can get in touch if you are selected for the next stage. If you opt into the prize draw, your contact details will also be used to enter you into the prize draw. No other identifiable information is required.

**[Before an online interview you will be asked to give verbal consent to participate. This verbal consent will be audio recorded. You will be asked to read the statements included on the consent form and state 'I agree' after each one. This part of the recording will be stored separately to other study files].**

All the contact information that we collect about you during the research will be kept strictly confidential and will be stored separately from the research data. Only the research team will be able to see your data. Your data will be anonymised and saved on a secure electronic drive. After this research has been completed, the data will be kept for use by the research team. All the data obtained will be treated as confidential and stored securely as is required by the Data Protection Act. For further information about the University's use of personal data, please see: <https://dataprotection.leeds.ac.uk/wp-content/uploads/sites/48/2019/02/Research-Privacy-Notice.pdf>

#### **What are the benefits and risks of taking part?**

The study will help us to understand some of the things that might be (or might not be) helpful in improving students' relationships with their smartphones and their experience of loneliness while at university.

As a thank you for completing the survey, you will be entered into a prize draw to win 1 x £20 amazon voucher and 2 x £10 Amazon vouchers. Students who go on to complete the second stage of the study will receive up to £10.

Some of the questions in this survey are of a personal nature. It is therefore advised that you choose a location where you are able to answer the questions confidentially.

#### **Who has reviewed this study?**

This study has been reviewed by the School of Medicine Research Ethics Committee, University of Leeds [insert ethics approval number once granted].

#### **If I have questions about the study, who can I ask?**

If you would like further information please contact the Doctoral student who is completing this research, Lucy Rigley ([hs17ljr@leeds.ac.uk](mailto:hs17ljr@leeds.ac.uk)). You can also contact the Lead Supervisor, Dr Bridgette M Bewick ([b.m.bewick@leeds.ac.uk](mailto:b.m.bewick@leeds.ac.uk)).

#### **Where can I access other support if I need it?**

The study focuses on social media use and loneliness. We understand that some people participating might be experiencing distress. If you feel that you need further support or support for other difficulties you can find more information about how to access help on the **University of Leeds Support and Wellbeing page**: <https://students.leeds.ac.uk/#Support-and-wellbeing>.

**Consent Form**

I confirm that I have read the participant information and understood what I am being asked to do in this research.

I understand that my responses to the survey will remain confidential.

I understand that my participation is voluntary, and I can exit the questionnaire at any time.

I understand that if I cannot withdraw any data I submitted anonymously from the research.

I understand that where my survey responses can be identified as mine (i.e. if I provided a valid email) up to two weeks after the submission of my survey responses I can email and request my data be withdrawn. I understand that after the two week period it is not possible to withdraw my data.

I give consent to take part in this research and for my anonymised data to be stored and used in the analysis of this research, and possible future research.

**If you understand the information provided and consent to taking part in the study, please confirm by clicking "next" below. You will then be redirected to the survey.**



## Appendix 3: Interview Participant Information Sheet and Consent Form

School of Medicine & Health



UNIVERSITY OF LEEDS

### Undergraduate students' experience of loneliness and social media

#### What is the purpose of the study?

We know that lots of people age 16-24 say they have experienced feeling lonely but there isn't much research that helps us to understand why this is and what we might be able to do to reduce feelings of loneliness. Some research tells us that social media has a positive and a negative impact upon loneliness amongst students when they start university. We would like to understand the experiences of feeling lonely and using social media for people who have started university. We hope that this research will inform how people are supported when they start university in the future.

#### What will happen if I decide to take part?

This interview will last between 60-90 minutes. We will look at the images you have gathered together. The researcher will ask you some questions about these images.

#### What will happen if I don't want to carry on with the study?

During the interview, you can tell the research you want to stop the interview and withdraw your data at any time. You can withdraw up until four weeks after the interview date by contacting the researcher, Lucy Rigley ([hs17ljr@leeds.ac.uk](mailto:hs17ljr@leeds.ac.uk)). Any interview data or questionnaires will then be destroyed and will not be included in the final study. It will not be possible to withdraw four weeks after the interview date due to the research being analysed.

#### What will you do with my information?

Information collected on the screening survey and during the interview will be kept confidential. Any information you do share will be anonymised. Only the research team will be able to see your information. Any saved information will be anonymised and saved on a secure University of Leeds electronic drive.

All the contact information that we collect about you during the course of the research will be kept strictly confidential and will be stored separately from the research data. Once the study has been completed, the anonymised data will be kept securely for use by the research team. All the data obtained will be treated as confidential and stored securely as is required by the Data Protection Act. The data collected will be used as part of a thesis for a Doctorate and may be written up for publication. No identifying information about you will be included in the report. If any direct quotes are used within the report, these will be anonymised; any identifiable information will be removed, and pseudonyms will be used. If you share any information that suggests you might be a risk to yourself or others, the research team will have a duty to act on this. In these circumstances you may be contacted by the research team and confidentiality may need to be broken to access the right support for you. For further information about the University's use of personal data, please see: <https://dataprotection.leeds.ac.uk/wp-content/uploads/sites/48/2019/02/Research-Privacy-Notice.pdf>

#### Will I be recorded, and how will the recorded media be used?

The interviews will be audio recorded and transcribed verbatim. The transcriptions will be used for analysis and will only be available to the research team. The transcripts and recordings will be stored on a secure University of Leeds electronic drive. The recordings will be deleted once analysis has taken place.

V1 19/11/2019

<b>Consent Form</b>		
<b>Undergraduate students' experience of loneliness and social media</b>		
<b>Researchers:</b> Lucy Rigley, Dr Bridgette Bewick, Dr Simon Pini		
	<b>Yes</b>	<b>No</b>
1. I have read and understand the information sheet which explains the research project.		
2. I have had the opportunity to consider the information sheet and to discuss and ask questions about the project. I have had any questions about the study answered satisfactorily.		
3. I understand that taking part in the study is voluntary and I am free to withdraw from the project up until four weeks after interview without giving a reason.		
4. Some photographs from the project will be in the final report, published, and presented, but I know that I can say at the interview if there are any photos that I do not wish to be used.		
5. I understand that some direct quotes may be used in the final report, however these will be anonymised, and any identifiable information will be removed.		
6. I agree that members of the research team can have access to my responses, and I agree they can use them in research linked with this study.		
7. I agree to the interview with me being audio recorded so that what I say can be accurately typed up.		
8. I understand that my responses will be kept confidential unless the researcher feels there is a significant risk to myself or others, which has been discussed with me prior to conducting the interview.		
9. I agree to take part in the above research project.		
<b>Name of Participant</b>	<b>Date</b>	<b>Signature</b>
<b>Name of Researcher</b>	<b>Date</b>	<b>Signature</b>

## Appendix 4: Photo Elicitation Information Sheet



UNIVERSITY OF LEEDS

### Photo and image recording instructions

**Thank you for agreeing to take part in this research. When we meet up we will talk about what you have taken photos of. This will help us to understand your experience of starting university. We want to understand more about loneliness and using social media.**

#### **What do I take photos of?**

You can take photos of anything you like. You could also take screenshots or download pictures. We would like you to photograph anything that will help us to talk about and understand starting university, feeling lonely, belonging, and social media. Try to collect images of things that you will be able to talk a little bit about when we meet up.

#### **What can't I take photos of?**

Try not to take photos of anybody who doesn't want their photo taken. Be aware of what or who is in the background. Do not take photos of anything that could offend anybody.

#### **How many photos should I take?**

There is no set number of photos or images you need to take. You can take as many images as you like and then decide later which you would like to discuss when we meet. You will need enough images to talk for about one hour. People usually bring between 2 and 15 images.

#### **What do I do with the images once I've taken them?**

You will need to decide which images you might want to talk about when we meet and send them to me. Photos should be sent at least 24 hours before we meet. The best way to do this would be through your university e-mail address as this is secure. My e-mail address is [hs17ljr@leeds.ac.uk](mailto:hs17ljr@leeds.ac.uk). If you want to share your images with me another way, we can think about this together.

#### **What happens to the photos after the project?**

When the project is over the photos you have taken will be kept safely by the research team. At the end of the interview, we will talk about whether you are happy for us to use any of your photos in our reports.

**If you have any questions about this task, or aren't sure what to do, please contact me. I look forward to meeting you. Lucy Rigley ([hs17ljr@leeds.ac.uk](mailto:hs17ljr@leeds.ac.uk))**

## Appendix 5: Screening Survey Demographic Information

Online screening survey: demographic questions

### About University (Page 4)

1. **My current level of study is** [Drop down box – select one only: Undergraduate, Taught Postgraduate, Research Postgraduate]
2. **Is this your first undergraduate degree?** [Drop down box – select one only: Yes, No, Not undergraduate]
3. **My year of study is... (For example, imagine a three year full-time programme of study. You will answer 1st, 2nd or 3rd year regardless of whether you are enrolled as a full-time or part-time student. It is the year of the programme we are asking about NOT the number of years you have been studying)** [Drop down box – select one only: 1, 2, 3, 4, 5, Other]
4. **Please select your Faculty** [provide drop down list and include other: Arts, Humanities and Culture, Biological Sciences, Business, Social Sciences, Engineering and Physical Sciences, Environment, Medicine and Health/Other]
- 4a. **Please select your School** [provide drop down list dependent on what is answered above]
- 4b. **Please write your programme of study (For example, BSc Psychology, LLB Law, BA History of Art)** [Free Text Box]
5. **What best describes your fee status?** [Drop down box – select one only: Home Student, EU Student, International Student]
6. **Are you a full-time or a part-time student?** [Drop down box – select one only: Full-time, Part-time]

### About me (Page 8):

7. **Please select your age in years** [Drop Down Box 16-99+ - select one only]
8. **I identify my relationship status as...** [Drop down box – select one only: Single, In a relationship, Cohabiting, Married/In a Civil Partnership, Divorced, Widowed, Other, Prefer not to say]
9. **Please describe the option that best describes your gender.** [Drop down box – select one only: Female, Male, Transgender female, Transgender male, Gender non-binary, Prefer to self-describe/ other, Prefer not to say]
10. **I identify my ethnicity as...** [Drop down box – select one only: White - English/Welsh/Scottish/Northern Irish/British, White – Irish, White - Gypsy or Irish Traveller , White - Any other White background, please describe below, Mixed/Multiple ethnic groups - White and Black Caribbean, Mixed/Multiple ethnic groups - White and Black African, Mixed/Multiple ethnic groups - White and Asian, Mixed/Multiple ethnic groups - Any other Mixed/Multiple ethnic background, please describe below, Asian/Asian British – Indian, Asian/Asian British – Pakistani, Asian/Asian British – Bangladeshi Asian/Asian British – Chinese, Asian/Asian British - Any other Asian background, please describe below, Black/ African/Caribbean/Black British – African, Black/ African/Caribbean/Black British – Caribbean, Black/ African/Caribbean/Black British - Any other Black/African/Caribbean background, please describe below, Other ethnic group – Arab, Other ethnic group - Any other ethnic group, please describe below]
11. **I identify as having a disability...**[Drop down box, select one only: Yes, No]
- 11a. **If you answered yes above, please give details:** [Tick boxes, can select more than one: Blind/partially sighted, Deaf/hard of hearing, Dyslexia, Dyspraxia, Dysgraphia, Autism spectrum condition (e.g. Asperger syndrome), Mental health difficulties, Personal care support, Wheelchair user/mobility difficulties, Long-term medical condition (e.g. chronic fatigue syndrome, diabetes, epilepsy, cancer, HIV), Other disability, Prefer not to say]

## Appendix 6: Measure of Loneliness

*UCLA Loneliness Scale Revised (Russell, Peplau & Cutrona, 1980)*

**Instructions: indicate how often each of the statements below is descriptive of you.**

Statements	Never	Rarely	Sometimes	Often
How often do you feel that you are "in tune" with the people around you? *	1	2	3	4
How often do you feel that you lack companionship?	1	2	3	4
How often do you feel that there is no one you can turn to?	1	2	3	4
How often do you feel alone?	1	2	3	4
How often do you feel part of a group of friends?*	1	2	3	4
How often do you feel that you have a lot in common with the people around you?*	1	2	3	4
How often do you feel that you are no longer close to anyone?	1	2	3	4
How often do you feel that your interests and ideas are not shared by those around you?	1	2	3	4
How often do you feel outgoing and friendly?*	1	2	3	4
How often do you feel close to people?*	1	2	3	4
How often do you feel left out?	1	2	3	4
How often do you feel that your relationships with others are not meaningful?	1	2	3	4
How often do you feel that no one really knows you well?	1	2	3	4
How often do you feel isolated from others?	1	2	3	4
How often do you feel you can find companionship when you want it?*	1	2	3	4
How often do you feel that there are people that really understand you? *	1	2	3	4
How often do you feel shy?	1	2	3	4
How often do you feel that people are around you but not with you?	1	2	3	4
How often do you feel that there are people you can talk to?*	1	2	3	4
How often do you feel that there are people you can turn to?*	1	2	3	4

**Scoring: Items marked with an asterisk are reverse scored**



*Social Media Use Integration Scale (SMUIS) (Jenkins-Guarnieri, Wright, & Johnson, 2013)*

Please indicate how much you agree or disagree with the statements below.

	Strongly Disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree
I feel disconnected from friends when I have not logged into social media.					
I would like it if everyone used social media to communicate.					
I would be disappointed if I could not use social media at all.					
I get upset when I can't log on to social media.					
I prefer to communicate with others mainly through social media.					
Social media plays an important role in my social relationships.					
I enjoy checking my social media account.					
I don't like to use social media.					
Using social media is part of my everyday routine.					
I respond to content that others share using social media.					

## Appendix 8: Measure of Wellbeing

*Warwick-Edinburgh Mental Wellbeing Scales (WEMWBS) (Tennant et al. 2007)*

Below are some statements about feelings and thoughts.

Please tick the box that best describes your experience of each over the last 2 weeks.

Statements	None of the time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	1	2	3	4	5
I've been feeling useful	1	2	3	4	5
I've been feeling relaxed	1	2	3	4	5
I've been feeling interested in other people	1	2	3	4	5
I've had energy to spare	1	2	3	4	5
I've been dealing with problems well	1	2	3	4	5
I've been thinking clearly	1	2	3	4	5
I've been feeling good about myself	1	2	3	4	5
I've been feeling close to other people	1	2	3	4	5
I've been feeling confident	1	2	3	4	5
I've been able to make up my own mind about things	1	2	3	4	5
I've been feeling loved	1	2	3	4	5
I've been interested in new things	1	2	3	4	5
I've been feeling cheerful	1	2	3	4	5



## Appendix 9: Measure of Distress

Core 10 (Barkham et al., 2013)

This form has 10 statements about how you have been OVER THE LAST WEEK. Please read each statement and think how often you felt that way last week. Then check the box which is closest to this.

Over the last week...	Not at all	Only Occasionally	Sometimes	Often	Most or all of the time
1. I have felt tense, anxious or nervous	0	1	2	3	4
2. I have felt I have someone to turn to or support when needed	4	3	2	1	0
3. I have felt able to cope when things go wrong	4	3	2	1	0
4. Talking to people has felt too much for me	0	1	2	3	4
5. I have felt panic or terror	0	1	2	3	4
6. I made plans to end my life	0	1	2	3	4
7. I have had difficulty getting to sleep or staying asleep	0	1	2	3	4
8. I have felt despairing or hopeless	0	1	2	3	4
9. I have felt unhappy	0	1	2	3	4
10. Unwanted images or memories have been distressing me	0	1	2	3	4

## Appendix 10: Invite to Interview E-mail

### E-mail body

Thank you for taking the time to participate in the survey on your experiences of social media, loneliness and belonging. I am writing to you to invite you to take part in a research project which aims to gain an understanding of what it is like for students starting university. There is a monetary reimbursement for your participation in this study of a £10 e-voucher.

The next part of the study will involve you:

- Taking some pictures, downloading images, and taking screenshots of things that will help the researcher understand your thoughts on starting university, social media, and loneliness
- Attending an interview face to face or online. If you decide to take part in the study, the researcher will contact you to arrange a date and time to meet at the University of Leeds. [online alternative: If you decide to take part in the study, the researcher will contact you to arrange a date and time to participate in an online interview. Online interviews will take part by electronic means (e.g., Microsoft Teams (via MS Office 365) WhatsApp, Skype).]

Please find information attached explaining the project and what it would involve for you so you can decide whether you would like to take part. If you have any questions or queries or if anything is unclear, please do not hesitate to ask me for further clarification.

----- E-mail, attachment below -----

## Appendix 11: Topic Guide

Interviews will be informed by the following topic guide; semi-structured interviews allow for flexibility. Not all questions will necessarily be asked nor in this order.

### Procedure

- Check information sheet and consent form has been received, that they have read and understood them.
- Go over confidentiality – everything will remain confidential unless some information is shared that I feel places the participant or others at risk, this information will then be shared with the necessary organisations in discussion with the participant.
- Explain they can take a break if anything we discuss makes them feel uncomfortable.
- Explain the outline of the interview – looking at photographs they have brought and asking questions about their experiences which will take around 60-90 minutes.
- Give the opportunity to ask any questions they may have.

### Topic Guide

I am going to ask you to tell me about the images you have sent to me. We can talk about them in any order you like. We can come back to any images later in the interview if you want.

Which image would you like to start with?

1. Tell me about the image

- What is this an image of?
- What do you want me to understand from this image?
- What does this image tell me about you?
- What made you choose this picture?
- Does that matter? Why?
- Is that important?

2. If people are in image...

- Who is in this image?
- What did they think about you bringing this image?
- How would they describe you? What do you think about that?
- How would they respond hearing you talk about them now?

Which image would you like to talk about next? (Repeat above)

3. Which photograph is most important to you?

- Why?

4. Which photograph is least important to you?

- Why?

5. How does it feel looking at all the images together now?

- What was it like collecting all these images?
- How does it feel talking about these images?

6. Was there anything that you wanted to bring an image of you were not able to?

- What was it?
- Tell me more about it.

**Further information**

- Is there anything else you would like to tell me that you feel we have not covered?
- How has it been for you to take part in this research?

**After interview**

- Thank them for taking part – acknowledge it can be difficult to talk about, provide contact details of services who can offer support should they feel they would like to talk to someone in the future.
- Complete photo consent form.
- Provide incentive, asking participants to sign to confirm they have received this.
- Ask for consent regarding future contact for any follow up interviews/research.
- Follow up any risk issues should they arise.
- Allow time for any further questions before ending.

## Appendix 12: Alternative Topic Guide

If participant has not taken any images with them or has failed to bring images to the interview with them, the following topic guide can be utilised. These questions can also be used as prompts when discussing the images the participant has taken. Procedure to follow as with photo topic guide.

### Transition to University

- Can you tell me what it was like starting at the University of Leeds?
- Can you describe to me what life was like before university?
- Was there anything specifically good about starting university?
- Was there anything specifically difficult about starting university? (prompt: academic, social, housing, feeling homesick)
- Are there people you do or do not keep in contact with who you knew prior to starting university? (prompt: how do you keep in touch with people from “home”?)

### Social Media

- I am interested to hear about your experience of social media – can you tell me more about this? (prompt: have you ever used social media? What is good about using social media? What is bad about social media? What do you hear people saying about social media?)
- Can you tell me about how you use social media currently? (Prompt: What platforms do you use? How often do you use them? How do you use them? E.g., to post photos, to talk to friends, to make new friends, to share a hobby. Has the way you use social media changed?)
- Who do you interact or engage with on them?

### Loneliness

- Can you tell me what you think loneliness means?
- You described loneliness as (INSERT SUMMARY HERE). Do you think there are people at University that feel like that?
- Are there positive/negative aspects to feeling lonely?
- What do you think people around you do when they are feeling lonely?

## Appendix 13: Photo Consent Form

School of Medicine & Health



**UNIVERSITY OF LEEDS**

### Photo consent form

Some photos produced as part of this research may be used within my report, and publications and presentations of the research. If there are some photos you took that you would rather not be shared, that is fine, and these will not be used. We will number each photo and record below which photos you are happy to be used and any that you are not.

I consent to the photos which numbers are below being used for dissemination and reporting activities. This activity might include the final report, publication in professional journals, and presentations.

Photo Number	Consent Given

I agree that the photos which numbers are below will not be used in any reports, professional journals, or presentations.

Photo Number	Consent not given

Participant Signature..... Date  
.....

Researcher Signature..... Date  
.....

Please get in touch with me if you have any other questions

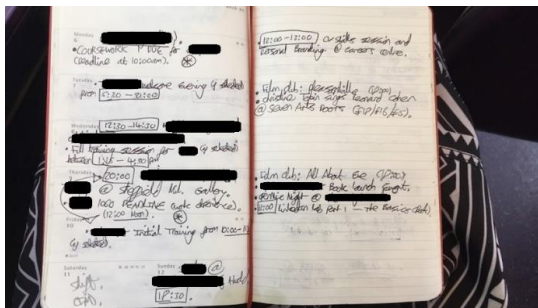
V1 19/11/2019

## Appendix 14: Example of Transcript

Balancing what you give and what you receive in connections	<p><b>P: the amount of followers was more important. So, it was always the number of followers that were bigger than the amount that I was following</b></p> <p>I: okay</p> <p><b>P: always. So, if I had like a 1000 followers I'd be following like 500 people. It'd never be, it'd never be the other way round</b></p> <p>I: how come?</p> <p><b>P: um, if that makes sense. Cause I feel like if you, huh! I feel like umm, it's like if you follow someone and they don't follow you back you feel like you're not receiving anything. So, in that, in that way if I'm following more people than the amount of people following me, I feel that people'll perceive that as me not receiving anything, if that makes sense</b></p> <p>I: okay. What do you hope to receive; like what does social media help you to receive?</p> <p><b>P: confidence I suppose and, you know building like a social image</b></p> <p>I: mm-huh</p> <p><b>P: like, cause I think the amount of followers definitely and the amount of likes that you get, definitely show that you're somewhat popular in, in a way. But it doesn't reflect how popular you are in a, in real life, if that makes sense</b></p>	<p>Value in quantity of connections      "More important" – others view your importance through number of followers</p> <p>Monitoring social media metrics      "it'd never be the other way round" – others view your importance through number of followers      You have to give more than you receive in relationships online      "you're not receiving anything" – reciprocal nature of relationships</p> <p>Social media is not reflective of who are offline.      "real life" – social media is not real?</p>
Curating an identity	<p>I: okay</p> <p><b>P: so, it says something online, but it doesn't say anything like in reality because um, I might, well I feel like I was quite like popular on social media</b></p> <p>I: mm-huh</p> <p><b>P: on social media, but in real life I wasn't actually like that confident or popular</b></p> <p>I: okay</p> <p><b>P: I just wanted that sort of feeling from social media</b></p> <p>I: mm-huh. Why do you think that was?</p> <p><b>P: probably because I wasn't like that in real life and I wanted that sort of attention, uh-huh!</b></p> <p>I: okay. Okay</p> <p><b>P: and that was like one way of getting it, I suppose</b></p> <p>I: what made it hard to get that in real life?</p> <p><b>P: umm, I think it might be because of the people I might like hang out with</b></p>	<p>Feeling popular online was important.      "reality" – even though she is popular online, the sense of connection with others does not translate to offline interactions &amp; connections</p> <p>Popularity online is part of the image curation process      Social media fulfilling relational needs</p> <p>Getting from social media what was not available online      "real life"      "attention" – relational needs are unfulfilled</p>
Desired vs experienced connection	<p>I: mm-huh</p>	<p>Making sense of why belonging needs were unfulfilled – influence of others/friends</p>

### Appendix 15: Photo Examples

Adam



Alexandra



Craig



Yasmin

Ross



Gabby

