

#### **Doctoral Thesis**

# Adolescents' experiences of social connection during lockdowns

Declan Jordan

Lancaster University

Doctorate in Clinical Psychology

# **Statement of Total Word Count for the Thesis**

	Main Text	Appendices (including tables,	Total
		figures and	
		references)	
Thesis Abstract	228	0	228
Section 1: Literature Review	8,000	14,342	22,342
Section 2: Research Paper	7,929	12,186	20,115
Section 3: Critical Appraisal	4,000	2,278	6,276
Section 4: Ethics	5,138	1,443	6,581
Totals:	25,295	30,249	55,544

#### **Abstract**

This thesis explores adolescents' relationships with digital technologies and their experiences of social connection during lockdowns. It comprises of a systematic literature review, a research paper and a critical appraisal. The literature review utilises a meta-ethnographic approach to synthesise findings across 25 qualitative papers looking at adolescent's use of and relationships with social media and smartphones. In response to ongoing concerns and narratives around the increasing impact that digital technologies and their developers are having on the wellbeing of younger generations, focus was directed towards developing greater understanding around where control is felt to lie. In an effort to amplify younger voices and position them more centrally in the debate, adolescent reflections on factors that are thought to both enhance and diminish their personal agency were explored. Five themes capturing the complex and nuanced nature of adolescent's relationships with digital technologies emerged. The research paper utilises a constructivist grounded theory informed approach to explore adolescent experiences of lockdown. Data from interviews with eight participants were analysed with five themes emerging that chart the course of their journey through lockdowns and subsequent reflections. From an initial stage of adjustment, through notable disruption to education, to emergence through the other side, themes reflect the shape and cadence of participants lockdown experiences. Finally, the critical appraisal summarises findings, reflects on challenges throughout the thesis, and suggests implications for clinical practice.

**Declaration** 

This thesis records work undertaken for the Doctorate in Clinical Psychology at the Division

of Health Research at Lancaster University from September 2019 to October 2024.

The work presented here is the author's own, except where due reference is made. The work

has not been submitted for the award of a higher degree elsewhere.

Name: Declan Jordan

Date: 18th October 2024

#### Acknowledgements

Primarily, I would like to thank the young people that were kind enough to share their time and stories with me. You spoke so openly and insightfully about what the journey through lockdown felt like for you and your families. I learned so much about the nature of resilience and importance of connection from your stories. I hope that I have gone some way toward capturing them meaningfully.

I would also like to thank the children, young people, and families I work alongside in my clinical role. Your strength and determination are a constant source of inspiration.

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#### **Section 1 Literature Review**

Who is in control? A Meta-ethnography of adolescents' usage of smartphones and social media

Declan Jordan Lancaster University Doctorate in Clinical Psychology

#### Abstract

Following a period of intense and rapid growth, digital technologies are playing an increasingly prominent role in modern society and the lives of children and young people (CYP). Levels of concern around the possible developmental consequences of CYP's relationship with and usage of smartphones and social media have intensified notably. In response to alarming narratives and declinist arguments, a need for a more considered view was identified. To help provide this, and amplify the perspectives and voices of CYP, a metaethnographic approach was utilised to synthesise findings across qualitative studies exploring how adolescents themselves reflect on their relationships with smartphones and social media. Specific focus was directed towards any factors that might appear to enhance or diminish their sense of personal agency. A systematic search of five electronic databases was carried out, supported by hand searches of key journals. Twenty-five papers were identified for inclusion. Five themes emerged from the synthesis that capture the nuanced and complex nature of adolescent's interactions with smartphones and social media. Across various life domains, engagement with digital technologies was found to both empower and imprison adolescents, dependent on individual and biological vulnerabilities and a range of complex contextual factors.

#### Introduction

Over 6.5 billion people, 84% of the world's population, now have access to a smartphone (Laricchia, 2022). A key driver of the proliferation of smartphone devices has been the rapid growth of social media, defined as a group of internet-based platforms that provide its users with a space in which to create and exchange content (Kaplan & Haenlein, 2010). Over half of the global population, 4.9 billion people, are now active users of social media and typically spend an average of 2.5 hours a day across various platforms (Wong & Bottorf, 2023).

#### Adolescents' Relationships with Digital Technologies

Today's children and young people (CYP) are the most technologically connected generation in history. Ninety-five percent of adolescents across demographic groups have access to a smartphone and 97% of those regularly use social media (Smith & Anderson, 2018). The most popular online platforms, including You Tube, TikTok, Facebook, Instagram, and Snap Chat, have transformed adolescents' daily lives and the very nature of what it means to communicate (Nesi et al., 2018).

Many adolescents have come to view their smartphones as an extension of themselves (Nesi et al., 2018) and report being online on an almost constant basis (Anderson & Jiang, 2018). They experience a strong sense of connection not only to their devices but to the various forms of digital communication they help to facilitate (Vorderer et al., 2016). So intense can be their sense of attachment that many adolescents now sleep with their devices within arm's reach (Live Person, 2021) and any lack of proximity can lead to emotional distress and symptoms of withdrawal (Stieger & Lewetz, 2018).

#### Key Drivers of Adolescent Use of Digital Technologies

Adolescence is a critical period for young people's physical, cognitive, and social development (Steinberg, 2010). As adolescents seek individuation from parental figures, peer

groups typically displace family to become the principal source of social support (Koepke & Denissen, 2012). Given the unique opportunities provided by social media platforms for independent exploration, self-expression, and the careful construction of an online identity (Nadkarni & Hofmann, 2012) it is no surprise that adolescents often develop close emotional bonds with their favoured platforms (Andreassen & Pallesen, 2014).

# Concerns Over the Impact of Digital Technologies on Adolescent Health and Wellbeing

Risk taking follows a trajectory that peaks during late adolescence (Romer et al., 2017). With regions of the brain that govern impulse control and motivation not yet fully formed, adolescents are uniquely vulnerable to the development of addictive behaviours (Gladwin et al., 2011). It is natural, therefore, that concerns exist in relation to how CYP might be choosing to spend their time and to what extent they may be exposed to potential danger during a time of increased freedoms and reduced adult supervision. Although attempts have been made to provide reassurance and balance (Uhls, 2015), current levels of concern around the possible developmental consequences of CYP's exposure to digital technologies have culminated in what appears as a particularly intense form of 'moral panic' (Cohen, 1972).

It is claimed that digital dependence is disconnecting CYP from the 'real' world; rewiring their brains, shaping their emotions, and changing their behaviours in the process (Greenfield, 2015). In response to such alarming narratives and declinist arguments, it is important to take a considered view of the available empirical evidence.

#### Existing Literature and Previous Reviews

Epidemiological cross-cohort comparisons have provided compelling evidence of an ongoing decline in child and adolescent mental health across high-income countries (Collishaw, 2015; Collishaw et al., 2010). Over the past decade, rates of depression, anxiety, loneliness, self-harm, and suicide have all increased considerably in both the United

Kingdom (UK) and the United States (US) (Cybulski et al., 2021; Kalb et al., 2019; Mercado et al., 2017; Twenge et al., 2021). To fully understand any potential underlying causes of this cohort effect there is a need to look beyond recognised risk factors for poor mental health and consider the potential impact of any broader cultural shifts and influences (Gunnell et al., 2018).

Whilst a range of potential contributory factors have been considered (Collishaw, 2015; Hagell, 2012), focus has been increasingly directed towards the concurrent widespread use of digital technologies (Booker et al., 2018; Haidt, 2024; Sedgwick et al., 2019; Twenge & Campbell, 2019). An extensive amount of quantitative research has highlighted the apparently deleterious effects of smartphone and social media usage across cognitive, emotional, social, and physiological domains (Crone & Konijn, 2018; Kelly et al., 2019; Thornton et al., 2014; Twenge and Farley, 2021; Wacks & Weinstein, 2021). Systematic reviews and meta-analyses conducted in the area have noted statistically significant correlations between adolescent smartphone and social media usage and poorer mental health (Abi-Jaoude et al., 2020; Alonzo et al., 2021; Cataldo et al., 2021; Shannon et al., 2022).

Other reviews in the area have, however, questioned the quality of published studies and the validity of any associated conclusions (Erfani & Abedin, 2018; Orben & Przybylski, 2019). An over-reliance on cross-sectional research and unwarranted assumptions based upon population level data have been put forward as key limitations (Coyne et al., 2020; Heffer et al., 2019). The reliability and validity of methods used to assess the frequency with which people engage with their devices have also been questioned (Groshek, 2018). A recent umbrella review noted the various methodological limitations of included studies and discussed how contrasting approaches to the application of statistical analysis had led to different conclusions being drawn from the same dataset (Valkenburg et al., 2021). Other authors have highlighted the widespread use of correlations based around weak effect sizes,

that fail to distinguish cause from effect and therefore have limited practical or clinical significance (Odgers & Jensen, 2020; Webster et al., 2021).

It may well be the case that insufficient consideration has been given to the positive impact of digital technologies on the lives of CYP (Shapiro & Mergolin, 2014). Smartphones and the social media platforms to which they provide access are not intrinsically harmful and any broad conclusions about their negative effects may be unjustified (Houghton et al., 2018; Przybylski & Weinstein, 2017). Overly negative rhetoric risks creating a fear among adults in relation to devices around which they possess limited understanding (Boyd, 2014) and, ultimately, is unhelpful to parents, caregivers, and professionals working in the field (Bell et al., 2015; Betton & Woollard, 2019).

Despite considerable efforts, there remains a lack of any consensus with regards to the relationship between CYP's use of digital technologies and their emotional and physical wellbeing (Bozzola et al., 2022; Keles et al., 2020). Any impact is likely to vary from adolescent to adolescent, dependent on nature of usage and a range of complex contextual factors (Beyens et al., 2020; Heffer et al., 2019; Valkenburg et al., 2022; Viner et al., 2019). To move the conversation forward, research needs to provide a deeper and more nuanced understanding of the different ways in which adolescents engage with digital technologies (Odgers et al., 2020).

#### The Role of Qualitative Research

Whilst quantitative research has provided insight into the extent of smartphone and social media usage, it has not been able to capture the complexity of adolescent experiences. Qualitative methods are therefore needed to elaborate on previous findings and capture the personal experiences and perspectives of adolescent social media and smartphone users (Fox & Moreland, 2015).

A growing body of qualitative research carried out in the area has gradually started to provide such insight. What remains outstanding, however, is a synthesis of this research (Dickson et al., 2018; Odgers et al., 2020); one that pulls together somewhat isolated findings and gives adolescent voices a more prominent role in the wider debate.

#### Aims of the Current Review

Using a meta-ethnographic approach (Noblit & Hare, 1988), the current review intends to synthesise findings across qualitative studies exploring how adolescents reflect on their relationships with smartphones and social media. Specific focus will be directed towards understanding to what degree adolescents feel in control of their use of digital technologies and an exploration of any factors that appear to enhance or diminish their sense of personal agency.

#### Methods

The study had three stages: (1) systematic search of the literature; (2) critical appraisal of selected studies; (3) qualitative synthesis using techniques of meta-ethnography, as originally described by Noblit and Hare (1988).

Whilst various methods are available for the synthesis of qualitative research (Barnett-Page & Thomas, 2009), it was felt that meta-ethnography was best suited to the aims of the current study and the development of additional knowledge in an area that is rapidly evolving (Toye et al., 2014). Whilst meta-ethnography supports the preservation of primary data (Dixon-Woods et al., 2004), it also provides space for conceptual innovation and the development of explanatory models that go beyond mere aggregation of original findings (France et al., 2016; Thorne, 2015).

Although Noblit and Hare (1988) outline seven phases (see Table 1), they are not intended to be discrete and meta-ethnography is not a linear process. Work across each of the

phases runs in parallel with one another and there can often be a considerable degree of overlap (Sattar et al., 2021).

#### Formulating a Research Question

The initial stage required the identification of a specific area of interest. This began with an exploration of the growing body of literature based around CYP's engagement with digital technologies and its impact on their mental health and emotional wellbeing. A considerable imbalance between the amount of quantitative and qualitative research was observed, which it was felt contributed to a notable absence of young voices.

Through a focus on the available qualitative literature, it became apparent that when reflecting on their relationship with digital technologies, CYP's experiences were often diverse and complex. The various studies and their findings appeared somewhat isolated from each other, and it was felt that it would be beneficial for them to be brought together through the process of qualitative synthesis (Denzin et al., 2011).

The decision was made to focus on adolescents as a cohort as it was felt that there were particularly interesting developmental considerations for this group, and conceptually rich data would be provided. The final guiding definition for the meta-ethnography was therefore 'published qualitative papers in which adolescents discussed their engagement and relationships with smartphones and/or social media'. Papers determined to fit within this definition were then closely analysed to note any references made with regards to usage and notions of control and agency.

#### Data Sources and Search Strategy

To locate potentially relevant qualitative studies, in February 2022 a systematic search was conducted across five electronic databases: PsycINFO, Medline, CINAHL, PubMed, and Academic Search Ultimate. Medical Subject Headings (MeSH) and thesaurus terms were combined with both keywords and the Boolean logic terms "or" and "and". Equivalent

search strings were created initially for PsychINFO (see Figure 1) and then subsequently for the remaining individual electronic databases (Appendix A).

It was recognised that within qualitative reviews of this nature, factors such as inappropriate or inaccurate use of indexing and keywords mean there is a potential for searches to be over-inclusive and for an unmanageable number of results to be returned (Evans, 2002). Consideration was therefore given to how to best increase sensitivity and effectively balance recall against precision (Shaw et al., 2004).

The nature of titles, content of abstracts, and inconsistent indexing practices have all been identified as key difficulties of qualitative literature searching (Evans, 2002; Murphy et al., 2006). To minimise the risk of relevant studies not being included, the search process was further supplemented by hand searches of relevant journals and the reference lists of key qualitative studies. Meetings were held with an information professional at Lancaster University to support the development of an effective search strategy.

The initial database searches returned 14,110 results. A further nine potentially relevant studies were later added as a result of hand searching. Any duplicates were removed, and the search was refined by screening all titles, abstracts and full texts as required. Due to a notable delay in completion of the study, the initial database search was re-run, allowing for any papers published in the interim period to be considered for inclusion. This additional search was carried out two years subsequent to the initial search, in February 2024. Results were compared to the original set of studies and any newly identified papers were screened. This and further hand searching highlighted an additional five papers that were selected for inclusion in the synthesis. The full process of study refinement and selection is depicted in Figure 2.

Twenty-five papers were included in the synthesis, all of which were published post 2014 (see Table 2). Included studies had to use qualitative methods of data collection and analysis and be written in the English language.

# Assessing the Quality of Studies

In line with guidance from The Cochrane Qualitative and Implementation Methods Group (Noyes et al., 2018) an evaluation of relevant papers was completed prior to the synthesis. The ten-item Critical Appraisal Skills Programme (2018) (CASP) framework for qualitative studies (see Table 4) was utilised for this process.

As in previous reviews (Toye et al., 2014), the decision was made to assign a numerical score to each item on the CASP checklist, indicative of whether it was felt that the question had been (1) not adequately addressed, (2) partially addressed, or (3) fully addressed. With the initial two items on the CASP intended to be screening questions they were excluded from the scoring. This enabled a score between 8 and 24 (for the eight remaining questions) to be assigned to each paper. Tension between assessing quality and relevance was acknowledged (Dixon-Woods et al., 2007) and scores were used to help with the organisation of papers rather than for the purposes of inclusion or exclusion. Four of the final papers were randomly selected for assessment by a second-rater to assess for inter-rater agreement. Similar scores were noted across each.

#### Phase Three – Reading the Studies

The conceptual output of any qualitative synthesis can be shaped considerably by the order in which papers are read (Atkins et al., 2008). Due to the rapid and constant evolution in digital technologies, it was felt that chronological reading and comparison of papers would be the most suitable option. Papers were read repeatedly to aid the process of familiarisation and close attention was given throughout to the detailed accounts adolescents provided in relation to their use of and relationship with smartphones and social media.

#### Phase Four – Determining How the Studies are Related

A standardised form was used for the verbatim extraction of primary data, with the intention of helping to preserve original meanings. To differentiate between the experiences of adolescent participants and the primary authors' interpretations, Schütz's (1962) conceptual notion of first and second order constructs was used (see Figure 3). At this stage, a third column was included on the data extraction form so that an initial list of emerging themes could be captured (see Table 5). A thematic analysis of these emerging themes was then conducted so that they could be grouped together into categories of shared meaning.

#### Phase Five – Translating the Studies Into One Another

This stage of the meta-ethnography involved a shift between working within accounts to across accounts (Lee et al., 2015). As outlined by Noblit and Hare (1988), using an approach similar to the method of constant comparison (Glaser & Strauss, 1967), previously identified initial categories (see Table 6) were juxtaposed across each paper in turn.

Categories derived from paper one were compared with those from paper two and then the syntheses of these papers was compared with paper three. Comparison of this nature was continued until each of the twenty-five papers had been considered.

This approach enabled further understanding of how papers were related and helped to inform the type of synthesis that would subsequently be carried out (France et al., 2014). Namely, a reciprocal translation that acknowledged the similitude of concepts across the different studies, and a subsequent line of argument synthesis that sought to further extended understanding of the phenomena under review (Luong et al., 2023).

The comparison between papers provided the foundation for the abstraction of second order constructs and identified categories into third order constructs. Detailed analysis of these final constructs (see Table 7) and the relationships between them allowed them to be

gradually grouped together to support the emergence of final themes that both capture shared meanings and transcend the findings of individual studies.

# Phase Six – Synthesising Translations

This stage of the meta-ethnography describes each of the final conceptual categories and related concepts that resulted from the translation process. A total of five categories were developed.

#### Results

#### Theme 1: Social connection – enhancement and disruption

Adolescents described the positive role that smartphones and social media platforms played in their lives, particularly with respect to enhancing their sense of social connection (S2, S5, S6, S8, S13, S14, S21-23). The ever-growing range of opportunities afforded by digital technologies was noted by adolescents to have facilitated expansion of their social networks (S1, S2, S4-S6, S11, S21, S22) in ways that may not otherwise have been possible "I met half my friends on social media. You talk to people you wouldn't normally talk to face-to-face" (S2). When seeking to establish relationships or manage transitions to a new environment, opportunities to initiate contact online prior to meeting face-to-face were highly valued (S4, S11, S21) "It's not as stressful as what it could have been ... it doesn't feel like you just met for the first time" (S21).

The effortless and continuous nature of communication via social media was noted by adolescents to support the strengthening of existing connections (S2, S6, S9, S16, S22-S25). A healthy overlap between offline and online social networks was described, with contact through social media allowing the development of relationships that were described by Throuvala (2019b) as being "symbiotic" in nature "I feel our friendship wouldn't stay the

same [without social media] even though we see each other, like quite a lot, social media kind of keeps us together even when we are not together" (S2).

The ease with which different online groups can be set up and accessed meant that social media was viewed as a key tool in the organisation of offline activities (S2, S5, S8, S14, S23, S20) "First thing in the morning, I go online, to see who is in there, to let them know I am here, and to see if we have any plans" (S20).

Adolescents noted how the ability to connect online expanded their social worlds and allowed friendships that might otherwise have faded to endure (S7, S8, S10, S22) "I live far away from my friends. I'd speak to them on Snapchat instead of texting ... we are across the world from each other, we can still talk" (S10).

Despite the various benefits of smartphones and social media in relation to the enhancement of social connection, frequent reference was also made to the ways in which they can negatively impact upon relationships (S1, S4-S7, S16, S20) "These people are all on their phones, they are unsocial ... it is cutting up the social aspect of life" (S10).

Social disruption was often caused by an apparent preference for online interaction despite being in the presence of others (S1, S4-S7, S10, S16, S20, S23), with adolescents frustrated by the tendency for peers to withdraw to their smartphones and switch off during offline social events (S1, S4, S6, S7, S10, S12, S20) "All of us we just went over to our friend's house to hang out and the first hour everybody was just on their phone ... I don't think anybody said a word" (S1).

Unsociable behaviour was observed to negatively impact upon the perceived quality and closeness of friendships. 'Phubbing', a term used to denote the act of snubbing somebody through use of a mobile phone, was described as being something that people did unconsciously and without full appreciation of its impact (S2, S3, S10, S17) "Social media

can take you away from talking to people, like you can constantly be on your phone and not realize you are shutting people out" (S2).

So pervasive has such behaviour become that adolescents highlighted steps taken at social events to impose external controls "If we were at a sleepover and we actually wanted to be sociable we would have to collect everyone's phones" (S19). For some adolescents, their usage of smartphones and social media dampened any desire to engage with friends face-to-face. Many referenced how immersion in digital spaces could contribute to a deterioration in their social skills and levels of confidence in offline settings (S3, S5, S14, S21) "You know you don't need to go out and socialise when you've got everyone at your fingertips, um ... but actually, we are humans, and we do need actual interaction" (S14).

### Theme 2: Sense of freedom diminished by growing pressures and shifting social norms

Adolescents described the opportunities provided by smartphones and social media for group affiliation, peer support, and connection to others with shared interests and passions. The ability to converse in a less inhibited way about sensitive topics was highly valued "You can open up to one of your close friends and really talk about how you're feeling" (S2).

Many adolescents noted how digital technologies helped them with the development of social skills (S2, S7, S16, S23, S25), particularly those that typically struggled with shyness or introversion in offline settings. Fear of judgment was often thought to be reduced online, and social interaction deemed to be less intimidating "I'm really bad at talking to people in real life but online it's so much easier" (S22).

Unfortunately for many adolescents, any sense of freedom experienced in relation to their use of social media appeared to be increasingly squeezed by shifting social norms that govern online interactions, and an intense and relentless pressure to respond to messages or online content (S1, S4, S9, S22, S24). A sense of obligation was frequently described (S1,

S3-5, S10, S22, S24) that detracted from adolescents' enjoyment of social media and impacted on their overall sense of control and personal agency:

"If my friend has posted a picture of herself, I feel that I have to comment on it, just because ... it's mandatory. But it's not. I don't know, it's weird. It's just the way it is, a culture that has evolved." (S3)

The relentless nature of social media was challenging for adolescents, with expectation for them to always be online and available both stressful and difficult to manage (S1-S4, S8, S21-23) "It's hard if you just want time alone to yourself because it feels like it's expected that you respond to people's texts and stuff, and that can be really stressful" (S6).

Many adolescents described being fearful that a lack of immediate response might have a negative impact on their relationships with peers (S2, S4, S8, S12, S17) "If you don't reply to someone, they get so mad at you" (S2). Having to second guess potential reactions to responses was noted to be mentally exhausting, with adolescents often left having to balance taking time away from devices against a fear of potential interpersonal consequences (S2, S8, S12, S24-25). Fear of missing out (FoMO) was a key driver of compulsive social media usage (S3, S9, S24) as adolescents strived to keep on top of what might be going on around them and navigate a constant perceived threat of social exclusion "I think I would have become very stressed [without social media]. And that is because I think I'm afraid of the feeling of being left out" (S3).

Social media was described by many adolescents as being almost mandatory (S2, S4, S7, S12, S20, S25), with any option to abstain from use effectively taken away from them if they wished to remain part of any wider groups and not feel isolated from peer support:

"If you've not seen something that everybody else has seen ... it's sort of annoying because you don't know what they're talking about. Then it, sort of, leads to exclusion and you feel paranoid that you're not included in that." (S12)

#### Theme 3: Compulsive patterns of use and the struggle for balance

Many adolescents, although self-professed avid users of social media, did not express any notable dissatisfaction with regards to screen time, feeling like they enjoyed the benefits without incurrence of any substantial negative impact "I have managed to combine it [social media and other activities] in a way that I don't neglect my studying or my activities. It's simply that I have some free time that I spend it online" (S16).

Frequently, adolescents also described how over time they had recognised the need to consciously develop strong internal resources of self-control to mitigate against any potentially unhealthy reliance. References to smartphones and social media tended to be neutral in nature, with adolescents describing them as software and hardware that could be utilised as one wished, dependent on a certain degree of maturity and experience "Facebook isn't bad, Facebook isn't good. It's a piece of software that's what people don't seem to realise, it's how you use it" (S14).

Adolescents spoke of having learned from experience and increased awareness of the need to regularly re-evaluate their relationship with smartphones and social media. Such reflections were shaped by an understanding of both the risks and addictive nature of digital technologies. Need for constant modification and the revision of ineffective patterns of use were described. Adolescents often noted having consciously stepped back from an initial wave of enthusiasm or phase of excess. Once novelty had waned, use tended to become more moderate, with any sense of dependency left behind:

"I was dependent on Facebook for a summer, and I decide to detox. I somewhat managed to do that ... I would go online for an hour and then I would say to myself "tough it out". I did not strictly time myself but rather I tried to fix my schedule."

(S16)

Following awareness of growing negative impact and a need to more effectively moderate their use of digital technologies, adolescents described undergoing a process of effortful self-correction paralleled with the gradual development of self-control strategies. For some adolescents, a more balanced approach had been shaped by a re-evaluation of their priorities and what felt most important to them "I told myself that I should reduce time [online] and tried to fill my time with some other activities, such as spending more time with my family" (S20).

Despite such descriptions, adolescents who felt able to effectively regulate their use of smartphones and social media appeared to be in the minority. For the most part, notable difficulties with moderation were experienced with many finding it increasingly challenging to limit time spent on devices (S3, S5-S8, S17, S21-22). Adolescents described how any initial sense of control with regards to the use of smartphone devices and social media tended to quickly fade (S3, S6, S9). Despite concerted efforts to 'switch off' adolescents felt an often-irresistible pull to reunite with their devices and reconnect "It's a bit hard to you know, to stop it because it becomes an addiction" (S11).

Adolescents described how a creeping sense of attachment and dependency took hold as they no longer felt able to survive without their smartphone "Well, addicted. So, it becomes a very important thing that I need in my life. If I don't have my mobile phone, I feel like I am dying" (S7).

Many adolescent reports indicated the presence of a tension between high levels of usage and awareness of the associated risks (S4, S8, S20, S25). Adolescents also described a

sense of fatigue that accompanied their use of social media (S1, S6, S24), due in large part to the draining nature of checking behaviours and sense of obligation to respond to content, reply to messages, or maintain 'streaks'. Passive usage and unconscious scrolling through endless algorithmic driven content was also noted as being mentally exhausting "At some point you become tired ... it's as if you ate the same thing every day ... I'd rather be in real life." (S16).

Frequent references were made to the shadow that addiction to social media and smartphones casts in the lives of adolescents, with some describing having experienced physical side effects:

"So, when I play with my mobile phone for too long, yes, I feel dizzy, pain in the eyes, and then my body feels stiff, not feeling well." (S7)

Structural mechanisms and persuasive design features utilised by developers of digital technologies appeared to be key drivers of compulsive use. Adolescents noted how a constant stream of notifications and digital prompts, that felt impossible to ignore or resist, had led to the development of unconscious checking behaviours that permeated every aspect of their daily lives "It's more of an interval thing ... open, check, then close ... [almost] every other minute" (S11).

#### Theme 4: Negotiating an ever-expanding world of digital content

Adolescents spoke positively about how digital content tailored to their individual needs not only provided news and entertainment but helped broaden their interests (S1, S4, S18, S23). The constant innovation of digital technologies and growing array of social media platforms appealed greatly to adolescents who saw it as providing them with choice and flexibility (S18, S23).

Adolescents also described how the digital content they accessed through social media was often a source of inspiration, particularly with respect to creative pursuits (S6,

S23). Opportunities to interact with creative minds around the world and be introduced to new ideas was noted to be a key strength of digital technologies:

"I usually prefer to be on social media as much as I can be without it interrupting my normal life ... it's just a creative outlet that I really love to use as much as I can, because it makes me happy." (S6)

Despite such positives, adolescent descriptions of digital content were often focused more on the darker aspects and negative impacts upon their wellbeing and sense of personal agency. Many noted concerns related to the permanency of digital content, and a fear of what might happen once information had been posted online and made available to others (S3, S8, S9, S10, S25) "You have it in the back of your mind when you think about it. "Oh, shit. I sent that photo. Now he or she has it." (S3).

The term 'virtual panopticon' was used by one group of researchers (Kennedy & Lynch, 2016) to adeptly reflect the sense of being constantly watched from all sides that adolescents experience during time spent online. Whilst adolescents described positively the ability to keep up with friends' day-to-day activities, they also noted the negative impact of people always knowing where they were. Akin to a form of online surveillance, various aspects of digital technologies allow movement to be tracked and have created an expectation that adolescents and their whereabouts remain visible to others at all times:

"I think many of us have gotten used to it ... being tracked online ... you are aware of it, but it happens to everyone regardless, so you can't really do anything about it unless you just decide to not use social media anymore." (S22)

Despite the options within social media sites to block certain users and their posts or messages, adolescents described how difficult it can be to avoid exposure to harmful content

that 'triggers' or evokes distress (S6, S21). Posts related to self-harm or disordered eating were noted to be particularly prevalent and destabilising "There's a lot of self-harm accounts out there that sometimes I stumble upon that's like ... and that can be really triggering" (S6).

Adolescents described a range of responses to such content that included having to temporarily withdraw from online activity. Many felt obligated to reach out and provide help and support to any individual thought to be affected or vulnerable. Some adolescents referenced ways in which their use of social media might change depending on their mood and state of wellbeing, noting an increased tendency to less consciously and carefully navigate the online environment when stressed, anxious, or low in mood.

The negative impact of online bullying or 'trolling' was also something that was frequently referenced by adolescents (S2, S4, S7, S25). Many described how the intense and inescapable nature of social media meant that bullying extended beyond the boundaries of educational environments. The potential for social media users to hide behind anonymous accounts was also a notable cause for concern for many "They don't have to be face to face with that person, so they send whatever they want. People aren't scared of what they say behind the screen" (S22).

#### Theme 5: Navigating the storms of adolescence

Adolescents described how they used social media to relieve boredom or boost their mood in response to challenging periods or life events (S3, S21). Online content and connection to friends provided a welcome distraction from day-to-day stresses and demands "Social media is like an escape from if you've been revising ... you can take your mind off it or whatever by getting on your phone or listening to music and stuff like that" (S15).

Social media was also said to provide adolescents with opportunities for selfreflection with many describing having evoked positive memories when looking back through old posts or messages. Enhanced privacy settings within different platforms also allowed adolescents to use social media as a process akin to journalling "You can make posts private so that only you will see it. So, you can pretend that you're posting something, but no one's going to see it but your account" (S16).

Adolescents described opportunities provided by social media for group membership and the safe and supportive development of identity, aided greatly by the provision of access to like-minded people. Many noted feeling emboldened to embrace a sense of difference in supportive online spaces where they felt less exposed to judgement or negative comments. Whilst the broader online environment might be associated with exposure to unwanted comments and a loss of control, adolescents described smaller pockets in which their experiences were typically more positive due to increased confidentiality, anonymity and acceptance "It makes me feel good because I'm like, 'Well, someone agrees with me.' And I was like, 'maybe my parents don't agree with me, but they do'" (S16).

With respect to development of identity, the asynchronous nature of online communication was felt by many adolescents to provide greater opportunities for considered responses and the careful construction of an online persona that more closely represented how they would like to be seen by others "You have the time to think about what you are going to say. You can edit things and be funny and sarcastic" (S19).

Social media was also noted to provide adolescents with opportunities to develop social skills within what was deemed a safe space. Importantly, adolescents felt that these skills often transferred to offline environments as their confidence grew and communication came to feel less intimidating:

"I found out that through the internet I can improve the way I communicate with others. In a good way, I became more open ... it became easier to talk to someone, online and in real life. And this has many advantages for me." (S20)

Adolescents described how the sense of connection experienced within online spaces could compensate for a lack of perceived support within their home and family environments. Difficult family dynamics or parents/caregivers being busy with work or other responsibilities could leave adolescents feeling isolated. In such cases, social media often provided an alternative space and a key source of comfort:

"Parents are troubled nowadays so they are not in the mood to say goodnight, nor do they have the time to attend to you. So, you feel as if you have been neglected and you slip away in the internet so you can talk to someone." (S20)

Whilst various normative developmental processes appeared to be aided by adolescents' engagement with smartphones and social media, many also noted how they felt that their use of digital technologies had disrupted personal growth and negatively impacted upon their emotional and physical wellbeing. Adolescents described how their use of social media had shaped an unhealthy reliance on external validation, with visible metrics such as 'likes' becoming a unit of comparison to others and often contributing towards feelings of inadequacy. "When you get all those likes and everything, that's going to make you feel good, but then the second you don't get, I don't know, 16 likes on your picture, that's going to make you feel bad" (S13).

Adolescents described a pressure to carefully manage or curate their online identity and noted finding it difficult not to engage in negative social comparison when viewing the online profiles of peers "I often see other people who have many advantages and more than me. I feel insecure. Why I am like this? When will I be like them? I always feel inferior and ugly" (S5).

Issues with sleep were widespread (S1-S4, S5-S9, S18, S21, S23-4) with many adolescents noting how difficulties disengaging from digital technologies at night-time often

delayed the onset of sleep and impacted upon their ability to function effectively the following day "You can't stop, like people are on it late at night, and then it makes your brain more active so you can't go to sleep, and people come to school like zombies" (S1).

Fragmented attention, an inability to maintain focus, and a growing tendency towards prolonged episodes of procrastination, all linked to the usage of smartphones and social media, were also noted to be a hindrance to academic performance (S2, S7, S20).

Adolescents impacted in this way noted it to be a particular source of conflict with parents or caregivers "Honestly, my academic performance is deteriorating ... since I become familiar with social media I never study. I just want to play games. When my parents told me to study, I get angry" (S7).

Adolescents also referenced the links between the use of digital technologies and a lack of downtime. An absence of moments throughout the day during which adolescents could disconnect and 'switch off' from a digital world were noted along with an accompanying frustration around not being able to explore thoughts and spend time alone without digital disruption. "I think that it's very positive for your mental health to explore your thoughts and figure out who you are and stuff like that. And that is something that you lose" (S3).

#### **Discussion**

The methods of meta-ethnography were utilised to produce a conceptual synthesis of twenty-five studies exploring adolescents' relationship with and use of digital technologies. Against a backdrop of increasingly alarming narratives, primarily focused on the negative impact that smartphones and social media are purportedly having on the development of young minds, focus was directed towards how adolescents themselves reflect on their usage. Five themes developed capture the nuanced nature of young people's interactions with digital technologies, and the complex interplay that exists between factors that both enhance and

diminish their sense of personal agency. Across various life domains, digital technologies appear to empower and imprison CYP in equal measure.

Usage of smartphones and social media were found to both enhance and disrupt adolescents' sense of social connection. Due to opportunities provided for the expansion of social networks and the strengthening of existing connections, digital technologies were viewed to help facilitate the creation of what has been described as bridging and bonding social capital (Lin et al., 2001). Whilst the value of virtual friendships has been questioned (Ryan et al., 2017), adolescents positively referenced a growing array of features unique to favoured social media platforms that help them extend communication and develop feelings of closeness beyond what would be possible in offline situations alone. Digital technologies were also found to help adolescents navigate transitions to new environments and organise offline activities.

In contrast, a diminished sense of control was noted by adolescents in relation to the ways in which digital technologies often disrupted in-person social interactions. Unsociable behaviour driven by overinvolvement with smartphones was noted to be commonplace. Further, an apparent preference for online interaction was said to result in the increasing tendency for adolescents to withdraw to their smartphones in offline settings, limiting the quality of in-person social interactions. Adolescents also described how their use of smartphones was often automatic and how a creeping reliance on digital devices had developed to the detriment of their social skills and ability to be present during offline social events.

Adolescents described various unique opportunities they felt were enabled through their use of digital technologies. Particularly valued was the ease with which they could access community spaces and connect with others around shared interests. In support of the finding that online communication allows people to act more in line with their authentic

selves due to reduced fear of judgement (Liang et al, 2023), adolescents felt empowered by the provision of safe and private online forums that promote reciprocal self-disclosure. Consistent with social compensation theory (Valkenburg & Peter, 2009) and the 'poor get richer' hypothesis (O'Day & Heimberg, 2021), adolescents described how online communication helped develop their sense of competence, a key aspect of psychological wellbeing (Gómez-López et al., 2022) that can have a lasting impact into adulthood (Romppanen et al., 2021).

Any sense of freedom, however, was tempered by the relentless nature of social media and a growing sense of pressure created by shifting social norms and the expectation to respond to messages or content. The threat of social exclusion loomed large for many adolescents, leaving them feeling that the use of digital technologies was mandatory for their generation. Factors found to be key in the development of compulsive use such as fear of interpersonal consequences and fear of missing out (Reer et al., 2019; Roberts & David, 2020), were experienced by many adolescents to the detriment of their sense of personal agency.

Many adolescents described a sense of control in relation to their use of digital technologies and the enjoyment of various benefits without substantial negative impact.

Whilst some described having had to learn from experience and the development of strategies that promoted more balanced patterns of use, others noted a revaluation of priorities and a conscious change of focus towards what they felt were more meaningful pursuits. More common though were descriptions of compulsive use and difficulties maintaining any degree of moderation that stripped away personal agency. In line with previous research, many adolescents noted how limited access to smartphones and social media had led them to experience withdrawal symptoms (Stieger & Lewetz, 2018). Adolescents impacted in this

way described how problematic usage contributed towards avoidance of daily responsibilities and a high degree of internal conflict.

Many adolescents described how social media platforms provided a source of creative inspiration and helped to broaden their interests. In support of the idea that adolescents are active agents who carefully select from the digital technologies available to them (Coyne et al., 2015), many described feeling they were the beneficiary of constant innovation and an ever-increasing array of platforms with in-built features tailored to their needs. In contrast, the pitfalls and dangers of digital content were also widely referenced and noted to play a central role in a loss of agency. Unwanted and unexpected exposure to triggering content was a particular source of distress for adolescents, as was cyberbullying. Adolescents also described a loss of control in relation to ownership of their personal data and right to privacy.

#### A More Balanced Approach Going Forward

CYP are facing unprecedented challenges with respect to the increasingly prominent role that digital technologies are playing in their lives and the potential impact on their development. Consideration needs to be given to how we help CYP develop the skills required to navigate a future that is inevitably going to be dominated by use of digital technologies and time spent online, supporting them to feel empowered and in control of their usage.

#### Effective Regulation

The developers of digital technologies have repeatedly neglected their duty of care and failed to accept responsibility with regards the regulation of online spaces from which they generate such enormous financial profits (Wong & Bottorf, 2023; Yar, 2018). A purposively designed and comprehensive regulatory framework that holds developers of digital technologies to account needs to be developed and implemented. To help counter the

tendency for CYP to actively resist attempts at technological governance (Grealy, 2018), they need to be at the forefront of discussions, confident that their voices have been heard and experiences acknowledged.

Guidance around the use of mobile devices within schools has been put forward (Department for Education: DfE, 2024) and some education providers in the United Kingdom have already introduced a statutory ban (Milmo, 2024)

### Digital Literacy

Existing educational approaches fail to adequately prepare CYP for a future that will be dominated by technology and time spent online (Head et al., 2020). Improvements in digital literacy are key to promoting the safe usage of online spaces. Educational interventions should focus on helping CYP to understand the potential pitfalls of time spent on social media, factors that can lead to the development of compulsive use, and ways in which developers are trying to exploit certain vulnerabilities.

#### Implications for Clinical Practice

Digital technologies are evolving so rapidly that it is difficult for those seeking to support and nurture CYP to maintain pace and fully understand the nature of usage. However, the relationships that professionals working alongside CYP are able to develop, place them in a unique position and provide opportunities for open and balanced discussions around the role that digital technologies are playing in lives and ways in which they might be aiding or impacting negatively upon healthy development. There is a tendency for CYP to absorb narratives around their use of smartphones and social media despite them not necessarily reflective of their experiences (O'Reilly et al., 2018). The creation of spaces in which CYP feel able to reflect honestly on their relationships with digital technologies, without fear of judgement and is likely to promote more meaningful conversations that can

effectively inform the wider debate. In this and many other areas, the voice of CYP needs to be amplified. Their insight is of incredible value and their lived experiences unique.

#### Conclusion

There are various factors that appear to have potentially contributed to a rapid rise in difficulties with mental health and emotional wellbeing among CYP, they include increased academic pressures, changes in family structures, and a range of complex socioeconomic and cultural influences (Hagell, 2012). Despite this, it is difficult to ignore the potential impact of widespread usage of smartphones and social media given the rapid rise and their apparent ability to disempower CYP and draw them towards compulsive patterns of use.

Responsibility for the development of young minds cannot be abdicated to the developers of digital technologies. Increased educational interventions and effective regulation needs to be in place so that CYP can operate safely within digital spaces, confident that they are in control and adequately protected.

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# **Tables and Figures**

Table 1. The seven phases of Noblit and Hare's (1988) meta-ethnography approach

Phase	Description
Phase 1: Getting started	"Identifying an intellectual interest that qualitative research might inform" ([15], p.26). Th focus of the synthesis may be revised through reading interpretative qualitative studies.
Phase 2: Deciding what is relevant to initial interest	Study selection should be "driven by some substantive interest derived from comparison of any given set of studies" ([15], p.28). Searches for studies need not be exhaustive: "unless there is a substantive reason for an exhaustive search, generalizing from all studies of a particular setting yields trite conclusions" ([15], p.28).
Phase 3: Reading the studies	The repeated reading of studies and noting of metaphors with close attention to details in the studies and what they tell you about your area of interest ([15], p.28).
Phase 4: Determining how the studies are related	Noblit and Hare recommend that reviewers create "a list of key metaphors, phrases, ideas and/or concepts (and their relations) used in each account, and [to] juxtapose them" ([15], p.28) in order to make an initial assumption about how the studies relate to one another. This informs the type of synthesis that will be carried out – a reciprocal or refutational translation or line of argument synthesis.
Phase 5: Translating the studies into one another	The metaphors and/or concepts in each account and their interactions are compared or 'translated' within and across accounts while retaining the structure of relationships between central metaphors/concepts within accounts. The translations taken together are "one level of meta-ethnographic synthesis" ([15], p.28). These are systematic comparisons and reciprocal translation is key to a meta-ethnography.
Phase 6: Synthesising translations	If there are many translations from phase 5 these can be compared with one another to see if there are common types of translations or if some translations or concepts can encompass those from other studies. "In these cases, a second level of synthesis is possible, analysing types of competing interpretations and translating them into each other" ([15], p.28) to reach new interpretations/conceptual understandings.
Phase 7: Expressing the synthesis	Tailoring the communication of the synthesis to the intended audience's culture and language so that it is intelligible and meaningful to them – "the written synthesis is only one possible form" ([15], p.29).

Table 2. Journals contributing to the meta-ethnography and number of papers identified

Journal	Papers (n)
International Journal of Environmental Research and Public Health	2
Journal of Occupational Science	1
Computers in Human Behaviour	2
Journal of Adolescence	4
Journal of Psychosocial Research on Cyberspace	1
Journal of Adolescent Research	1
British Medical Council Paediatrics	1
British Medical Counsel Psychology	1
Journal of the National Sleep Foundation	1
American Journal of Men's Health	1
Clinical Child Psychology & Psychiatry	1
Nurse Media Journal of Nursing	1
Doctoral Thesis	1
Canadian Review of Sociology	1
Journal of Mental Health	1
BMC Public Health	1
International Journal of Qualitative Studies on Health and Well-	1
Being	1
JMIR Mental Health	1
Journal of Adult and Adolescent Literacy	1
Social Media and Society	

Table 3. Study characteristics for each of the 25 final papers included in the review

Title	Authors	Year	Journal	Participants	Population	Data Collection	Data Analysis	Aim	Relevance Score	CASP 'Scor
Smartphone and Social Media Addiction: Exploring the Perceptions and Experiences of Canadian Teenagers <sup>S1</sup>	Adorjan & Ricciardelli	2021	Canadian Review of Sociology	115 adolescents (aged 13 to 19 years)	Canada	Focus groups	Grounded Theory	To explore adolescent participants' experiences and perceptions in relation to the idea that they are addicted to their smartphone devices and social media platforms.	9	22
Exploring the "Social" in Social Media – Adolescent Relatedness— Thwarted and Supported S2	West, Rice & Vella- Brodrick	2021	Journal of Adolescent Research	36 (Year 9) students (Aged 15 years)	Australian (Melbourn e) schools	Rich picture mapping activity and Focus Groups	Reflexive Thematic Analysis	To capture adolescent participants' perspectives on the ways in which social media impacts their relationships and connection to others.	9	23
How Do Norwegian Adolescents Experience the Role of Social Media in Relation to Mental Health and Well- Being: A Qualitative Study S3	Hjetland et al.	2021	British Medical Counsel Psycholog y	27 adolescents (aged 15-18 years)	Norway – two senior high schools	Focus groups	Thematic Analysis	To investigate adolescents' lived experiences of using social media.	8	23
Social media use and social connectedness among adolescents in the United	Winstone, Mars, Haworth & Kidger	2021	BMC Public Health	24 adolescents (aged 13-14)	Two English inner-city secondary schools	In-depth paired and individual interviews	Thematic Analysis	To examine the complex relationship between social media use and feelings of	7	23

Kingdom: a qualitative exploration of displacement and stimulation <sup>S4</sup>								connectedness to family and peers.		
Internet Addiction Among Male Adolescents in Indonesia: A Qualitative Study ss	Rakhmawati et al.	2021	American Journal of Men's Health	9 high school students	Indonesia	Individual Semi- Structured Interviews	Thematic Analysis	To identify the socio- emotional factors that contribute towards internet addiction among male adolescents.	7	21
Positive and negative uses of social media among adolescents hospitalized for suicidal behavior <sup>S6</sup>	Weinstein et al.	2021	Journal of Adolescen ce	30 adolescents (mean age 16.1 years of age)	Large urban inpatient psychiatry unit	Semi- structured interviews	Thematic Analysis	To explore potential associations between social media/smartphone use and risk of suicidal behaviour among hospitalised adolescents	8	23
Lived Experiences of Adolescents with Internet Addiction 87	Suryani, Sriati & Septiani	2020	Nurse Media Journal of Nursing	7 adolescents (aged 12-18)	Schools	Individual Interviews	Colaizzi Approach	To explore the lived experiences of adolescents with internet addiction.	8	22
Social Media and Adolescent Mental Health: The Good, the Bad and the Ugly <sup>S8</sup>	O'Reilly	2020	Journal of Mental Health	54 adolescents (aged 11 to 16 years)	UK – secondary schools	Focus groups	Thematic Analysis	To illuminate the perspectives of adolescents and practitioners in relation to social media and mental health.	4	22

Adolescent Perceptions of Sleep and Influences on Sleep Behaviour: A Qualitative Study <sup>89</sup>	Godsell & White	2019	Journal of Adolescen ce	33 adolescents (aged 13 to 14 years)	UK – secondary schools	Focus groups	Thematic Analysis	To explore adolescent perceptions of sleep and sleep behaviour.	7	23
A 'Control Model' of Social Media Engagement in Adolescence – A Grounded Theory Approach S10	Throuvala et al.	2019a	Internation al Journal of Environme ntal Research and Public Health	42 adolescents (aged 12 to 16 years)	UK – secondary schools	Focus groups	Constructi vist Grounded Theory	To explore adolescent psychological processes as they develop in their everyday interactions via social media.	9	22
"From the Moment I Wake Up I Will Use It Every Day, Every Hour": A Qualitative Study on the Patterns of Adolescents' Mobile Touch Screen Device Use from Adolescent and Parent Perspective S11	Hui Toh, Howie, Coenen & Straker	2019	British Medical Council Paediatrics	36 adolescents (aged 12 to 18 years) and their parents/caregive rs	Singapore	Semi- structured interviews	Thematic analysis	To explore potential influences on adolescent use of touch screen devices	7	23
Identifying Drivers for Bedtime Social Media Use Despite Sleep Costs: The Adolescent Perspective S12	Scott, Biello & Cleland Woods	2019	Journal of the National Sleep Foundation	24 adolescents (aged 11-17 years)	Scotland – secondary school	Focus groups	Thematic Analysis	To explore the underlying drivers for adolescent bedtime social media habits.	7	23

Motivational Processes and Dysfunctional Mechanisms of Social Media Use Among Adolescents: A Qualitative Focus Group Study S13	Throuvala et al., 2019	2019	Computers in Human Behaviour	42 adolescents (age 12 to 16 years)	UK – secondary schools	Focus groups	Thematic Analysis	To explore the key drivers of normative adolescent social media behaviours.	6	23
Online Social Networking and Psychological Experiences: The Perceptions of Young People with Mental Health Difficulties S14	Singleton, Abeles & Smith	2019	Doctoral Thesis	12 adolescents (aged 13 to 18 years)	UK – community CAMHS services	Semi- structured interviews	Constructi vist Grounded Theory	To explore the interaction between online social networking experiences and wellbeing among adolescents accessing mental health services.	5	23
Is Social Media Bad for Mental Health and Wellbeing? Exploring the Perspectives of Adolescents S15	O'Reilly et al.	2018	Clinical Child Psycholog y & Psychiatry	54 adolescents (Aged 11 to 18 years old)	UK – secondary schools	Focus groups	Thematic Analysis	To explore adolescent perceptions of their social media usage.	7	23
Adolescent Digital Profiles – A Process-Based Typology of Highly Engaged Internet User <sup>S16</sup>	Tzavela, Karakitsou, Halapi & Tsitsika	2017	Computers in Human Behaviour	72 adolescents (mean age = 15.7 years)	Greece, Spain, Iceland, Poland – school based	Semi- structured individual interviews	Grounded theory	To explore the experiences of highly engaged adolescent internet users with signs of addictive behaviours.	9	24
Depressed Adolescents' Positive and	Radovic, Gmelin, Stein & Miller	2017	Journal of Adolescen ce	23 adolescents (aged 13 to 20 years)	UK – mental health clinics	Semi- structured individual interviews	Content Analysis	To explore how social media use may influence and be influenced by	6	22

Negative Use of Social Media S17								psychological distress in adolescents diagnosed with depression.		
Exploring How Social Networking Sites Impact Youth with Anxiety: A Qualitative Study of Facebook Stressors Among Adolescents with an Anxiety Disorder Diagnosis S18	Calancie et al.	2017	Journal of Psychosoci al Research on Cyberspac e	8 adolescents (aged 13 to 18 years)	Canada – outpatient child and adolescent psychiatry clinic	Focus groups	Thematic analysis	Exploring how social networking sites and stressors impact on adolescents with anxiety.	6	22
A Shift from Offline to Online – Adolescence, the Internet and Social Participation S19	Kennedy & Lynch	2016	Journal of Occupatio nal Science	16 adolescents (aged 9-16 years)	Ireland – two primary schools and one secondary school	Focus groups	Thematic Analysis	To explore the occupational nature of adolescents online social participation.	8	23
Processes Discriminating Adaptive and Maladaptive Internet Use Among European Adolescents Highly Engaged Online S20	Tzavela et al.	2015	Journal of Adolescen ce	124 adolescents (mean age of 16.0)	Adolescent s from seven European countries	Semi- structured interviews	Grounded Theory	To explore adaptive and maladaptive use patterns that may promote or interfere with adolescents' development.	7	22
Adolescent Social Media Use - Cultivating and Constraining Competence S21	West, Rice & Vella- Brodrick	2023	Internation al Journal of Qualitative Studies on	36 adolescents (aged 15 years)	Australian schools (four)	Rich picture mapping and focus groups	Reflexive Thematic Analysis	To investigate mid- adolescents' perspectives of how their social media use impacts competence.	9	23

			Health and Well-being							
Effects of Social Media Use on Connectivity and Emotions During Pandemic-Induced School Closures: Qualitative Interview Study Among Adolescents S22	Liang et al.	2023	JMIR Mental Health	39 adolescents (aged 13-17 years)	United States	Semi- structured interviews			8	22
Exploring the role of social media literacy in adolescents' experiences with personalization: A Norwegian qualitative study \$23	Bell, Tennfjord, Tokovska & Eg	2022	Journal of Adolescent and Adult Literacy	48 adolescents (aged 15-19)	Norwegian secondary schools	Focus groups	Thematic analysis	To explore adolescents' shared experiences with personalization as a general social media phenomenon	8	22
How Do Adolescents Use Social Networks and What Are Their Potential Dangers? A Qualitative Study of Gender Differences \$24	De Felice et al.	2022	Internation al Journal of Environme ntal Research and Public Health	296 adolescents (aged 13-18)	Italian middle and high school students	Focus groups	Grounded theory	To explore adolescent perspectives on the uses and dangers of social networking sites	7	21
In Their Own Words: How Adolescents Use Social Media and	Van der Wal, Valkenburg & van Driel	2024	Social Media and Society	55 adolescents (aged 14-17)	Dutch secondary schools	Focus groups	Deductive thematic analysis	To uncover homogeneity (commonalities between adolescents),	4	22

How It Affects Them <sup>S25</sup>				heterogeneity (differences between adolescents), and duality (differences within adolescents) in the relationship between adolescents' social media use and well-being.	

# Table 4. The CASP Tool: 10 questions for appraising qualitative research

- 1. Was there a clear statement of the aims of the research?
- 2. Is a qualitative methodology appropriate?
- 3. Was the research design appropriate to address the aims of the research?
- 4. Was the recruitment strategy appropriate to the aims of the research?
- 5. Were the data collected in a way that addressed the research issue?
- 6. Has the relationship between researcher and participants been adequately considered?
- 7. Have ethical issues been taken into consideration?
- 8. Was the data analysis sufficiently rigorous?
- 9. Is there a clear statement of the findings?
- 10. How valuable is the research?

Table 5. Example data extraction from (Kennedy & Lynch, 2016) (S19)

Themes	First Order Constructs	Second Order Constructs
Social facilitation  Expanding opportunities for friendship	"I'd say if I wasn't on social networking sites, I wouldn't know half the people I know. I definitely feel more confident talking to some people online because you can mail, tweet or chat them which is	Building relationships, contacts, and connections – Global playground  All participants reported daily engagement in some form of online social
	way less personal than texting their phone." (Ella, 15)  "I think you would be less popular if you weren't online because a part of everybody's life is on the Internet, so if you don't have it you would be behind in your social life and stuff." (Joey, 12)	communication through texting, tweeting, or posting, which both broadened their social circles and maintained existing connections. From initially mingling amongst close groups of peers they progressed to a global playground through online social communities, where they now connected.
Shift towards online socialisation		Preferences for online interaction primarily related to an extended circle of friends.
		Young people aware of the benefits of the indirect nature of online interactions and the opportunity to develop new friendships online that would not be possible in more traditional face-to-face social contexts.
		Participants also spoke of a growing shift towards online socialisation.
Curation of online identity	"Because you have the time to think about what you are going to say you can be really funny and sarcastic." (Emma, 15)	Identity experiment and construction
	say you can be really juility and sar easile. (2111114, 12)	Participants highlighted the careful construction of online persona and the continuous experimentation with the constructions and reconstructions of self.
Persistent scrutiny		Cyber culture and virtual norms – living life in a virtual panopticon. Sense of being under persistent scrutiny
Need for guidance and protection (awareness of potential risks)		Like the panopticon (Foucault, 1979) - Imprisoned by a sense of being constantly observed.
		Overall, there was a realisation of needing some protection in this social space along with parental guidance in negotiating the social norms and culture therein.
Addiction – stuck online.	"Addiction" and "Withdrawal symptoms." - (Ashley – 16)	
Difficulty deactivating social media accounts.		You can logout anytime you like, but you can never leave (overuse)

	"Even when you realise you're bored when you're on the Internet, you still don't bother stopping because there is nothing better to do. I can't imagine living without it." (Mark - 11)	You can logout anytime you like, but you can never leave – occasional desire to unplug or deactivate social media accounts but find it difficult.
FoMO	"It is like a natural reflex now to just go on the Internet. I would prefer if we could just 'defriend' Facebook." (Emma - 15)	Participants revealed how they are drawn to continue their involvement with the Internet despite feeling that they can never leave: their identity lives on after them or despite them.
	"I would really suffer from FOMO [fear of missing out] because you would definitely miss out if you weren't online." – (Ashley – 16)	For all their love of the Internet, a substantial number of the adolescent girls acknowledged their occasional desire to unplug or erase Facebook completely.
		Fear of what they might miss out on if not online.
Unsociable behaviour/Phubbing	"If we were at a sleepover and we actually wanted to be sociable we would have to collect everyone's phones or else everyone will be on them the whole time." – (Ella – 15)	Unsociable behaviour  Pull to be online can lead to a sense of disconnection in offline settings/relationships.

Table 6. List of categories derived from thematic analysis of second order constructs and papers in which they were included.

Category	Papers in which the category was included
Device proximity	1,5,7,9,10,11,12,13,22,23,24
Device features	1,3,6,10,11,12,13,14,15,17,21,23,25
Social pressures and expectations	1,2,3,4,5,6,8,10,11,12,13,14, 15, 17,18,19,20,21,22,25
Impact on sleep	1,3,9,10,11,15,22,23,25
Disruption to offline activities	1,2,3,4,5,6,7,10,11,12,13,14,16,19,20,23
Addiction / Poor self-regulation	1,3,5,6,7,10,11,13,14,15,16,17,18,19,20,22,25
Need for support	3,11,16,19,21,25
Privacy	1,3,21
Loss of control in relation to social media content	1,2,3,5,6,8,14,17,18,19,24
Links to wider narratives	1,8,15,
Social support / friendships	2,3,4,5,6,8,9,13,14,16,17,19,20,21,23,24
Development tool	2,4,6,8,13,14,16,17,19,20,21,25
Compensatory use	4,16,21
Pro-active use	1,4,5,6,8,11,13,16,17,20,23
Improved self-regulation	2,3,5,8,11,14,16,17,20,25
Choice	7,13,20

### Table 7. List of final third-order constructs

#### Third-order constructs

Disruption to Offline Activities

'Phubbing'

Distraction / Preoccupation

Social Facilitation

Expanding Social Networks Making New Connections

Strengthening and Maintain Existing Connections

Organisation of Offline Activities

Overcoming Barriers

Pressure to be Available or Respond Fear of Missing Out (FoMO)

Feels Mandatory Burdensome

Relief to Have an Excuse to be Offline Peer Support and Group Membership

Shared Interests Checking Behaviours Ubiquitous Use

Loss of Control – Difficulties Regulating Use

Dependency

**Developing Social Skills** 

Negative Impact Upon Mood and Self-Esteem

Conscious Escape Self-Reflection

Entertainment and Relaxation Mood Boosting and Stress Reduction

Relief from Boredom Structural Mechanisms

**Endless Algorithmic Driven Content** 

Visible Metrics

Obligation to maintain streaks

Unable to Deactivate Accounts

Attributions

Parental & Sibling Addiction Social Media Fatigue Awareness of risks

Balanced Use & Effective Self-Regulation Structured and Disciplined Use (Evolved)

Digital Footprint

Unwanted attention and scrutiny Inescapable online surveillance Exposure to Harmful Content

Loss of Privacy Anonymity

Exposure to Triggering or Harmful Content

Online Bullying Loss of Ownership Choice and Innovation Inspiration and Creativity

Negative Impact on Schoolwork and Learning

Lack of Rest/Downtime Sleep Deprivation Physical Health Online Expertise Global Knowledge Enhanced Learning

Supporting Normative Developmental Processes

Identity Development Acceptance and Approval

Building Confidence & Developing Social Skills

Constant Stream of Notifications

Figure 1. Example search string (PsycINFO)

S1 = 45,831 (45,831)

"(DE "Mobile Phones" OR DE "Screen Time" OR DE "Mobile Devices" OR DE "Smartphone Use" OR DE "Bullying" OR DE "Internet Addiction" OR DE "Online Behavior" OR DE "Communications Media" OR DE "Electronic Communication" OR DE "Cyberbullying" OR DE "Internet" OR DE "Online Community" OR DE "Social Behavior" OR DE "Online Social Networks" OR DE "Social Capital" OR DE "Social Connectedness" OR DE "Social Interaction" OR DE "Social Support") AND (DE "Internet Usage" OR DE "Smartphone Use" OR DE "Screen Time" OR DE "Internet Addiction" OR DE "Online Behavior" OR DE "Social Behavior" OR DE "Social Support" OR DE "Emotional Support" OR DE "Friendship" OR DE "Social Connectedness" OR DE "Communications Media" OR DE "Electronic Communication" OR DE "Online Social Networks" OR DE "Cyberbullying" OR DE "Internet" OR DE "Online Community" OR DE "Social Interaction") OR TI ("social network\*" OR "social media" OR facebook OR instagram OR tiktok OR twitter OR snapchat cyberbull\* OR cyber-bull\* OR ((computer OR online OR digital OR cyber OR web) N5 (bull\* OR teas\* OR abus\* OR harrass\*)) ) OR AB ("social network\*" OR "social media" OR facebook OR instagram OR tiktok OR twitter OR snapchat cyberbull\* OR cyber-bull\* OR ((computer OR online OR digital OR cyber OR web) N5 (bull\* OR teas\* OR abus\* OR harrass\*)))

S2 = 1,131,000 (14,235)

"(DE "Social Anxiety" OR DE "Satisfaction" OR DE "Life Satisfaction" OR DE "Quality of Life" OR DE "Social Connectedness" OR DE "Social Health" OR DE "Well Being" OR DE "Mental Health" OR DE "Emotional States" OR DE "Affection" OR DE "Agitation" OR DE "Alienation" OR DE "Ambivalence" OR DE "Anger" OR DE "Anxiety" OR DE "Apathy" OR DE "Aversion" OR DE "Belonging" OR DE "Bereavement" OR DE "Boredom" OR DE "Catastrophizing" OR DE "Contentment" OR DE "Depression (Emotion)" OR DE "Disappointment" OR DE "Disgust" OR DE "Dissatisfaction" OR DE "Distress" OR DE "Doubt" OR DE "Embarrassment" OR DE "Emotional Exhaustion" OR DE "Emotional Trauma" OR DE "Enthusiasm" OR DE "Euphoria" OR DE "Euthymia" OR DE "Fear" OR DE "Frustration" OR DE "Gratitude" OR DE "Greed" OR DE "Grief" OR DE "Guilt" OR DE "Happiness" OR DE "Helplessness" OR DE "Homesickness" OR DE "Hope" OR DE "Hopelessness" OR DE "Jealousy" OR DE "Loneliness" OR DE "Love" OR DE "Mania" OR DE "Mental Confusion" OR DE "Morale" OR DE "Optimism" OR DE "Passion" OR DE "Pessimism" OR DE "Pleasure" OR DE "Pride" OR DE "Psychological Capital" OR DE "Psychological Engagement" OR DE "Regret" OR DE "Restlessness" OR DE "Sadness" OR DE "Shame" OR DE "Solidarity" OR DE "Suffering" OR DE "Suspicion" OR DE "Sympathy" OR DE "Anxiety" OR DE "Anxiety Management" OR DE "Computer Anxiety" OR DE "Anxiety Disorders" OR DE "Compulsions" OR DE "Repetition Compulsion" OR DE "Obsessive Compulsive Disorder" OR DE "Obsessive Compulsive Personality Disorder") OR TI (well-being OR wellbeing OR "life satisfaction" OR "social support" OR selfesteem OR "self esteem" OR "self-efficacy" OR "self efficacy" OR "mental health" OR stress\* OR depress\* OR anx\* OR fomo OR phubbing OR nomophobia OR worry OR worrie\* compulsive OR addict\* OR ((experience\* OR percept\* OR opinion\*) N5 (person\* OR child OR young OR patient OR adolesc\* OR teen\* OR user\* )) ) OR AB ( well-being OR wellbeing OR "life satisfaction" OR "social support" OR self-esteem OR "self esteem" OR "self-efficacy" OR "self efficacy" OR "mental health" OR stress\* OR depress\* OR anx\* OR fomo OR phubbing OR nomophobia OR worry OR worrie\* compulsive OR addict\* OR ((experience\* OR percept\* OR opinion\*) N5 (person\* OR child OR young OR patient OR adolesc\* OR teen\* OR user\* )) )

S3 = 935,144 (3,590)

"(DE "Adolescent Attitudes" OR DE "Adolescent Psychiatry" OR DE "Adolescent Psychology" OR DE "Adolescent Psychopathology" OR DE "Adolescent Psychotherapy" OR DE "Adolescent Health" OR DE "Adolescent Behavior" OR DE "Adolescent Characteristics" OR DE "Early Adolescence" OR DE "Emerging Adulthood" OR DE "Child Behavior" OR DE "Child Health" OR DE "Adolescent Development" OR DE "Childhood Adversity") OR TI (adolesc\* OR teen\* OR child\* OR girl\* OR boy\* OR youth\* ((young) N5 (person OR people))) OR AB (adolesc\* OR teen\* OR child\* OR girl\* OR boy\* OR youth\* ((young) N5 (person OR people)))

Limiters - Age Groups: Adolescence (13-17 yrs), Young Adulthood (18-29 yrs)

S4 = 552,201 (988)

"(DE "Qualitative Methods" OR DE "Focus Group" OR DE "Grounded Theory" OR DE "Interpretative Phenomenological Analysis" OR DE "Narrative Analysis" OR DE "Semi-Structured Interview" OR DE "Thematic Analysis" OR DE "Qualitative Measures" ) OR TI ( qualitative OR interview\* OR "focus group\*" OR narrative OR Interpretative OR Phenomenological OR mixed-method\* OR "mixed method" OR thematic ) OR AB ( qualitative OR interview\* OR "focus group\*" OR narrative OR Interpretative OR Phenomenological OR mixed-method\* OR "mixed method" OR thematic )

Figure 2. PRISMA Flow diagram showing the selection processes of papers for the metaethnographic synthesis review

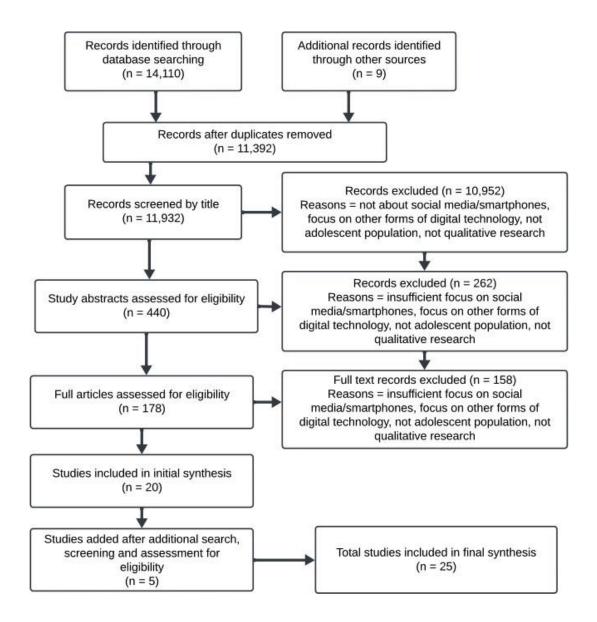


Figure 3. Working interpretation of Schütz's (1962) first and second order constructs. Addition of third order constructs drawn from the work of Noblit & Hare (1988) and Britten et al (2002).

#### FIRST ORDER CONSTRUCTS

 $A do lescent's \ views, \ accounts, \ and \ common \ sense \\ interpretations \ of \ their \ experiences \ using \ smartphones \ and \ social \ media$ 



### SECOND ORDER CONSTRUCTS (primary research findings)

Primary authors views and interpretations (captured in metaphors and themes) of the above first order constructs



# THIRD ORDER CONSTRUCTS (qualitative evidence synthesis findings)

Reviewer's interpretations and views (captured in metaphors and themes) of the above second order constructs

### **Appendix: Guidelines for Target Journal**

#### **Author Guidelines**

The *Journal of Adolescence* is an international, broad based, cross-disciplinary journal that addresses issues of professional and academic importance concerning development between puberty and the attainment of adult status within society. Our focus is specifically on adolescent *development:* change over time or negotiating age specific issues and life transitions. The aim of the journal is to encourage research and foster good practice through publishing empirical studies, integrative reviews and theoretical and methodological advances. The *Journal of Adolescence* is essential reading for adolescent researchers, social workers, psychiatrists, psychologists, and youth workers in practice, and for university and college faculty in the fields of psychology, sociology, education, criminal justice, and social work.

### Research Areas Encompassed:

- Adolescent development with particular emphasis on social, cognitive, and emotional functioning
  - Resilience, positive development, and effective coping within the context of adolescent development
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JoA actively seeks papers that are strongly grounded in theory and have a clear developmental focus. We are particularly interested in research focusing on less studied populations or that examine contextual variation in developmental processes. In addition to empirical research articles, JoA also publishes systematic Review Articles and papers that focus on areas of methodological import.

The Journal publishes quantitative, qualitative, and mixed method research and welcomes systematic review articles and papers providing reviews or practical guidance on important or novel topics relevant to developmental methodology. We do not publish papers whose primary purpose is the validation of established measures in new cultural contexts. If required, additional words may be permitted to report such validations within a standard empirical research article.

### **Sections**

- 1. <u>Submission and Peer Review Process</u>
  - 2. Article Types
  - 3. After Acceptance
- 1. Submission and Peer Review Process

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Journal of Adolescence follows APA form for final publications (see format exceptions below). However, we will accept <u>Free Format submission</u> for a simplified and streamlined submission process.

## Before you submit, you will need:

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  - An ORCID ID, freely available at <a href="https://orcid.org">https://orcid.org</a>. (Why is this important? Your article, if accepted and published, will be attached to your ORCID profile. Institutions and funders are increasingly requiring authors to have ORCID IDs.)
    - The title page of the manuscript, including:
    - Your co-author details, including affiliation and email address. (Why is this important? We need to keep all co-authors informed of the outcome of the peer review process.)
    - o Word count, excluding abstract, references, tables, figures or appendices.
    - Statements relating to our ethics and integrity policies. (Why are these important? We need to uphold rigorous ethical standards for the research we consider for publication) This includes:
      - data availability statement\*
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        - clinical trial registration
          - o \* Required

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    - vi. Acknowledgments.
  - vii. Word count, excluding abstract, references, tables, figures or appendices.

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- ii. Please check that all comments and notes have been removed from the manuscript prior to submission.

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The main text file should be in Word and include:

- Title page (see requirements above);
  - Abstracts
- Abstracts should have four headers, each comprising a short separate paragraph: Introduction, Methods, Results & Conclusions.

- o Abstracts should be 200-250 words long, concise and factual.
- Abstracts must be able to stand alone, and are often presented separately from the article
  - References should be avoided, but if essential, they must be cited in full, without reference to the reference list.
  - All abstracts must include basic information about the sample, including country of data collection, year of data collection, sample size, and relevant demographics. Numerical age and gender of participants are required.
  - Method of data collection should be indicated (e.g., qualitative analysis of interview material, surveys administered to parents and adolescents) and whether the study is cross-sectional or longitudinal
- Maximum of six keywords, listed immediately after the abstract. Avoid general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Only abbreviations firmly established in the field may be eligible. Keywords will be used for indexing purposes.
  - Main body: formatted as introduction, materials & methods, results, discussion, conclusion. Please consult the APA Style Manual for publication guidelines.
    - o Introduction: The Introduction should provide a clear statement of the paper's goal and a strong grounding in the literature, including all key constructs. It is important that the introduction clearly frames the study in a developmental framework.
      - Material and Methods: Methods must provide a clear description of recruitment, sampling methods, and final sample, including the year(s) and country of data collection. All measures must be fully described and cited appropriately, including appropriate descriptive statistics. Methods for handling missing data (at the measure and analysis level) should be described. A statement of compliance with ethical guidelines and review must be included.
    - Results: Results should reflect the problem statement in the Introduction, use the same names for constructs used in the Methods section, accurately describe the analytic techniques used, and refer to clearly tabled results and/or figures. Please table descriptions of complex multivariable analyses rather than reporting them in the text. Per APA guidelines, effect sizes should be reported whenever possible.
    - O Discussion and Conclusion: Discussion of the results should clearly reflect back on the literature cited in the introduction, draw a clear conclusion, and suggest future areas of research. Limitations of the current work should be clearly and succinctly described.
      - References:
      - Tables (each table complete with title and footnotes);
  - Figure legends: Legends should be supplied as a complete list in the text. Figures should be uploaded as separate files (see below).

#### **Biased and Offensive Language**

The Journal of Adolescence is an international journal. Please use inclusive language throughout your work and avoid sexist, racist, and offensive language and descriptions. The APA Style Guide provides extensive guidance on current usage.

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Authors and Wiley's Publication Ethics Guidelines.

#### 2. Article Types

Qualitative

new

Article Type	Description	Word Limit	Abstract / Structure	Other Requirements
Research article	Report of new research findings, including evaluations of interventions. Articles should clearly make a	Up to 5,000 words excluding abstract, references, tables, figures or appendices.	250 word structured abstract.	Data availability statement.

might include findings from the early stages of a program of research, registered replications (including failures to replicate) previously reported findings in novel contexts, or extentions of previously published work.

report of
research
replications
from
developing
countries and
places with a
less well
supported

A very brief

less well
supported
adolescence
research field,
where it may
be difficult to
find
international
publication
outlets and

bring the work to the attention of a wider audience. Up to 1000 words excluding abstract, references, tables, figures or appendices

250 word structured abstract.

## International Research Note

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#### **Appendix**

#### **Open Research Badges**

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#### **Resource Identification Initiative**

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Additionally, you must include the RRIDs in the list of keywords associated with the manuscript.

#### To Obtain Research Resource Identifiers (RRIDs):

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- Search for the research resource (please see the section titled "Search Features and Tips" for more information).
- Click on the "Cite This" button to obtain the citation and insert the citation into the manuscript text.

If there is a resource that is not found within the <u>Resource Identification Portal</u>, you are asked to register the resource with the appropriate resource authority. Information on how to do this is provided in the "Resource Citation Guidelines" section of the Portal.

If any difficulties in obtaining identifiers arise, please contact <u>rii-help@scicrunch.org</u> for assistance.

#### **Example Citations:**

Antibodies: "Wnt3 was localized using a rabbit polyclonal antibody C64F2 against Wnt3 (Cell Signaling Technology, Cat# 2721S, RRID: AB\_2215411)"

Model Organisms: "Experiments were conducted in c. elegans strain SP304 (RRID:CGC\_SP304)"

Cell lines: "Experiments were conducted in PC12 CLS cells (CLS Cat# 500311/p701\_PC-12, RRID:CVCL\_0481)"

Tools, Software, and Databases: "Image analysis was conducted with CellProfiler Image Analysis Software, V2.0 (http://www.cellprofiler.org, RRID:nif-0000-00280)"

#### **Species Names**

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known species, however, scientific names may be omitted from article titles. If no common name exists in English, only the scientific name should be used.

#### **Genetic Nomenclature**

Sequence variants should be described in the text and tables using both DNA and protein designations whenever appropriate. Sequence variant nomenclature must follow the current HGVS guidelines; see <a href="https://www.varnomen.hgvs.org">warnomen.hgvs.org</a>, where examples of acceptable nomenclature are provided.

#### **Acronyms**

Use of acronyms should be minimized unless they are extremely common (e.g., ANOVA).

## **Sequence Data**

Nucleotide sequence data can be submitted in electronic form to any of the three major collaborative databases: DDBJ, EMBL, or GenBank. It is only necessary to submit to one database as data are exchanged between DDBJ, EMBL, and GenBank on a daily basis. The suggested wording for referring to accession-number information is: 'These sequence data have been submitted to the DDBJ/EMBL/GenBank databases under accession number U12345'. Addresses are as follows:

- DNA Data Bank of Japan (DDBJ): <a href="ddbj.nig.ac.jp">ddbj.nig.ac.jp</a>
  - EMBL Nucleotide Archive: ac.uk/ena
  - GenBank: ncbi.nlm.nih.gov/genbank

Proteins sequence data should be submitted to either of the following repositories:

- Protein Information Resource (PIR): georgetown.edu
  - SWISS-PROT: ch/sprot/sprot-top

#### Structural Data

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#### Appendix A: Example search strings for all included databases

Search string and results (PubMed)

S1 = 80,809 (80,809)

"Social Media" [MeSH Terms] OR "Internet Addiction Disorder" [MeSH Terms] OR "Social Networking" [MeSH Terms] OR ("Technology Addiction" [MeSH Terms] OR "Cell Phone" [MeSH Terms] OR "Mobile Applications" [MeSH Terms] OR "Screen Time" [MeSH Terms] OR "Cyberbullying" [MeSH Terms] OR "Friends" [MeSH Terms] OR "Online Social Networking" [MeSH Terms] OR "social network\*" [tiab] OR "social media" [tiab] OR "facebook" [tiab] OR "instagram" [tiab] OR "tiktok" [tiab] OR "twitter" [tiab] OR "snapchat" [tiab] OR "cyberbull\*" [tiab] OR "cyber-bull\*" [tiab] OR (("computer" [tiab] OR "online" [tiab] OR "digital" [tiab] OR "cyber" [tiab] OR "web" [tiab]) N5 ("bull\*" [tiab] OR "teas\*" [tiab] OR "abus\*" [tiab] OR "harrass\*" [tiab]))

S2 = 2,718,567 (29,012)

"Quality of Life" [MeSH Terms] OR "Adolescent Health" [MeSH Terms] OR ("Social Norms" [MeSH Terms] OR "Social Interaction" [MeSH Terms] OR "Social Isolation" [MeSH Terms] OR "Social Cohesion" [MeSH Terms] OR "Social Capital" [MeSH Terms] OR "Social Support" [MeSH Terms] OR "Social Environment" [MeSH Terms] OR "Social Skills" [MeSH Terms] OR "Social Participation" [MeSH Terms] OR "Social Behavior" [MeSH Terms]) OR ("Psychological Phenomena" [MeSH Terms] OR "stress, psychological" [MeSH Terms] OR "Psychological Distress" [MeSH Terms]) OR ("Emotions" [MeSH Terms] OR "Emotional Regulation" [MeSH Terms]) OR ("behavior, addictive" [MeSH Terms] OR "Technology Addiction" [MeSH Terms] OR "Internet Addiction Disorder" [MeSH Terms]) OR ("Compulsive Behavior" [MeSH Terms] OR "Obsessive-Compulsive Disorder" [MeSH Terms]) OR ((("well-being"[Title/Abstract] OR "wellbeing"[Title/Abstract] OR "life satisfaction"[Title/Abstract] OR "Social Support"[Title/Abstract] OR "selfesteem"[Title/Abstract] OR "self-esteem"[Title/Abstract] OR "self-efficacy"[Title/Abstract] OR "self-efficacy" [Title/Abstract] OR "mental health" [Title/Abstract] OR "stress\*"[Title/Abstract] OR "depress\*"[Title/Abstract] OR "anxi\*"[Title/Abstract] OR "fomo"[Title/Abstract] OR "phubbing"[Title/Abstract] OR "nomophobia"[Title/Abstract] OR "worry"[Title/Abstract] OR "worrie\*"[Title/Abstract]) AND "compulsive"[Title/Abstract]) OR "addict\*"[Title/Abstract] OR ((("experience\*"[Title/Abstract] OR "percept\*"[Title/Abstract] OR "opinion\*"[Title/Abstract]) AND "N5"[All Fields]) AND ("person\*"[Title/Abstract] OR "child"[Title/Abstract] OR "young"[Title/Abstract] OR "patient"[Title/Abstract] OR "adolesc\*"[Title/Abstract] OR "teen\*"[Title/Abstract] OR "user\*"[Title/Abstract])))

S3 = 2,620,347 (10,529)

"Adolescent" [MeSH Terms] OR "Adolescent Development" [MeSH Terms] OR "psychology, adolescent" [MeSH Terms] OR "Young Adult" [MeSH Terms] OR "Adolescent

Behavior"[MeSH Terms] OR "Adolescent Health"[MeSH Terms] OR "Adolescent Behavior"[MeSH Terms] OR "Adolescent Health"[MeSH Terms] OR (("adolesc\*"[Title/Abstract] OR "teen\*"[Title/Abstract] OR "child\*"[Title/Abstract] OR "girl\*"[Title/Abstract] OR "boys\*"[Title/Abstract] OR "youth\*"[Title/Abstract]) AND (("young"[Title/Abstract] AND "N5"[All Fields]) AND ("person"[All Fields]) OR "people"[Title/Abstract])))

S4 = 687,073 (2,017)

("Qualitative Research" [Mesh] OR "Focus Groups" [Mesh]) OR "Grounded Theory" [Mesh] OR ("qualitative" [tiab] OR "interview\*" [tiab] OR "focus group\*" [tiab] OR "narrative" [tiab] OR "Interpretative" [tiab] OR "Phenomenological" [tiab] OR "mixed-method\*" [tiab] OR "mixed method" [tiab] OR "thematic" [tiab])

Search string and results (Medline)

S1 = 311,717 (311,717)

(MH "Social Media") OR (MH "Communications Media") OR (MH "Internet Use") OR (MH "Internet") OR (MH "Screen Time") OR (MH "Leisure Activities") OR (MH "Online Social Networking") OR (MH "Social Networking") OR (MH "Social Support") OR (MH "Social Skills") OR (MH "Social Interaction") OR (MH "Smartphone") OR (MH "Mobile Applications") OR (MH "Internet Addiction Disorder") OR (MH "Communication") OR (MH "Internet Access") OR (MH "Loneliness") OR (MH "Happiness") ) OR TI ( ("social network\*" OR "social media" OR facebook OR instagram OR tiktok OR twitter OR snapchat cyberbull\* OR cyber-bull\* OR ((computer OR online OR digital OR cyber OR web) N5 (bull\* OR teas\* OR abus\* OR harrass\*)) ) ) OR AB ( ("social network\*" OR "social media" OR ((computer OR online OR digital OR cyber-bull\* OR ((computer OR online OR digital OR cyber OR web) N5 (bull\* OR teas\* OR abus\* OR harrass\*)) ) )

S2 = 2,409,771 (132, 961)

(MH "Social Support") OR (MH "Social Skills") OR (MH "Social Alienation") OR (MH "Social Participation") OR (MH "Social Interaction") OR (MH "Social Behavior") OR (MH "Social Inclusion") OR (MH "Social Isolation") OR (MH "Social Identification") OR (MH "Social Facilitation") OR (MH "Social Adjustment") OR (MH "Shyness") OR (MH "Social Desirability") OR (MH "Self-Control") OR (MH "Emotional Regulation") OR (MH "Aggression") OR (MH "Sadness") OR (MH "Pleasure") OR (MH "Loneliness") OR (MH "Hope") OR (MH "Happiness") OR (MH "Frustration") OR (MH "Emotional Regulation") OR (MH "Fear") OR (MH "Panic") OR (MH "Depression") OR (MH "Boredom") OR (MH "Emotions") OR (MH "Hate") OR (MH "Anger") OR (MH "Affect") OR (MH "Irritable Mood") OR (MH "Stress, Psychological") OR (MH "Behavior, Addictive") OR (MH "Technology Addiction") OR (MH "Internet Addiction Disorder") OR (MH "Compulsive Behavior") OR (MH "Obsessive-Compulsive Disorder") OR (MH "Emotional Regulation") OR (MH "Self-Control") OR (MH "Social Behavior") OR (MH "Behavior and Behavior Mechanisms") OR (MH "Sadness") OR (MH "Pleasure") OR (MH "Loneliness") OR (MH "Control") OR (MH "Sadness") OR (MH "Pleasure") OR (MH "Loneliness") OR (MH

"Hope") OR (MH "Hate") OR (MH "Happiness") OR (MH "Jealousy") OR (MH "Fear") OR (MH "Panic") OR (MH "Psychological Distress") OR (MH "Disgust") OR TI ( well-being OR wellbeing OR "self esteem" OR "self-esteem OR "self-esteem" OR "self-esteem" OR (MH "Disgust") OR anx\* OR depress\* OR anx\* OR depress\* OR depress\* OR depress\* OR depress\* OR depress\* OR child OR young OR patient OR adolesc\* OR teen\* OR user\* )) OR AB ( well-being OR "self-efficacy" OR "self efficacy" OR "self-efficacy" OR "self efficacy" OR "mental health" OR stress\* OR depress\* OR anx\* OR fomo OR phubbing OR nomophobia OR worry OR worrie\* compulsive OR addict\* OR ((experience\* OR percept\* OR opinion\*) N5 (person\* OR child OR young OR patient OR adolesc\* OR teen\* OR user\* )) )

S3 = 2,249,712 (28,511)

( ((MH "Adolescent") OR (MH "Adolescent Behavior") OR (MH "Psychology, Adolescent") OR (MH "Adolescent Development") ) ) OR TI ( ( ( adolesc\* OR teen\* OR youth\* ((young) N5 (person OR people)) ) ) OR AB ( ( adolesc\* OR teen\* OR youth\* ((young) N5 (person OR people)) ) ) )

S4 = 679,283 (6,274)

( "(DE "Qualitative Methods" OR DE "Focus Group" OR DE "Grounded Theory" OR DE "Interpretative Phenomenological Analysis" OR DE "Narrative Analysis" OR DE "Semi-Structured Interview" OR DE "Thematic Analysis" OR DE "Qualitative Measures" ) ) OR TI ( ( qualitative OR interview\* OR "focus group\*" OR narrative OR Interpretative OR Phenomenological OR mixed-method\* OR "mixed method" OR thematic ) ) OR AB ( ( qualitative OR interview\* OR "focus group\*" OR narrative OR Interpretative OR Phenomenological OR mixed-method\* OR "mixed method" OR thematic ) )

#### Search string and results (Academic Search Ultimate)

S1 = 127,663 (127,663)

"(DE "Mobile Phones" OR DE "Screen Time" OR DE "Mobile Devices" OR DE "Smartphone Use" OR DE "Bullying" OR DE "Internet Addiction" OR DE "Online Behavior" OR DE "Communications Media" OR DE "Electronic Communication" OR DE "Cyberbullying" OR DE "Internet" OR DE "Online Community" OR DE "Social Behavior" OR DE "Online Social Networks" OR DE "Social Capital" OR DE "Social Connectedness" OR DE "Social Interaction" OR DE "Social Support") AND (DE "Internet Usage" OR DE "Smartphone Use" OR DE "Screen Time" OR DE "Internet Addiction" OR DE "Online Behavior" OR DE "Social Behavior" OR DE "Social Support" OR DE "Emotional Support" OR DE "Friendship" OR DE "Social Connectedness" OR DE "Communications Media" OR DE "Electronic Communication" OR DE "Online Social Networks" OR DE "Cyberbullying"

OR DE "Internet" OR DE "Online Community" OR DE "Social Interaction") OR TI ( "social network\*" OR "social media" OR facebook OR instagram OR tiktok OR twitter OR snapchat cyberbull\* OR cyber-bull\* OR ((computer OR online OR digital OR cyber OR web) N5 (bull\* OR teas\* OR abus\* OR harrass\*)) ) OR AB ( "social network\*" OR "social media" OR facebook OR instagram OR tiktok OR twitter OR snapchat cyberbull\* OR cyber-bull\* OR ((computer OR online OR digital OR cyber OR web) N5 (bull\* OR teas\* OR abus\* OR harrass\*)) )

S2 = 1,940,154 (14,232)

"(DE "Social anxiety" OR DE "Anxiety" OR DE "Anxiety disorders") OR (DE "Social contact" OR DE "Social interaction" OR DE "Sociability")) OR (DE "Group identity")) AND (DE "Friendship" OR DE "Interpersona; relations" OR DE "Childhood friendships" OR DE "Internet friendship")) AND (DE "Well-being" OR DE "Quality of life" OR DE "Student well-being" OR DE "Happiness" OR DE "Social support")) AND (DE "Social capital" OR DE "Social influence" OR DE "Social networks")) OR (DE "Psychological distance")) OR (DE "Emotions" OR DE "Anger" OR DE "Autonomy (Psychology)" OR DE "Empathy" OR DE "Enthusiasm" OR DE "Escape (Psychology)" OR DE "Fear" OR DE "Happiness" OR DE "Helplessness (Psychology)" OR DE "Hope" OR DE "Impulse (Psychology)" OR DE "Intimacy (Psychology)" OR DE "Psychological stress" OR DE "Sadness" OR DE "Selfconfidence" OR DE "Shame" OR DE "Worry" OR DE "Affect (Psychology)" OR DE "Mental health" OR DE "Self-control")) OR (DE "Cell phone addiction" OR DE "Internet addiction" OR DE "Social media addiction")) OR (DE "Compulsive behavior" OR DE "Cell phone addiction" OR DE "Internet addiction" OR DE "Social media addiction")) OR (DE "Compulsive behavior in adolescence") OR (DE "Adolescent psychology" OR DE "Adolescent friendships" OR DE "Attachment behavior in adolescence" OR DE "Attention in adolescence" OR DE "Emotions in adolescence" OR DE "Happiness in adolescence" OR DE "Identity (Psychology) in adolescence" OR DE "Individual differences in adolescence" OR DE "Interpersonal communication in adolescence" OR DE "Interpersonal relations in adolescence" OR DE "Self in adolescence" OR DE "Self-confidence in adolescence" OR DE "Self-control in adolescence" OR DE "Self-esteem in adolescence" OR DE "Social desirability in adolescence" OR DE "Social interaction in adolescence" OR DE "Social skills in adolescence") OR (DE "Adolescent friendships" OR TI (well-being OR wellbeing OR "life satisfaction" OR "social support" OR self-esteem OR "self esteem" OR "self-efficacy" OR "self efficacy" OR "mental health" OR stress\* OR depress\* OR anx\* OR fomo OR phubbing OR nomophobia OR worry OR worrie\* compulsive OR addict\* OR ((experience\* OR percept\* OR opinion\*) N5 (person\* OR child OR young OR patient OR adolesc\* OR teen\* OR user\* )) ) OR AB ( well-being OR wellbeing OR "life satisfaction" OR "social support" OR self-esteem OR "self esteem" OR "self-efficacy" OR "self efficacy" OR "mental health" OR stress\* OR depress\* OR anx\* OR fomo OR phubbing OR nomophobia OR worry OR worrie\* compulsive OR addict\* OR ((experience\* OR percept\* OR opinion\*) N5 (person\* OR child OR young OR patient OR adolesc\* OR teen\* OR user\* )) )

S3 = 1,795,178 (3,362)

"(DE "Adolescent development" OR DE "Adolescence")) OR (DE "Adolescent development" OR DE "Teenagers" OR DE "Youth" OR DE "Young adults") ) OR TI ( ( adolesc\* OR teen\* OR child\* OR girl\* OR boy\* OR youth\* ((young) N5 (person OR people)) ) OR AB ( adolesc\* OR teen\* OR child\* OR girl\* OR boy\* OR youth\* ((young) N5 (person OR people)) ) ) )

S4 = 1,126,801 (921)

(((DE "Qualitative research methodology") OR (DE "Focus groups" OR DE "Groups" OR DE "Qualitative research" OR DE "Interviewing")) OR (DE "Grounded theory") OR (qualitative OR interview\* OR "focus group\*" OR narrative OR Interpretative OR Phenomenological OR mixed-method\* OR "mixed method" OR thematic)) OR TI ( (qualitative OR interview\* OR "focus group\*" OR narrative OR Interpretative OR Phenomenological OR mixed-method\* OR "mixed method" OR thematic)) OR AB ( (qualitative OR interview\* OR "focus group\*" OR narrative OR Interpretative OR Phenomenological OR mixed-method\* OR "mixed method" OR thematic))

Search string and results (CINAHL)

S1 = 221,605 (221,605)

(MH "Communications Media") OR (MH "Internet") OR (MH "Social Media") OR (MH "Facebook") OR (MH "Twitter") OR (MH "Behavior") OR (MH "Communication") OR (MH "Social Networking") OR (MH "Internet Addiction") OR (MH "Cellular Phone") OR (MH "Smartphone") OR (MH "Cyberbullying") OR (MH "Behavior, Addictive") OR (MH "Internet Access") OR (MH "Life Style, Sedentary") OR (MH "Screen Time") OR TI ( "social network\*" OR "social media" OR facebook OR instagram OR tiktok OR twitter OR snapchat cyberbull\* OR cyber-bull\* OR ((computer OR online OR digital OR cyber OR web) N5 (bull\* OR teas\* OR abus\* OR harrass\*)) ) OR AB ( "social network\*" OR "social media" OR facebook OR instagram OR tiktok OR twitter OR snapchat cyberbull\* OR cyber-bull\* OR ((computer OR online OR digital OR cyber OR web) N5 (bull\* OR teas\* OR abus\* OR harrass\*)) )

S2 = 865,259 (61,739)

(MH "Social Anxiety Disorders") OR (MH "Separation Anxiety") OR (MH "Social Behavior") OR (MH "Adolescent Behavior") OR (MH "Attitude to Computers") OR (MH "Internet Addiction") OR (MH "Coping") OR (MH "Social Identity") OR (MH "Social Cognition") OR (MH "Social Integration") OR (MH "Social Conformity") OR (MH "Social Skills") OR (MH "Impulsive Behavior") OR (MH "Compulsive Behavior") OR (MH "Life Style, Sedentary") OR (MH "Screen Time") OR (MH "Social Norms") OR (MH "Social Attitudes") OR (MH "Social Inclusion") OR (MH "Social Isolation") OR (MH "Loneliness") OR (MH "Social Alienation") OR (MH "Social Participation") OR (MH "Emotions") OR (MH "Anxiety") OR (MH "Happiness") OR (MH "Emotional Regulation") OR (MH "Psychological Distress") OR (MH "Psychosocial Functioning") OR (MH "Obsessive-Compulsive Disorder") OR (MH "Compulsive Behavior") OR (MH "Obsessive-Compulsive Disorder") OR (MH "Fear") OR (MH "Self Concept") OR (MH "Behavior and Behavior Mechanisms") OR (MH "Personality") OR (MH "Personality Development") OR (MH "Individuation") OR (MH "Self-Awareness") OR (MH "Self Disclosure") OR (MH "Confidence") OR (MH "Psychological Distress") OR (MH "Personal Satisfaction") OR (MH "Student Satisfaction") OR TI (well-being OR wellbeing OR "life satisfaction" OR "social support" OR self-esteem OR "self esteem" OR "self-efficacy" OR "self efficacy" OR "mental health" OR stress\* OR depress\* OR anx\* OR fomo OR phubbing OR nomophobia OR worry OR worrie\* compulsive OR addict\* OR ((experience\* OR percept\* OR opinion\*) N5 (person\* OR child OR young OR patient OR adolesc\* OR teen\* OR user\* )) ) OR AB ( wellbeing OR wellbeing OR "life satisfaction" OR "social support" OR self-esteem OR "self esteem" OR "self-efficacy" OR "self efficacy" OR "mental health" OR stress\* OR depress\* OR anx\* OR fomo OR phubbing OR nomophobia OR worry OR worrie\* compulsive OR addict\* OR ((experience\* OR percept\* OR opinion\*) N5 (person\* OR child OR young OR patient OR adolesc\* OR teen\* OR user\* ))

S3 = 1,023,053

(MH "Adolescence") OR (MH "Adolescent, Hospitalized") OR (MH "Adolescent Behavior") OR (MH "Adolescent Psychology") OR (MH "Adolescent Psychiatry") OR (MH "Adolescent Health") OR (MH "Child Development") OR (MH "Transition to Adulthood") OR TI (adolesc\* OR teen\* OR child\* OR girl\* OR boy\* OR youth\* ((young) N5 (person OR people)) ) OR AB (adolesc\* OR teen\* OR child\* OR girl\* OR boy\* OR youth\* ((young) N5 (person OR people))

S4 = 523,990 (3,930)

(MH "Nonexperimental Studies") OR (MH "Qualitative Studies") OR (MH "Action Research") OR (MH "Ethnological Research") OR (MH "Ethnological Research") OR (MH "Ethnological Research") OR (MH "Ethnological Research") OR (MH "Indurry") OR (MH "Naturalistic Inquiry") OR (MH "Phenomenological Research") OR (MH "Thematic Analysis") OR (MH "Semi-Structured Interview") OR (MH "Unstructured Interview") OR (MH "Structured Interview") OR (MH "Interviews") OR TI ( qualitative OR interview\* OR "focus group\*" OR narrative OR Interpretative OR Phenomenological OR mixed-method\* OR "mixed method" OR thematic ) OR AB ( qualitative OR interview\* OR "focus group\*" OR narrative OR Interpretative OR Phenomenological OR mixed-method\* OR "mixed method" OR thematic )



## **Section 2 Research Paper**

## Adolescents' experiences of social connection during lockdowns

Declan Jordan Lancaster University Doctorate in Clinical Psychology

#### **Abstract**

In response to the outbreak of the coronavirus (COVID-19) pandemic, the United Kingdom government imposed nationwide lockdowns and a series of mandated social and physical distancing measures. With the period of adolescence associated with a heightened need for social connection and increased desire for independence, it was felt that such measures might have a unique impact at a crucial stage of their development. This paper utilised a constructivist grounded theory informed approach to explore adolescent participants experiences of lockdowns, with an initial focus on their experiences of social connection. Data was provided by eight participants who engaged in semi-structured interviews. Four main themes emerged that map participants journeys through an unprecedented period of disruption in their lives: adjustment to lockdowns, living through lockdowns, impact on education, and coming through the other side. Participants navigated a range of challenges, managing notable uncertainty and prolonged disruption to their education. Engagement with social media and digital technologies was found to have helped limit any sense of isolation, facilitate connection, enable continued education, and help lockdown feel like a more shared experience. Findings of the research are considered within the wider sociopolitical contexts and implications for clinical practice are considered alongside limitations of the study.

#### Introduction

In the closing stages of 2019, the World Health Organisation (WHO) were notified that, in a small district of the Hubei Province in the Chinese city of Wuhan, a cluster of over forty cases of pneumonia had been identified with no known aetiology. This represented the beginning of a global outbreak of coronavirus (COVID-19), a highly infectious disease caused by the SARS-CoV-2 virus (World Health Organization: WHO, 2020). Following the first documented case in January of 2020, the United Kingdom (UK) has now experienced several major waves of the infection. Recent estimations have indicated that over 44 million people in the UK contracted the virus with nearly 227,00 related deaths (BBC News, 2023). From a public-health epidemiology and disaster risk reduction perspective, governments across the world were compelled to respond.

The first UK national lockdown commenced in March 2020 (Appendix A) and was designed to reduce population movement and slow the transmission of the virus. In addition to this, the UK government also outlined the imposition of a range of mandatory social distancing measures and stay at home initiatives. Whilst non-pharmaceutical interventions related to COVID-19 are said to have been unequivocally effective in reducing the transmission rate (The Royal Society, 2023), such measures have been highly disruptive. Macroeconomic consequences are extensive and likely to endure well into the future (McKibbin & Fernando, 2021). Whilst the full scale of the financial impact is still being assessed (Elliott, 2023), the pandemic and government response appears to have acted as a catalyst in further deepening already entrenched socio-economic inequalities (Andres, Moawad & Kraftl, 2023).

Such widescale restrictions to fundamental personal freedoms have also had a pervasive impact upon psychological wellbeing and the prevalence of mental health disorders

(Brookes et al., 2020; Luo et al., 2020; Shevlin et al., 2020; Torales et al., 2020). With notable concern already around a sharp decline in children and young people's (CYP's) mental health and emotional wellbeing throughout the previous decade (Bell et al., 2019; Earle, 2016), focus has rightly turned towards understanding the potential impact on younger generations.

## The Unique Impact on Children and Young People

Whilst the risk of severe disease and mortality from COVID-19 is lowest for CYP (Turke, 2020), in comparison to other population groups they have sacrificed the most and been more severely impacted by restrictions (Pierce et al., 2020; Power et al., 2020; Ralls, 2020). Systematic reviews in the area have provided initial assessment of the scale of the impact on CYP's mental and physical health (Li et al., 2023; Panchal, 2023) and concerns related to safety and wellbeing have been raised accordingly (NSPCC, 2022).

Referrals to mental health services, already under immense structural pressures (British Medical Association: BMA, 2024a), doubled during the pandemic (Gregory, 2021), with the amount of young people aged 14 to 22 experiencing symptoms of anxiety and depression rising notably (Czeisler et al., 2020; Rideout et al., 2021). Longitudinal research has highlighted how behavioural and attentional difficulties increased as lockdowns progressed (Cresswell et al., 2021) and levels of childhood obesity have also been noted to have risen substantially, with potential lifelong health consequences (Foster, 2024). UK school closures, that affected up to 8.8 million CYP (Lewis et al., 2021), have reinforced existing inequalities (Betthäuser et al., 2023) and widened the learning gap for disadvantaged pupils and those from poorer backgrounds (Andrew et al., 2020; Cullinane & Montacute, 2020; Van Lancker & Parolin, 2020).

CYP and their families have already endured the impact of austerity and welfare reforms (BMA, 2024c) and are now having to navigate an ongoing cost of living crisis

(Beckett, 2024). The COVID-19 pandemic has further increased child poverty in the UK (Joseph Rowntree Foundation: JRF, 2024) and the impact on labour markets has had a disproportionate effect on young people searching for employment. In a radical shift, people in their twenties are now more likely to be out of work due to ill health than people in their forties (BBC News, 2024). With education so disrupted, and prospects and opportunities for financial independence notably hampered, it is no surprise that many CYP are experiencing existential concerns regarding their future trajectories (Bell et al., 2023)

## Social Connection and its Importance During Adolescence

A particular area of concern in relation to the COVID-19 pandemic and the impact of associated restrictions on CYP comes in relation to any potential loss of social connection. Social interactions and the sense of belonging they can provide are a basic human need, analogous to other fundamental requirements such as food and sleep (Baumeister & Leary, 1995). A perceived sense of disconnection has been associated with a range of profound and enduring negative consequences on both physical and emotional health, which at their most impactful can even contribute towards an increased risk of mortality (Hawkley & Cacioppo, 2010)

During the period of adolescence, when young people are aged between ten and twenty-four (Sawyer et al., 2018), there is a heightened degree of sensitivity to social connection (Blakemore & Mills, 2014) making it a cornerstone for health and wellbeing (Blum et al., 2022). As their attachment needs shift from parents or caregivers to peers, adolescents seek to establish a greater degree of independence and an autonomous sense of self (Thiesen et al., 2018). The depth and complexity of social relationships increases notably as more time is spent away from family (Lam et al., 2014) and the acceptance of peers acts as a protective factor and provides a stabilising effect (Birkeland et al., 2014). During adolescence, hunger for social approval grows stronger along with sensitivity to

rejection (Minihan et al., 2023). Peer influence also strengthens in importance (Smith et al., 2014) and the impact of any unmet social needs can be acute (Tomova et al., 2021).

The pandemic has further reduced sense of belonging and increased already escalating rates of global loneliness (Allen & Furlong, 2021; Lim et al., 2021). Adolescents have endured profound disruption at a critical period of their psychosocial development, losing access to various offline sources of support, both formal and informal Whilst there is some indication that increased pandemic related challenges with physical and mental health have been most pronounced in preadolescent children (Waite et al., 2021) the consequences of social deprivation are likely to have had a heightened impact on adolescents (Sawyer et al., 2018). Hence, there is an urgent need to better understand the potential impact of COVID-19 social distancing measures on their wellbeing and development (Orben et al., 2020). Particularly as any impact may well endure long beyond the period across which restrictions were imposed.

## The Need for Qualitative Research

Whilst rapid reviews of quantitative research in the area have demonstrated the negative impact of social isolation on CYP (Loades et al., 2020) and mixed methods studies have provided a degree of insight (Bell et al., 2023), there is a need to significantly amplify CYP's voices to promote better understanding of the nature of their experiences. Research thus far has presented a nuanced picture of how CYP experienced the pandemic and associated restrictions that derailed development across various domains, paused access to key support services, disrupted their education, and weakened protective factors.

Qualitative research allows us to make sense of reality and explore the intricacies of people's complex social experiences (Morse & Field, 2004). A range of factors influence and predict the nature of CYP's response to traumatic events or adverse childhood experiences

(Prati & Pietrantoni, 2009; Trickey et al., 2012). Hence the impact of the pandemic is likely to be highly contextualised.

## Aims of the Current Study

Using a constructivist ground theory approach (Charmaz, 2014), the current study aims to accurately and meaningfully capture the impact of the pandemic on adolescent participants, with focus directed towards their experiences of social connection during lockdowns. Acknowledging an absence of young voices from much of the debate thus far, from an interpretivist perspective the study intends to place participant voices at the front and centre to aid development of an integrated and comprehensive theory grounded in their stories.

#### Methods

## Study Design

This qualitative study was conducted from an interpretivist perspective in which reality is viewed to be subjective in nature and socially constructed from the meanings individuals attach to their unique experiences. Congruent with this perspective, a constructivist grounded theory (CGT) approach (Charmaz, 2014), which seeks to promote understanding of the social processes that underlie a specific phenomenon, was utilized.

Drawing on the basic tenets of symbolic interactionism, CGT recognises that knowledge is mutually created by the viewer and the viewed (Charmaz, 2003). It was felt therefore that CGT would facilitate the researcher's aim of sitting alongside young participants to explore the unique impact of COVID-19 and associated social restrictions on their lives at a crucial period of their development. The structure and flexibility provided by grounded theory was deemed to be of particular benefit to a novice researcher. As was the

focus on reflexivity promoted by CGT and the necessary scrutiny of the researcher's own history and personal and professional experiences.

#### Recruitment

Via established links with a service supporting emotional health in schools', information on the nature of the study (Appendix B) and recruitment posters (Appendix C) were shared with head teachers, heads of year, and other relevant figures. The same information was also shared with 18 secondary schools in the researcher's local area (Appendix D).

Although limited by schools' ongoing social restriction policies and limitations around access for external visitors, drop-in sessions were offered in which additional information questions could be asked and CYP could build familiarity with the researcher. Subsequently, discussions were also held with the facilitators of various local sports clubs and information posters provided.

CYP from the target participant group were involved in the design of the research study, confirming its value and reviewing draft recruitment materials to ensure that they were accessible, appealing, and used age-appropriate language.

#### Consent

Research involving CYP is increasingly influenced by a greater recognition of their rights and a desire to reconceptualize them as active agents (David et al., 2001). The decision to seek informed assent from participants directly, rather than parental consent, was therefore made with the intention of acknowledging CYP's role in contemporary society and their developing ability to make informed choices.

A participant information sheet (Appendix E) was created to help maximise understanding of what would be involved and to seek assurance that any decisions around participation were both rational and informed. Equal provision was given to the creation of

an assent form (Appendix F) that was provided to any participants that expressed an interest. Efforts were taken to ensure that participants felt comfortable ending their involvement prior to a final cut off point due to data having then been anonymized.

#### Participants and Sampling

A total of eight participants, four males and four females, were recruited and interviewed for the study. Initially, purposive sampling was utilised to recruit participants who at the time of conducting the research were in UK Key Stage 4 education. This is secondary school years 10 and 11, during which pupils are aged 14 to 16. It was felt that, in comparison to younger children, participants from this age bracket would allow for richer data to be gathered. Young people in this age group are legally permitted to register accounts on various social media platforms and often have access to mobile technology through their own devices. Engagement with digital technologies as a means of maintaining social connection was thought to be a particularly important factor to develop understanding around.

Following completion of the first set of interviews and concurrent data analysis, in line with principles of CGT research, the intention was to adopt a theoretical sampling approach, whereby participants would be sought to aid with the development of tentative initial categories or fill gaps in the initial analysis. However, due to ongoing challenges with recruitment and a lack of response from schools, a decision to use a convenience sampling approach was made.

#### Data Collection

Semi-structured interviews lasted between 27 and 45 minutes and were conducted either via telephone or online video call (MS Teams or Zoom). On completion all participants were provided with a debrief sheet (Appendix G) Interviews were digitally

recorded and transcribed verbatim. An interview guide (Appendix H) was created and refined as the research progressed.

## Data Analysis

Initial line by line coding was used as the first step of data analysis. Descriptive in nature, this was intended to increase familiarity with, and promote granular examination of, the data. Once completed, intermediate coding was then used to move beyond mere description and towards the early stages of conceptual analysis (see Table 1). A process of constant comparative analysis was followed, comparing data against data and codes against codes, to aid exploration of any potential similarities and differences. At this stage core categories began to emerge.

Advanced coding was then undertaken in an attempt to further raise the level of abstraction and progress towards the development of a theory grounded in the data with explanatory power (Birks & Mills, 2015). Decisions were taken around the prevalence and perceived importance of different codes, concepts and categories and they were then refined and developed until it was felt that a point of saturation had been reached.

#### Data Saturation

Throughout the planning of the study and ethics submission, consideration was given to how a novice researcher, with limits on available time and resources, might be able to achieve a point of genuine theoretical saturation (Glaser & Strauss, 1967). Potential implications in terms of recruitment and point of completion were considered. Discussion also took place around how this might impact upon the quality and rigour of the study (Fush & Ness, 2015).

Following discussions with a research supervisor, the decision was made to work towards a point of meaning saturation (Hennink et al., 2017) rather than theoretical saturation. The recruitment process was therefore stopped, and no further interviews were

conducted, once it was felt that emerging themes contained sufficient depth of meaning and no new relationships were being discovered (Hennink et al., 2017; LaDonna et al., 2021).

#### Results

## An Understanding of Social Connection

With the initial focus of the study shaped towards understanding the impact of lockdowns on young people's experiences of social connection, participants were encouraged to consider its personal meaning for them and reflect on the role it plays in their lives. The enjoyment of time spent with one another and the development of ever-closer bonds was widely referenced. Constant availability and frequent contact through digital technologies was noted to promote the strengthening of relationships. Laughter and the creation of shared memories was widely discussed, as was a sense of relaxation in one another's company and the positive impact this was thought to have on emotional wellbeing "Seeing my friends always, like, makes me feel better ... and I notice it when I'm on my own" (ID4)

Feeling part of something wider was also widely referenced, linked to a sense of belonging and attachment to a group. Ideas around confidence and safety were also noted, along with descriptions of how access to alternative sources of support acted as a protective factor "You get a lot of teens, kids my age now really struggling from depression and everything ... but I don't suffer from that because I feel I can connect with people in any sort of way" (ID6).

Shared interests and passions were also widely referenced with considerations of the extent to which they strengthened CYP's sense of connection to each other. The age of participants meant that focus often naturally fell onto how their interests, needs, and priorities in relation to social connection had evolved over time. A reduced role for parents in the

maintenance of friendships was noted, with participants having experienced a growing need for independence and a desire to both organise activities and build connections themselves. A shift in emphasis from quantity to quality was noted by many, as connections grew more intimate, and the development of trust became a key priority:

"When I was younger, it was all about oh you're the coolest if you've got loads of friends ... but then as you get older ... you've got your friends, and you become really close with a few select people. You talk to others ... but not like openly, and you're not like really close with them." (ID5)

## The Journey Through Lockdowns

As interviews progressed and participants reflected more broadly on their lockdown experiences, a tendency to reference progressive stages of a journey emerged. Whilst sense of connection was something that, to varying degrees, permeated each of the stages, it became clear that to fully attend to how participants had constructed the meaning of their lockdown experiences a broader focus was required. An explanatory model (see Figure 1) with six themes was therefore developed, to reflect the shape and cadence of the journeys described.

## Adjusting to Lockdowns

This theme captures how participants reflected on their initial adjustment to lockdowns, and the realisation that something which initially felt like a temporary measure was destined to be more prolonged. As people across the UK struggled to adjust to rules and adapt to a new and restricted way of living, participants began to observe varying levels of

compliance among friends and recalled questioning the extent to which we might actually be, 'all in this together'.

As participants reflected on the initial lockdown, there was a notable absence of concern around any potentially sustained period of disruption. Rather, a sense of freedom was described, allied with a determination to make the most of an unexpected break from schooling and associated pressures. An initial sense of novelty and excitement was widely referenced "When we first went into lockdown it was, like, it was sort of like being, on a bit of a holiday, we're not going to be here for long" (ID6).

However, as enthusiasm began to wane and lockdowns showed no signs of ending, participants began to consider the longer-term implications. Focus shifted towards trying to adjust to the rules and an accompanying sense of confusion and frustration:

"When you'd go out to like see them [friends] in a park, but you had to stay two meters apart and then you accidentally forgot it was just ... all these different new rules and restrictions ... yeah, it wasn't great." (ID2)

"To be fair, they were quite, like, complicated the rules they gave us. I think everyone was a bit confused by what you were and weren't allowed to do." (ID7)

Although challenging, participants described how their adherence to rules was shaped by a collective sense of responsibility:

"I feel like it was quite difficult to begin with ... but once everyone was really into lockdown everyone was like really going by the rules because you've got to do it to help other people

and to move forward from it ... it was quite important to be doing like they were telling you to do." (ID4)

Concern for others, particularly older or vulnerable family members, was common among participants and some recalled palpable fear and time spent wrestling with the potential macabre consequences of transmitting the virus themselves:

"If I had the virus and I didn't even know then I would just feel like I'm spreading it and like not even caring that much ... but like it's affecting others, that could possibly even die from it, and it would just be my fault." (ID5)

As the adjustment to lockdowns continued, it became apparent to participants that adherence to rules varied among friends and their families. Diminished sense of solidarity and a perception that peers were not taking rules seriously was a notable source of frustration:

"Yeah, some of them were like, "oh it's fine" but then you have to think, well we've been told that we actually need to stick to the rules and it's for, it's not just for you, it's for everyone else as well." (ID2)

"Even when it was, like right now when it's like cases are high again and deaths are, I don't think they're taking it that seriously." (ID5)

Participants described how they took their lead from those around them, with parental influence a key factor. Whilst more broadly there may have been varying degrees of

compliance, participants described how they followed the guidance of parents and adopted a unified approach as a family unit:

"I feel like it was more like the adults that got the say ... like my parents were telling me what to do, I'd just like kind of take that on board and I wouldn't really think about." (ID9)

## Living Through Lockdowns

As lockdowns continued, people were required to adjust to a 'new normal' and a way of living that was in many ways alien to them. This theme captures how participants reflected on a growing acceptance that lockdowns were going to be in place for a longer period than originally assumed and more permanent adjustments would therefore be required. As restrictions were kept in place, participants described a growing sense of fatigue as adherence to rules began to take an increasing toll on their physical and emotional wellbeing. In response, new ways to stay connected through technology were utilised and highly valued. Concerted efforts were also made to maintain levels of physical activity and spend time outside due to recognition of the associated benefits.

Contemplation of missed time spent with friends was common, as was a creeping sense of isolation "Just, kind of, like a loneliness, to be fair. Like, some days, like, you just miss them, like, you go want to go, "ahh I want to go out with my mates", but you couldn't" (ID8).

Participants were keen to express the scale of change and how different their day-to-day lives had become due to lockdowns and associated social restrictions. Disconnected from their normal routines and the sense of structure they provided, many noted a negative impact upon their mood and increased irritability or annoyance:

"When I was swimming, I was seeing these people seven times a week, two hours a session ... then not seeing them it's a big shock, it's a big change. Like, these guys were my best mates so it's like, I'm not seeing them now, it just gets a bit, a bit annoying." (ID6)

With any sense of initial novelty having faded, fatigue and a sense of mental exhaustion began to grow more prominent for many participants, and was often driven by a lack of clarity around how long the current situation was going to continue:

"Yeah, it felt like it was just getting dragged on and it just kept on going and like wasn't ending." (ID2)

"Yeah, it got less of a holiday as it went on, like, it got more boring, like, you were like, "ugh, can't this end." You just wanted it to be over, to be fair. Like when it got further on." (ID8)

Use of digital technologies was a key factor in participants maintaining their sense of connection to peers. Social media and smartphones facilitated access to a network of support, and the opportunities they enabled were highly valued "Everyone's struggling at the moment with different things, so it's just nice to know that someone's always there, like, on your phone" (ID5).

Although clearly different in nature, virtual spaces provided participants with some sense of connection to normality and the ability to spend time with friends in a group:

"We always kept in touch, like, nothing really changed to be fair ... not seeing each other for a very long time was tough but, like, we still like Face Timed all the time ... we couldn't do stuff together, but we would just try and do stuff all the time, like virtually." (ID8)

For those participants who found living through lockdowns less of a struggle, space at home and the ability to take time away from family members when required was a key factor. Spending time on your own and having the option to remove themselves from a situation helped participants to minimise conflict:

"There probably would have been, yeah, the odd moment but we just, there's plenty of rooms in my house, like, so you just take yourself off. I mean, we had plenty of time by ourselves.

We, you know, it wasn't like we were spending all day together." (ID7)

Participants who noted how they benefitted from having sufficient space acknowledged that it was not something available to everyone and expressed a sense of gratitude. Those who had a greater degree of agency around who they spent time with and a broader range of options in their home environment described how it helped them to maintain closer and more cordial connections with family members. One implication of this appeared to be that they weren't quite as reliant on the use of digital technologies to contact friends "I actually spent more time outside because I've got the garden, so I would spend a lot more time with my family outside rather than with friends and on social media" (ID7).

Staying active became increasingly important and beneficial for wellbeing as lockdown journeys progressed. Participants noted how enforced restrictions around how much time they could spend outside their home led them to place increased value on physical exercise and the opportunities it provided for offline social contact "You could go out and

exercise with someone, so I used to go on a bike ride with one of my mates ... or run like a 5k or something like that. It was great, we could just see each other and talk" (ID8).

#### The Impact on Education

School closures began in March 2020 and finished a year later. This theme captures how participants reflected on that period and the notable disruption to their education. Disconnected from their typical sources of support and increasingly reliant on digital technologies, participants struggled to maintain focus and motivation. At a pivotal stage of their education, participants were required to manage notable uncertainty around what might lay ahead and the potential consequences of prolonged school closures on their imagined futures and long-term prospects. With education providers largely unprepared for a short notice shift to remote learning, participants were required to find ways to adapt and adjust.

As restrictions to in-person learning began, participants described the difficulties they experienced maintaining adequate levels of focus and concentration when trying to study from home:

"I struggled with online lessons, like I couldn't keep concentrated, I couldn't stay focused.

There was so many different distractions in my room ... I think that just almost slowed my learning. Like, I was missing certain things, I was missing bits of information. I couldn't stay concentrated on the work for long periods of time." (ID6)

Many participants noted the increased level of fatigue they experienced whilst trying to learn remotely and the detrimental impact that had on their physical and emotional wellbeing "I don't think it's good for you because you're there just staring at something, and you start drifting off into space and just feel tired" (ID6).

Being away from the normal school environment required notable adjustment.

Participants described the challenges of learning in busy houses with parents and siblings

who were also trying to navigate various stresses and a new approach to working. With so many people at home at once, finding sufficient space was a common challenge, and bedrooms that were previously a place for relaxation turned into makeshift classrooms:

"Because you've thought your entire life that your bedroom's your just sit there and chill area, but it's coming to be more of an office ... well you've got into that mindset of it being your relaxed zone so it's difficult to get out of it and think let's switch on now, this is where we're working." (ID7)

Participants referenced various practical inconveniences, that included a lack of required equipment or supplies. This was particularly apparent in relation to creative subjects, and was something that notably limited participants enjoyment and perceived progress:

"The most difficult thing for me was I took really arty subjects, so I didn't have the supplies that I had at school ... like textiles, I didn't have a sewing machine and then, like, art all the different materials that I needed ... it was really difficult." (ID2)

With participants in years 10 or 11 and studying for their GCSE's, many were left to manage considerable uncertainty around their academic futures, employment prospects, and transition into further education:

"You've already like prepared yourself emotionally and, like, mentally for it. So, it keeps like messing with my head and, like, focusing on what I need to revise for and stuff like that. It's a bit messy at the moment." (ID5)

A central feature of such concerns was a feeling of being ill-prepared for any examinations that might go ahead in the future. Many participants speculated about personal learning loss due to the impact of school closures and enforced remote learning "I don't feel like I've learnt as much because I've not been in school, so I feel like I've missed out like two years" (ID3).

Participants also described the challenges of feeling isolated and disconnected from both teachers and peers. Within the confines of their own digital silos, individualised support or instruction felt limited, with minimal opportunities for meaningful interaction around schoolwork:

"It was weird, you couldn't really, like, put a hand up and ask because people wouldn't really speak over Teams ... the teacher would just say something, but no one would unmute their mic, people would just be silent like that, a bit odd, nothing like that interaction you have in school really." (ID8)

Participants described difficulties related to a lack of routine and structure. Whilst most were consistently pushed and guided by parents who had the time and energy to do so, others were left to determine their own levels of industry. Without the academic and emotional support provided by teachers and the wider school environment, participants noted having struggled to generate sufficient motivation "I wouldn't really do anything, like, I would stay in bed till 12 some days, just, I wouldn't do the schoolwork that they set and I, just, don't know, couldn't really be bothered" (ID8).

However, even in the absence of any real oversight, there were participants who as time progressed developed and relied upon intrinsic sources of motivation "It taught me just

to always keep motivated, you have to when you are by yourself. When you're literally, you've got nothing except, like, you've got no one to help you really, just always keep going" (ID7).

Whilst there now exists detailed guidance for education providers around the provision of remote learning, at the start of the pandemic and the beginning of school closures it was still very much in its infancy. The scale of the challenge varied dramatically between schools, and across different periods of school shutdowns. Participants described uneven and uncertain levels of support. As schools reopened, however, and participants returned to the classroom, a renewed sense of support was described as teachers recognised pupils' need for closer engagement:

"Teachers come around more and help you a bit more because they know that you've missed out on quite a lot of face-to-face learning and things like that, so they give you a bit more help and support with things." (ID3)

Whilst a return to the school environment was welcomed, it wasn't without its difficulties as participants strived to find ways to adapt. Separated into smaller groups, as a containment strategy, schools felt like much different places. Although participants were pleased to be back in the classroom, they acknowledged the presence of concerns around their safety:

"At the start, when we came back in September, like we had our own, each year group had their own section of the school. I can't remember when it started again, but it moved to the whole of the school. So, that was a big impact as well, because you were just, you were mixing with everyone, and it just felt like COVID would be easier spread that way." (ID5)

## Coming Through the Other Side

The final theme captures how participants reflected on their emergence from lockdowns and began giving consideration to what had they had gained or lost as a consequence. In many cases, experiencing prolonged periods of social restriction had led to a re-evaluation of what felt most important and a recognition of the value of offline connection:

"I feel like I've always been quite a social person ... now being able to see people again, like, I've really tried to make time for people and, like, see people more than I would have done before maybe, because I've known what, felt what it's like to not see people and then now I want to see them as much as possible." (ID4)

There was a notable sense of excitement around the future and opportunities for connection. A conscious intention to take a step back from digital technologies was noted:

"Well, I'd want to see like people that I haven't seen in a while face to face more and, like, not just be the same person. Like, see more people, not spend as much time on my phone, like, texting them, and just trying to, like, experience things that I wouldn't have done before because, well, obviously when it's safe, but just, like, make the most out of the time that you have, being almost free." (ID5)

Participants also described their intention to embrace restored freedoms and any opportunities to travel and create new experiences with friends in different surroundings:

"We know that whilst we're out of lockdowns we should do stuff more, like, see each other more in person and make the most of being able to go places ... we went to Liverpool the other day and that was really nice because it's just going to different places and seeing new things because we've not done that in a long time." (ID2)

With lockdowns finally lifted, thoughts naturally turned to contemplation of what had been lost and the personal costs of having lived through a year of widespread social restrictions. Some participants noted an impact on their levels of confidence and a reduced sense of independence. Reference was made to ways in which social distancing measures had negatively impacted connection to loved ones and a diminished sense of physical and emotional intimacy. Stolen endings and regret around lost opportunities were also articulated.

As the nation emerged from a series of lockdowns, facilities and services that had previously been available were limited in different ways and, from a practical perspective, participants noted how that contributed toward a diminished sense of independence:

"So, instead of my parents, like, taxiing me around, I would get the 84 [bus], like, a lot. But since COVID, like, it's either been, I think it was stopped at one point and then it was like face masks, and then it was just, kind of, like, I think I've been on a bus like maybe twice since the start of it now. So that stopped me from like getting places, which has impacted me." (ID5)

As regular face-to-face contact with people outside of their 'bubble' recommenced, participants noted initial trepidation as they struggled to make the necessary adjustments.

Social interactions that had previously felt natural had become more effortful, and

participants noted how it took time for them to regain a level of comfort "It's just, it's changed dramatically, like, my confidence and, like, speaking to people, but I think, I think it's like, kind of, gradually get getting a bit better now. But, yeah, it has like affected my confidence" (ID5).

Many participants observed how a reliance on online communication through digital technologies had perhaps led to a deterioration in their social skills and a perceived inability to effectively converse:

"Over, like, the first lockdown and returning I completely lost, like, all my confidence ... even if I've spoken to them before, like the past year, I would still, like, just be like really blunt with them, but not like in a mean way, just like I didn't know how to say things." (ID2)

Infection control measures that included mandatory face coverings were a manageable inconvenience for most, however, participants did describe becoming so used to them that their removal led to increased feelings of awkwardness around peers "There's a lot of maskwearing and now it's like when you don't wear masks, it makes you feel, like, self-conscious and stuff like that. So, that's had a really big impact on me." (ID5)

Well-managed transitions are particularly important for CYP as they navigate through different stages of their education and personal development. Close bonds are often forged as CYP move through school together and celebrate their achievements. Participants described how any excitement about starting out on the next stage of their journey was often somewhat tempered by a lack of appropriate ending and closure:

"So, yeah, I remember that just before lockdown we thought it was going to be really quick, but it didn't turn out like that and then everyone's doing different things and then by the time lockdown was over, we were all going to separate colleges." (ID1)

Not being able to fully celebrate milestones or special occasions with wider family had a notable impact on participants and many described a feeling that they had missed out "I just feel, like, you really noticed it more when it was like celebrations and you wanted to be with people and, like, main events like that, that feeling like you should be with people, but you couldn't." (ID4)

Measures preventing or limiting physical contact also had a detrimental effect, with participants having described how an absence of closeness evoked feelings of frustration:

"Not seeing, like, not being able to hug other family members ... we got to that point where you could see six people, but you had to social distance, like, having like your family in the back garden and not being able to, like, give them a hug after ages, you just had to sit two meters apart." (ID8)

## What We Gained

Participants also found space to reflect on what they felt had been gained as a consequence of their experiences throughout periods of lockdown. Increased time spent together due to social restrictions left many feeling a notably stronger sense of connection to family members. This was particularly the case in relation to siblings. Participants also acknowledged a feeling of pride in relation to what was perceived to be an increased ability to adapt to adversity.

Participants described how they and their families had made a conscious effort to support each other and engage in activities that strengthened connection:

"To be fair, our family, like, we would always try and do something ... we would try and play board games, me and my sister would go out on rides ... go get some food, just, like, have that bonding time together. We would always try and sit together, just do something together, so we wouldn't be in our rooms, like, by ourselves." (ID8)

Fond reflections of time spent together were commonplace as participants looked back on how habits and family dynamics had changed for the better:

"We never used to do things in the garden together, I don't think. We did that a lot more from lockdown and, it was kind of like, it felt like being on holiday, you know, where you play and then you go and have a couple hours by yourself and then come back for dinner, it was like that every day. So, I think habits changed, yeah." (ID7)

Sibling relationships were noted to have been a particular source of support with many participants reflecting on how fortunate they felt to have been able to spend time with somebody close to their own age, who often shared a similar perspective on events and with whom they could enjoy different activities "It probably made it seem ... less isolated, more normal, because you, kind of, had friends with you. Like you could play games with them, you could go outside, you could just communicate, like, talk to them" (ID1).

Participants articulated how as a result of spending increased time together their relationships with siblings had evolved "I quite like it because when we were younger, we

never used to be as close as we are now. And I think it's quite nice to know that they're your siblings as well as friends" (ID3).

### Discussion

During the initial stages of lockdown, as participants gradually adjusted to a new way of living, a sense of novelty was experienced. Increased time for relaxation and a reduction in typical age-related pressures was welcomed. As it became clear that restrictions may be less temporary in nature than had once been assumed, participants were required to adapt accordingly and were largely successful in their efforts. Guided by parents and a collective sense of responsibility, healthy acceptance was common despite increasing recognition that outside of their bubbles there might be differing degrees of appetency towards adherence.

As time progressed and restrictions remained in place, a sense of fatigue took hold as participants began to struggle with a loss of structure and routine. Any sense of freedom around how to fill their days was gradually replaced by a growing frustration and confusion around rules. A lack of physical connection with anybody outside of their home environments felt increasingly difficult to manage as participants craved any easing of conditions. In response to periods of difficulty, participants recognised the need to proactively attend to self-care and experience the benefits of being outside wherever possible. This was done with the acknowledgement that, along with ample space, it was not something available to everyone and that their experience was by no means universal. In the absence of opportunities for offline connection, digital technologies were highly valued and utilised to maintain contact and a sense of closeness to peers.

As schools closed, participants were required to adjust and contend with the challenges of remote learning and a notable disruption to their education. With school and home environments now intertwined, there was a reliance on intrinsic sources of motivation

as a creeping sense of isolation from typical educational support took hold. Participants were required to manage considerable uncertainty as they contemplated when the need for remote learning might end and how any changes to plans around their GCSE's might impact on personal trajectories and future progress. With schools insufficiently prepared to initiate and support remote learning on a mass scale, learning was significantly hampered. Teachers struggled to match instruction to different styles and levels of learning, and whilst some went considerably beyond their core responsibilities, others did not. As schools reopened, any excitement at reconnecting with peers experienced by participants was accompanied by an initial sense of discomfort and loss of confidence related to a perceived deterioration in social skills. As participants adjusted to new social distancing measures and the wearing of protective masks or face shields, some felt self-conscious or nervous, whilst others struggled to effectively communicate. Although all participants coped admirably, having benefitted from access to required technology and sufficient space, it was notable than none thrived and all welcomed a return to face-to-face learning.

## Implications for Clinical Practice and Future Research

Much can be learned about how the young participants interviewed for this research responded to adversity and found effective solutions, with protective factors in place and access to both formal and informal sources of support. Participants reflected on material resources and stable, responsive and compassionate family systems. Of course, this isn't reflective of all young people's experiences and the pandemic is likely to have impacted most strongly on those who were already most vulnerable. That doesn't mean, however, that participants experiences and meanings are any less valuable, and there is a great deal that can be learned from their responses and what needs to be in place for CYP to cope with adversity and foster resilience. Appropriate safeguarding of CYP is clearly of paramount concern, however wider society and those working alongside them must also continue to recognise and

highlight their amazing capacities to adjust and respond when they have effective systems of support around them. Narratives are powerful. Rightly, there been much discussion following the pandemic around its potential short- and long-term effects. Of course, we must recognise the impact of the pandemic and associated disruption on CYP's lives and prepare better for the future. In addition, though, we must also recognise the danger of sweeping generalisations around the future fate of a 'lost generation' and imminence of an impending mental health pandemic (Daley, 2020, Foulkes, 2021) that perhaps highlights a concerning tendency to individualise or overmedicalise normal human reactions. Any emotional distress: frustration, longing, sadness, anxiety, stress, reduced motivation, that the young people interviewed experienced during the course of their lockdown journeys appeared a normal response to an abnormal situation. Clinicians must continue to focus on formulation and helping CYP to make sense of their experiences, considering what has happened to them rather than what might be wrong with them (Johnstone, 2018).

Sufficient access to digital technologies also played a central role in limiting the impact of restrictions upon participants emotional health and sense of wellbeing. With the future likely to be increasingly dominated by digital technologies, supporting the development of digital literacy and global competence need to be a priority, as do efforts to address the digital divide.

## Conclusion

Participants' reflections on their experiences of lockdown have provided a valuable insight into how CYP were able to maintain a sense of social connection despite the imposition of mandatory restrictions on face-to-face contact. Further, they have helped highlight how the development of adaptive responses to a range of novel challenges promoted healthy emergence back into wider society. Participants demonstrated

psychological flexibility in accepting and adjusting to the situation and restraints imposed upon them. Self-reliance was mixed with a willingness to seek out and engage with any available support. Whilst there were periods of frustration and notable uncertainty, engagement with social media and digital technologies limited any sense of isolation, facilitated connection, enabled continued education, and helped lockdown feel like a more shared experience. Parental presence, willingness to adapt, and a concerted effort to make the most of a testing situation resulted in a deeper sense of family connection, closer sibling bonds and the development of positive new habits.

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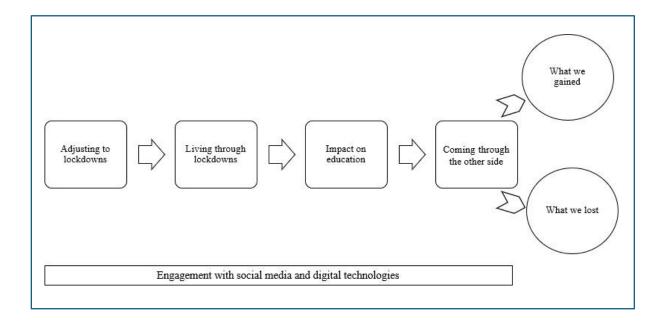
# **Tables and Figures**

Table 1. Coding example

Interview Transcript	Initial line-by-line coding	Intermediate coding
INT: Super. And thinking back then to the lockdown and the restrictions that were in place, what, what kind of impact did they have on you in terms of the way you were able to connect with people?		
ID4: Quite a big one, as I say I like to be outside, I like to be with people, but I'd still find a way. I could go on walks with people, I'd still like see people, but like the main thing is that I was still with my family, so I could still speak to them.	Restrictions had a big impact, particularly in preventing from spending time outside and being with others.  Finding ways to work around the challenges was important.  Still had connection to family.	Adapting to rules and restrictions  Adapting to rules and restrictions  Importance and meaning of family connection
INT: Yeah		
ID4: And it wasn't like a complete shut off because obviously I could use the internet and whatever to keep in touch with people, but yeah that's pretty much it, overall.	Still able to connect with friends online so didn't feel completely 'shut off'.	Connecting through technology
INT: And then in terms of the school closures, what, what kind of, what was that experience like for you, not being at school and learning from home?		
ID4: That was quite a big one because I'm quite like a visual learner and I like to be in a classroom and I like to see what the teachers are learning rather than just like writing, because I'm dyslexic so	Learning from home was difficult – feels like they are a visual learner so work better in class.  Dyslexia also made learning from	Responding to challenges of online learning  Responding to challenges
like.	home challenging.	of online learning
INT: Right		
ID4: I prefer seeing visual things like to get them into my brain and, obviously, because it was going on for so long, it's like knocked me quite a lot back in school and learning things.	Remote lessons were different style of learning that didn't suit them.  Felt like lockdown left them behind where they otherwise would have been.	Responding to challenges of online learning  Unable to fulfil potential.
INT: Was that, was that something that was recognised by teachers then? That people have different styles of learning, and there were some people that perhaps needed more support.		

ID4: Well, I think so, and I would always like if I didn't understand things I wouldn't just like let it go, I would	Had to be persistent in seeking out additional help to understand things.	Seeking support
always like email my teacher and say is	Had to adopt range of strategies to	
there a way of like, like I would do things myself, like writing my notes and	manage challenges of learning from home.	Finding a way
putting pictures next to my notes and just	nome.	rinding a way
making things easier for me because I	Understands their own way of	
knew my way of learning.	learning and how it might be	Finding a way
	different to peers	
INT: Yeah		
ID4: And obviously the teachers don't	Not all teachers aware of their	School's response
know every single time that I have a different way of learning so they can't	individual learning need.	
cater for everyone, but I'd just do things myself that made it easier.	Needed to be autonomous in finding ways around challenges of home learning.	Finding a way

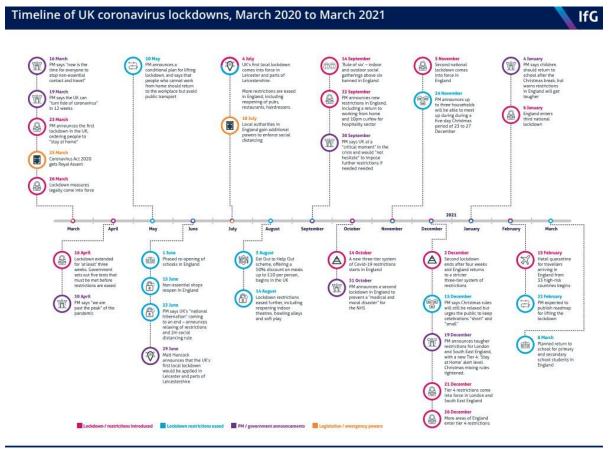
Figure 1. Explanatory model – Participants journey through lockdown



## **Appendices**

## Appendix A

## Timeline of UK coronavirus lockdowns, March 2020 to March 2021



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Source: Institute for Government analysis.

## Appendix B

## **School Information Sheet**

School Information Sheet



## A Grounded Theory Exploration:

# Adolescent Experiences of Social Connection During 'Lockdown'

I am conducting a research study into the impact that recent COVID-19 restrictions and 'lockdowns' have had on the lives of young people, as I believe that there is a lot that can be learned from gaining a better understanding of their experiences.

I am seeking the support of secondary schools in recruiting young people (currently in Key Stage 4 education) who wish to share their experiences of social connection during recent 'lockdowns'. It is hoped that the research will link into work currently underway with the Lancashire Emotional Health in Schools Service (LEHSS) service relating to transitions and Relationships.

In response to COVID-19, it appears that many decisions have been made without due appreciation of the potential short-and-long term impact upon children and young people, and without adequate consultation with those working in education. I believe that more research is needed which helps young people to share their stories and experiences, and it is hoped that the information gathered in such research can then be used to guide future decisions.

Further information on the study is provided below, along with recruitment posters. Please feel free to contact me using the details provided if you are happy for your school to be involved, or if any further information is required. I am happy to arrange and hold drop-in sessions if felt to be beneficial, and if they can be arranged safely and without undue inconvenience to yourselves.

My name is Declan Jordan and I am a Trainee Clinical Psychologist.

This research is being conducted as part of the Doctorate in Clinical Psychology programme at Lancaster University, Lancaster, United Kingdom.

Contact Details



d.jordan3@lancaster.ac.uk



TBC

Version 1.0 - 05/11/2020



#### What will be involved in taking part?

Due to ongoing COVID-19 restrictions, interviews (lasting approx. 30mins) will be conducted either via telephone or video call depending on what would help participants to feel most comfortable. The interview will consist of questions about young people's experiences of social connection during recent 'lockdowns'.

#### Process of Consent

As participants will be under the age of 18, they will not legally be able to provide consent. Prior to meeting though, they will be sent and asked to sign, complete and return an assent form. Similar to consent, assent is for people who are not old enough to legally give informed consent but who are old enough to (a) understand the nature of the research and its expected risks or potential benefits (b) know what is expected of them and their rights as a participant.

The decision to seek informed assent from participants directly, rather than parental consent, has been made with the intention of acknowledging young people's role in contemporary society and their developing ability to make informed choices. The current research study has in part been driven by a belief that the voices of CYP have been absent from much of the debate around COVID-19 and the potential short- and long-term impact of associated restrictions. It is deemed important therefore that the consent process of the current study promotes agency and acknowledges the ability of young people within this age group to balance information, understand the requirements, and decide themselves whether they wish to talk about and share their experiences.

Although consent from parent(s) or carer(s) is not required, I encourage participants to discuss the research with them if they wish to do so.

### How will interviews be recorded and stored?

Interviews will be digitally recorded using an encrypted and password-protected device. As soon as is possible, the file will be securely transferred from the device onto Lancaster University's secure network. It will be stored within the researcher's individual area, meaning they will be the only person able to access it. All files will be treated with great care and attention

After a two-week period, the interview file will be typed out. This will be done solely by the researcher. This version of the interview will be made anonymous by removing any identifying information. Anonymised direct quotations from interviews may be used in the

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reports or publications from the study. All reasonable steps will be taken to protect the anonymity of the participants involved in this research project.

All personal data will be confidential and will be kept separately from interview responses.

Audio recordings will be deleted once the research project has been examined/submitted for publication. Hard copies of any documents will be kept in a locked cabinet.

#### What if participants change their mind?

Participants will have the right to stop the interview at any point if they no longer wish to continue. Following a completed interview, they will have the right to withdraw their interview from the study a period of up to two-weeks afterwards. After this point it will have been anonymised and can no longer be withdrawn. Participants will not need to provide a reason to withdraw from the study. If participants do wish to withdraw their data, then they will need to contact me via email within the two-week window and request that their interview be withdrawn. The interview will then be deleted and not transcribed.

#### Confidentiality

There are some limits to confidentiality in that if what is said in the interview makes me think that the participant, or someone else, is at significant risk of harm, I will have to break confidentiality and speak to a member of Lancaster University staff about this. If possible, I will discuss this with the participant before doing so. Whilst I will try to create a space in which participants feel able to talk openly and honestly about their experiences, it is also clearly my responsibility to help maintain their safety.

#### What will happen to the results of the study?

The findings of the research will be summarised and reported in a thesis as part of a Doctorate in Clinical Psychology, with the aim to try and publish in a peer reviewed academic journal following completion.

## Are there any risks involved in taking part?

There are no risks anticipated with participating in the study. However, if participants experience any distress following their interview they will be encouraged to inform the researcher and use the resources provided.

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## Are there any benefits to taking part?

It is hoped though that participants will find taking part interesting and that interviews will provide an opportunity to share and reflect on recent experiences in relation to COVID-19 associated 'lockdowns'. In addition, as a thank you and in recognition of the time invested, all participants will receive a £10 Amazon voucher.

## Who has reviewed the project?

This study has been reviewed and approved by the Faculty of Health and Medicine Research Ethics Committee at Lancaster University.

## Complaints

If you wish to make a complaint or raise a concern about any aspect of this study and do not want to speak to the researcher directly, you can contact:

Dr Ian Smith

Tel: (01524) 592 282 ian.smith@lancaster.ac.uk

Health Research Lancaster University Lancaster LA1 4YG

If you wish to speak to someone outside of the Doctorate in Clinical Psychology Programme, you may also contact:

Dr Laura Machin Tel: +44 (0)1524 594973
Chair of FHM REC Email: I.machin@lancaster.ac.uk
Faculty of Health and Medicine
(Lancaster Medical School)
Lancaster University
Lancaster
LA1 4YG

Thank you for taking the time to read this information sheet.

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Get help and advice about a wide range of issues, call Childline on 0800 1111, talk to a counsellor online, send Childline an email or pos message boards.

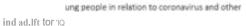
https://www.childline.org.uk/

Text the Young Minds Crisis Messenger service for free 24/7 support across the UK if you are experiencing a mental health crisis.

- If you need urgent help text 85258
- · All texts are answered by trained volunteers, with support from experienced clinical supervisors
- . Texts are free from EE, O2, Vodafone, 3, Virgin Mobile, BT Mobile, GiffGaff, Tesco Mobile and Telecom Plus.

If you want to know more about how you're feeling, get information about a mental health condition or know what support is available to you. visit our Find Help guides:

https://youngminds.org.uk/find-help/





I!«U """ www.annafreud.org/corpnavirus-support/support-for-young-





Apps to support with mindfulness, relaxation & sleep

## **Appendix C**

## **Recruitment Posters**

All participants will be entered into a draw for a £50 Amazon voucher









Are you in secondary school years 10 or 11?



Would you like to **talk about your experiences** of COVID-19 and its impact on **you** and **your friends**?



Volunteers are needed to take part in research exploring young people's experiences of social connection during COVID-19 'lockdown'.



We understand the importance of social connection for young people.



We think that young people should be given opportunities to share their experiences and knowledge.

Interested in taking part?

Please get in touch

Like more information?

d.jordan3@lancaster.ac.uk



All participants will be entered into a draw for a £50 Amazon youcher









# SOCIAL CONNECTION DURING 'LOCKDOWN'



Are you in secondary school years 10 or 11?



Would you like to **talk about your experiences** of COVID-19 and its impact on **you** and **your friends**?



**Volunteers** are **needed** to take part in **research** exploring **young people's experiences of social connection** during COVID-19 'lockdown'.



We understand the importance of social connection for young people.



We think that young people should be given opportunities to share their experiences and knowledge.

Interested in taking part?

Please get in touch



Like more information?

d.jordan3@lancaster.ac.uk

## Appendix D

## **School Email**

Good afternoon,

Sorry to trouble you on what I'm sure is a very busy Monday. I'm a trainee clinical psychologist working within the NHS and am currently leading a research project looking to better understand **young people's experiences of social connection during COVID-19 related 'lockdowns.'** I'm hoping to recruit volunteers from **years 10 or 11** who might be interested in taking part in a short interview that will allow them to share their knowledge and unique experiences. As a team we feel it's important that young people are provided with a space to talk about what has been a challenging time so that we can learn about the impact and give their voices a platform. The project is being supported by Lancaster University as part of a clinical doctorate but as I live in \_\_\_\_\_\_\_, I'm contacting local schools to gauge any interest.

I've attached some posters for the project along with a school's information sheet. I wondered if it would be possible to share with any relevant heads of year, or teachers working within areas such as pastoral support. It'd be great to hear from anybody who thinks this might be of interest to the young people they work with. Additionally, in line with the many COVID-19 restrictions you're currently having to manage, I'd be happy to offer a drop-in session to provide information and meet with pupils/teachers if that would be helpful.

Thanks for any help with this.

Kind Regards

Declan Jordan
Trainee Clinical Psychologist
Lancaster University Doctorate in Clinical Psychology Programme

## Appendix E

## **Participant Information Sheet**

Participant Information Sheet





A Grounded Theory Exploration:

# Adolescent Experiences of Social Connection During 'Lockdown'

You are being invited to take part in a research study

- Before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve.
- Please take the time you need to read the following information carefully. Discuss it with family and friends if you wish.
- You are free to decide whether or not to take part.
- If there is anything that feels unclear at any point, or you have any questions you would like to ask, then please feel free to do so using the contact details provided.

Important things that you need to know

- The research will require you to take part in an interview, which will last approximately 30 minutes.
- The interview will take place at a time convenient for you, via telephone or video call depending on what helps you to feel most comfortable.

My name is Declan Jordan and I am a Trainee Clinical Psychologist.

This research is being conducted as part of the Doctorate in Clinical Psychology programme at Lancaster University, Lancaster, United Kingdom.

Contact Details



d.jordan3@lancaster.ac.uk



TBC

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#### What is this research study about?

It is important that we look to understand the impact that recent COVID-19 restrictions and 'lockdowns' have had on the lives of young people, as I believe that there is a lot that can be learned from gaining a better understanding of their experiences. I am particularly interested in the idea of social connection during COVID-19, which means the interview will be based around that.

In recent months, lots of decisions have been made (school closures, learning at home, returning to the classroom, lack of access to clubs/sports/leisure activities etc) without what feels like proper conversations taking place with the children and young people that are affected. I believe that more research is needed which helps young people to share their stories and experiences. It is hoped that the information from such research can then be used to guide future decisions.

#### Who can take part?

I am looking to recruit young people in Key Stage 4 education (so those aged between 14-15) who wish to share their experiences of social connection during recent 'lockdowns'. Unfortunately, I do not have access to a translator or interpreter so the interview will need to be conducted in English.

#### What will be involved in taking part?

If you decide that you would like to take part in the study, then please contact me via the email address <a href="mailto:d.jordan3@lancaster.ac.uk">d.jordan3@lancaster.ac.uk</a>. We can then organise a convenient time and date on which to conduct the interview. This can either be via telephone or video call depending on what would help you to feel most comfortable. It is important to acknowledge that although much care will be taken, the internet cannot be guaranteed to be a completely secure means of communication.

As participants will be under the age of 18 you will not legally be able to provide consent. Prior to us meeting though I will send and ask you to sign, complete and return to me something called an assent form. Similar to consent, assent is for people who are not old enough to legally give informed consent but who are old enough to (a) understand the nature of the research and its expected risks or potential benefits (b) know what is expected of them and their rights as a participant.

Although consent from your parent(s) or carer(s) is not required, I would encourage you to discuss your participation in the research with them if you wish to do so.

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The interview will consist of questions about your experiences of social connection during recent 'lockdowns'. There is no right or wrong way to describe your experiences. I am interested in your unique view.

#### How will interviews be recorded and stored?

Interviews will be digitally recorded using an encrypted and password-protected device. As soon as is possible, the file will be securely transferred from the device onto Lancaster University's secure network. It will be stored within the researcher's individual area, meaning they will be the only person able to access it. All files will be treated with great care and attention.

After a two-week period, the interview file will be typed out. This will be done solely by the researcher. This version of your interview will be made anonymous by removing any identifying information, including your name. Anonymised direct quotations from your interview may be used in the reports or publications from the study. All reasonable steps will be taken to protect the anonymity of all participants involved in this research project.

All your personal data will be confidential and will be kept separately from your interview responses.

Audio recordings will be deleted once the research project has been examined/submitted for publication. Hard copies of any documents will be kept in a locked cabinet.

## What if I change my mind?

You have the right to stop the interview at any point if you do not wish to continue. Following a completed interview, you have the right to withdraw your interview from the study for up to two-weeks afterwards. After this point it will have been anonymised and can no longer be withdrawn. You will not need to provide a reason to withdraw from the study. If you wish to withdraw your data, then please contact me via email within the two-week window and request that your interview be withdrawn. The interview will then be deleted and not transcribed.

## Confidentiality

There are some limits to confidentiality that are important for you to understand. If what is said in the interview makes me think that you, or someone else, is at significant risk of harm, I will have to break confidentiality and speak to a member of Lancaster University staff about this. An appropriate member of staff from your school may then need to be informed. If

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possible, I will discuss this with you before doing so. Whilst I will try to create a space in which you feel able to talk openly and honestly about your experiences, I also have a responsibility to help keep you and others safe.

## What will happen to the results of the study?

The findings of the research will be summarised and reported in a thesis as part of a Doctorate in Clinical Psychology, with the aim to try and publish in a peer reviewed academic journal following completion. A summary of the research findings will also be provided for participants and schools that take part. Hard copies can be provided, and it can also be hosted online.

## Are there any risks involved in taking part?

There are no risks anticipated with participating in this study. However, if you experience any distress following participation you are encouraged to inform the researcher and use the resources provided at the end of this sheet.

## Are there any benefits to taking part?

It is hoped that you will find participating interesting and that the interviews will provide you and other young people with the opportunity to share and reflect on some of your recent experiences in relation to COVID-19 associated 'lockdowns'. As a thank you and in recognition for your time, all participants will receive a £10 Amazon voucher.

## Who has reviewed the project?

This study has been reviewed and approved by the Faculty of Health and Medicine Research Ethics Committee at Lancaster University.

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## Complaints

If you wish to make a complaint or raise a concern about any aspect of this study and do not want to speak to the researcher, you can contact:

Dr Ian Smith

Tel: (01524) 592 282 ian.smith@lancaster.ac.uk

Health Research Lancaster University Lancaster LA1 4YG

If you wish to speak to someone outside of the Doctorate in Clinical Psychology Programme, you may also contact:

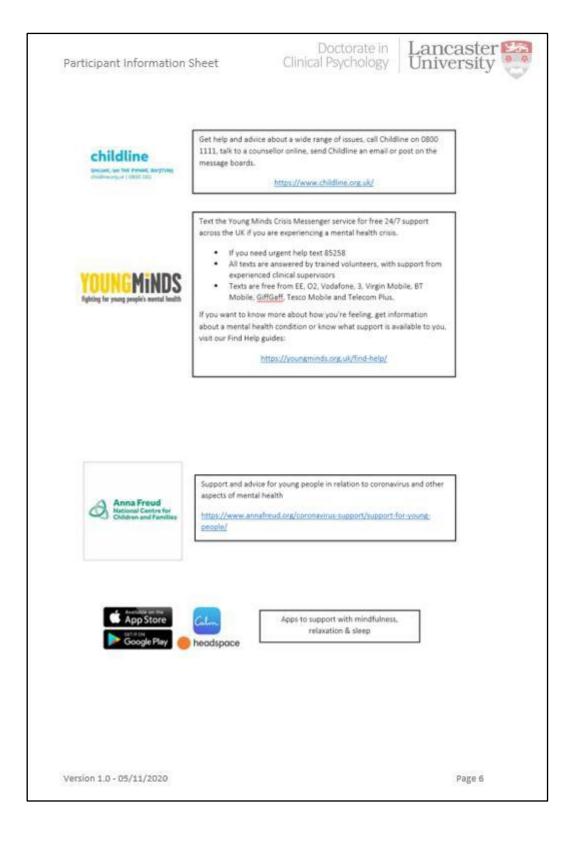
Dr Laura Machin Tel: +44 (0)1524 594973
Chair of FHM REC Email: I.machin@lancaster.ac.uk
Faculty of Health and Medicine
(Lancaster Medical School)
Lancaster University
Lancaster
LA1 4YG

## Thank you for taking the time to read this information sheet.

Upon completion of the interview, you will be given chance to feedback to the researcher on how you feel and what it was like to be involved in the interview.

Should you feel distressed either as a result of taking part, or in the future, the following resources may be of assistance.....

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# Appendix F

# **Assent Form**

	Doctorate in Clinical Psychology Univer	sity
Asser	nt Form	
-	<b>Title:</b> A Grounded Theory Exploration: Adolescent Experiences of Social Connection (*) (Lockdown').	n
recent	e asking if you would like to take part in a research project exploring the impact COVID-19 restrictions and 'lockdowns' have had on the lives of young people along the lives of young people are the lives of young pe	
inform questi	e you consent to participating in the study, we ask that you read the partici nation sheet and mark each box below with your initials if you agree. If you have ons or queries before signing the consent form please speak to the principal research I Jordan, using the contact details provided at the bottom of this sheet.	any
1.	I confirm that I have read the information sheet and fully understand what is expected of me in this study.	
2.	In confirm that I have had the opportunity to ask any questions and to have them answered.	
3.	I understand that my interview will be audio recorded and then made into an anonymised written transcript.	
4.	I understand that audio recordings will be kept until the research project has been examined.	
5.	I understand that my participation is voluntary and that I am free to withdraw at any time and without giving any reason.	
6.	I understand that once my data have been anonymised and incorporated into themes it might not be possible for it to be withdrawn, though every attempt will be made to extract my data, up to the point of publication.	
7.	I assent to anonymised information and quotations from my interview being used in reports, conferences, and training events.	

Doctorate in Clinical Psychology	Lancaster San University
<ol> <li>I understand that any information I give will remain confidential and anonymous unless it is thought that there is a risk of harm to myself of others, in which case the principal researcher will/may need to share information with their research supervisor.</li> </ol>	
<ol> <li>I assent to Lancaster University keeping anonymised written transcrip of the interview for 10 years after the study has finished.</li> </ol>	itions
11. I assent to take part in the above study.	
Name of Participant	
Signature           Date	
Name of Researcher	
Signature	
Date	
Contact Details:	
d.jordan3@lancaster.ac.uk	
TBC	
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## Appendix G

## **Participant Debrief Sheet**



#### Participant Debrief Sheet

**Thank you for participating in this research** - seeking to explore adolescent experiences of social connection during 'lockdown'.

COVID-19 restrictions and the associated 'lockdowns' have had a major impact on the lives of young people. There is much to be learned from listening to your thoughts and gaining a better understanding of your experiences.

Across the year, lots of decisions have been made (school closures, learning at home, returning to the classroom, access to clubs/sports/leisure activities etc) without what feels like proper conversations taking place with the children and young people that are affected. It is hoped that this research will help young people to share their experiences, and that information collected can be part of wider research that is used to guide future decisions.

As we adjust to a different way of life there is an opportunity to listen to and learn from children and young people. The lessons learned can then be applied as we moved forward and make changes to the systems and structures around us.

In recognition of your participation in the study you have been entered into a prize draw for a £50 Amazon youcher. The draw will take place upon completion of interviews and the winner will be notified immediately.

#### How will information from the interview be used?

Your interview will be typed out in full by the researcher. Information from all interviews will be analysed in order to identify key themes and ideas. Findings will be summarised and reported in a thesis that forms part of a Doctorate in Clinical Psychology, with the aim to publish in a peer reviewed academic journal following completion.

#### Who to contact with any questions?

If you have any questions at any point following the interview, then please feel free to contact me via the details below:













d.jordan3@lancaster.ac.uk



TBC

#### Resources and support in the event of distress

Upon completion of the interview, you will have been given chance to feedback to the researcher on how you felt and what it was like to be involved in the interview.

Should you feel distressed either as a result of taking part, or in the future, the following resources may be of assistance......



Get help and advice about a wide range of issues, call Childline on 0800 1111, talk to a counsellor online, send Childline an email or post on the message boards.

https://www.childline.org.uk/

Text the Young Minds Crisis Messenger service for free 24/7 support across the UK if you are experiencing a mental health crisis.

- If you need urgent help text 85258
- All texts are answered by trained volunteers, with support from experienced clinical supervisors
- Texts are free from EE, O2, Vodafone, 3, Virgin Mobile, BT Mobile, GiffGaff, Tesco Mobile and Telecom Plus.

If you want to know more about how you're feeling, get information about a mental health condition or know what support is available to you, visit our Find Help guides:

https://youngminds.org.uk/find-help/



Support and advice for young people in relation to coronavirus and other aspects of mental health

https://www.annafreud.org/coronavirus-support/support-for-youngpeople/







## Appendix H

#### **Interview Guide**



Interview Guide/Structure

**Study Title:** A Grounded Theory Exploration: Adolescent Experiences of Social Connection During 'Lockdown'.

- What does social connection mean to you? (What variations are there in the way you connect with close friends, peers at school, family, people online etc)
- · How important a role do social connections play in your life?
- How has your need for social connection changed as you've grown older?
- · How do you normally look to connect with others socially?
- How have the restrictions during COVID-19 affected your ability to socially connect with others?
- Have you noticed any particular changes in your life as a result of the different social restrictions that have been in place?
- · How have school closures affected you?
- What changes have you noticed since returning back to school?
- How does what is happening at home and with family relationships impact on your social connections?
- What part of the social restrictions have been most challenging for you?
- How have you looked to find ways around any of these challenges?
- How have things changed for you the longer that restrictions have been in place?
- Have any of the social restrictions provided opportunities that you wouldn't otherwise have had?
- What role does technology/social media play in your social connections with others?

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- What do you think people can learn from the ways in which people of your age connect with each other?
- What might you do differently in the future as a result of your experiences of being 'locked down' during COVID-19? Has it changed your approach to anything? Or changed what you think is important?
- · How easy has it been for you to understand / stick to the various rules in place?

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## Appendix I – Guidelines for target journal

#### Journal of Adolescent Health

#### Guide for Authors

#### Guide for authors

**Submission Checklist** 

The following list will be useful during the final checking of an article prior to sending it to the *Journal of Adolescent Health* for review. Please consult this Guide for Authors for further details of any item. Ensure that the following items are present:

## Cover letter

- Disclosure of any prior publications or submissions with any overlapping information
  - A statement that the work is not posted under consideration elsewhere
  - Disclosure of any potential conflict of interest, real and perceived, for all named authors
    - Names and contact information for 5 potential reviewers Statements of Authorship
    - Please submit a separate statement for each named author

## Title page

- Article title
- Full names, academic degrees (master's level and above), and affiliations of all authors
- Name, address, e-mail address, telephone and fax number of the corresponding author
  - Sources of funding and acknowledgments of support and assistance
  - Disclosure of potential conflicts, real and perceived, for all named authors
    - Clinical trials registry site and number
      - List of abbreviations *Manuscript*
      - Please double-space
  - Abstract in the appropriate format: Original Articles and Briefs require structured abstracts; Review Articles and Clinical Observations require unstructured abstracts
    - List of keywords
    - Implications and Contributions statement
  - Institutional Review Board (IRB) Research Ethics Board (REB) statement in the Methods section- or consent statement for Clinical Observations (Case reports)— in the Methods section
- References should be formatted according to the *AMA Manual of Style*, 11th edition; all references mentioned in the Reference list are cited in the text, and vice versa
  - Figure titles should be on a separate page
  - Manuscript has been spell-checked and grammar-checked
    - Page numbering turned on

#### **Tables**

• Each saved as a separate document, including title and footnotes *Figures* 

- Each saved as a separate file, with captions/legends (without titles)
  - Figure titles should be on a separate page
- Color figures are clearly marked as being intended for color reproduction on the Web (free of charge) and in print (for a fee), or to be reproduced in color on the Web (free of charge) and in black-and-white in print (free of charge); if only color on the Web is

required, black-and-white versions of the figures are also supplied for printing purposes

- Permission has been obtained for use of copyrighted material from other sources (including the Web)
- Copies of prior and/or in press publications related to the current submission can be uploaded as separate files or e-mailed to the Managing Editor

## Types of Articles

The *Journal* publishes the following types of articles. Word count limits apply only to the main body of the manuscript and do not include the title, references, or figure and table captions.

## **Original Articles**

Original Articles are full-length scientific reports on the results of original research. Text is limited to 3500 words with a 250-word structured abstract, 5 tables/figures, and 40 references. Studies on human subjects require ethics committee approval and informed consent, which should be documented in the paper. Original articles should include a 50-word Implications and Contribution summary statement.

#### Adolescent Health Briefs

Adolescent Health Briefs are brief scientific reports of original research that represent preliminary findings, small samples, and newly described associations in unique populations. Briefs are limited to 1000 words, with a structured abstract of 150 words or less. A combined total of 2 figures and/or tables and a maximum of 20 references will be accepted. Studies on human subjects require ethics committee approval and informed consent, which should be documented in the paper. Briefs should include a 50-word Implications and Contribution summary statement.

# **Review Articles**

Review Articles provide a high-quality summary of the mature literature in a specific area. Systematic reviews and meta-analyses are preferred, though strong, evidence-based integrative reviews will be considered for publication. Book chapters and dissertations will not be considered. All review articles are subject to a rigorous peer-review process. The format of the review article should include the introduction, review of the relevant literature, discussion, summary and implications section. Each review article must have a 200-word summary abstract. Review articles are limited to 4500 words, 5 tables/figures, and an unlimited number of references. Review articles should include a 50-word Implications and Contribution summary statement.

## Clinical Observations (Case Reports)

Clinical Observations represent rare and new observations in the clinical arena. Papers in this format are limited to 1000 words and should include an introduction, concise discussion of the clinical observation, and discussion. Clinical observations should include a 200-word summary abstract. A combined total of 1 figure, table, or illustration and 10 references will be accepted. Studies on human subjects require ethics committee approval and informed consent, which should be documented in the paper.

#### Letters to the Editor

Letters to the Editor typically represent correspondence regarding articles published in the *Journal* within the preceding 6 months. The author(s) of the article that is the subject of the correspondence will be invited to respond. Letters to the Editor may also be utilized to notify the *Journal* audience about reports, events, organizations, or other announcements that may be relevant to the international adolescent and young adult health community. Letters should not exceed 400 words. If appropriate, Letters can be accompanied with up to 5 references. Disclosure of potential conflicts, real and perceived, for all named authors must

be disclosed in the cover letter and at the bottom of the Letter to the Editor. This correspondence is published at the discretion of the Editor-in-Chief and the Associate Editors.

Commentaries

Commentaries serve as a forum for thoughtful discussions of critical issues in adolescent and young adult health, placed within the context of the scientific literature. Topics may include changes in relevant healthcare training and guidelines, governmental health policies and reports, international health, medical/scientific ethics, and meeting reports. Commentaries should not exceed 1,000 words and 10 references. Disclosure of potential conflicts, real and perceived, for all named authors must be disclosed in the cover letter and at the bottom of the Commentary. Commentaries are published at the discretion of the Editor-in-Chief and the Associate Editors.

## **Editorials**

Editorials are invited by the Editor-in-Chief and are linked to an original research article published in the same issue of the *Journal*. Disclosure of potential conflicts, real and perceived, for all authors must be disclosed to the Editor-in-Chief at the time of invitation. Editorials aim to highlight important research findings and to place findings within a broader context for a wide audience. Editorials should not exceed 1,000 words and 20 references. Disclosure of potential conflicts, real and perceived, for all named authors must be disclosed at the bottom of the Editorial. Editorials are published at the discretion of the Editor-in-Chief and the Associate Editors.

#### Intersections

Intersections is a platform for sharing creative and artistic work by young people, family and community members, and health professionals. Intersections intends to deepen our insights into the health and well-being of adolescents and young adults that can augment scientific peer-reviewed research. Intersections amplifies the intersection of childhood with adulthood, and art with science. Submitted work may take the form of written word (e.g., poetry, personal narratives), or images (e.g., photographs or two-dimensional artwork). Authors must be 18 years of age or older. If the submission involves a true patient/person story or image, the patient/person must be adequately de-identified and the author/artist must obtain the patient/person's written permission for publication.

Items accepted for publication in *Intersections* may also be used by the Society for Adolescent Health and Medicine for professional educational and awareness purposes, and the person who submitted the work will always be acknowledged. Submissions are reviewed and selected by the *Intersections* Section Committee and published at the discretion of the *Intersections* Section Editor(s), Editor-in-Chief, and Associate Editors.

#### Infographics

Infographics are graphical representations of data that make a clear and concise point about a specific topic. The *Infographic* should be based upon publicly available data. The image should measure 6? inches by 4 inches at 300dpi (1,950 x 1,200 pixels). Please include a title and 3-5 bullet points, which will run beneath the image. *Infographics* are published in full color in the digital edition of the *Journal* but should be designed to be comprehensible when converted to grayscale for publication in hard copy. Infographics are reviewed internally by the Editors.

The *Journal* publishes externally funded supplements containing peer-reviewed articles. Initial inquiries and proposals for supplements should be directed to the Managing Editor and the Editor-in-Chief. Proposals approved by the Managing Editor and the Editor-in-Chief will be referred to the Elsevier Supplement Leadership Team.

## Acceptance for review

Manuscripts submitted to the *Journal* are reviewed internally for interest and relevance. Approximately two thirds of all submitted manuscripts are returned to the authors following

this internal review by the Editors; the remaining one-third are subjected to full peer-review. This decision is made quickly, within 10 business days of submission.

Initial review of submitted manuscripts involves collaboration among the Editor-in-Chief, Associate Editors, and the Editorial Board. We have developed the following four specific criteria to guide decisions about whether a submission is referred for full peer review versus "desk rejected" without full peer review:

- Topic/Content. Is the content new, innovative, and/or important to the field of adolescent and young adult health?
- Science. Is the scientific design and execution strong, and are the conclusions likely to be valid?
- Presentation. Is the study (rationale, methods, results, and discussion) presented in an
  organized and easily understandable manner? Given the Journal's limited capacity to
  assist authors in editing their manuscripts, submissions must be written in clear
  scientific English. Collaboration with an English-speaking colleague is
  recommended. Elsevier provides language services for a fee.
  - Alignment with the *Journal's* Aims and Scope. Does the study align well with the aims and scope of the Society for Adolescent Health and Medicine's (SAHM) professional journal? The Journal prioritizes publication of information that will be of interest to people working on adolescent and young adult health in multiple geographical areas. For example, for the Journal to publish an article, its results should be of interest to those working in the field of adolescent and young adult health in more than one state in the United States, or more than one other country.

#### Peer review and decision

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Manuscripts will either be declined based on reviewer comments or referred back to the authors for revision.

### Revisions requested

A Revise and Resubmit decision is an invitation to present a carefully revised draft for further peer review; it is not an acceptance.

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Revised manuscripts must include a revision letter that describes how the authors have specifically responded to each of the reviewer critiques. Requirements include:

- 1. A detailed description of all responses to reviewer critiques, organized item by item, as a bulleted item list or in a table format.
  - 2. A version of the revised manuscript in which all changes are clearly visible. Our preferred option is the "Track changes" feature available in most word-processing software.
    - 3. A clean version of the revised manuscript.

## Appeal process

Authors may appeal rejections. Appeals will be reviewed by an Editor who was not involved in the original decision. This appeal must: (1) be submitted by the primary author in writing, (2) rebut the negative decision, and (3) be submitted within 30 days after the decision is rendered. Consideration of the appeal will be based on the appeal letter, the version of the manuscript that was peer reviewed, and the reviews. The decision of an appeal is final.

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Fast-tracking for critical issues in adolescent and young ad Manuscripts accepted for a fast-track review will receive an expedited review. If the review is favorable, fast-track authors will be asked to complete any necessary revisions within two weeks.

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# **Section 3 Critical Appraisal**

# Summary of the research, consideration of implications for clinical practice, and thoughts on reflexivity

Declan Jordan

Lancaster University

Doctorate in Clinical Psychology

The critical appraisal begins with a summary of findings from both research papers, with consideration given to methodological challenges and limitations for each. Implications for clinical practice and future research are discussed before consideration is then given to reflexivity, and ways in which my own personal and professional experiences are thought to have influenced the process.

## Systematic Literature Review (SLR) Summary

The SLR used a meta-ethnographic approach to synthesise the findings of 25 qualitative studies focused on adolescents' usage of social media and smartphones. Focus was on seeking to develop further understanding of factors that adolescents' feel enhance and diminish their sense of personal agency and control.

Adolescents' use of smartphones and social media was found to both enhance and disrupt their sense of connection. The ease with which adolescents are able to maintain contact with friends helps them to build new relationships whilst strengthening existing ones. Access to community spaces aids the creation of bonds around shared interests, and transitions are made to feel more manageable due to the potential to build familiarity online in advance. The tendency for adolescents to unsociably withdraw to their smartphones in the presence of others was, however, a notable source of frustration and a disruptive influence.

Use of smartphones and social media provides adolescents with a sense of freedom due to the ability to access safe forums in which sensitive topics can be discussed with reduced fear of judgement. Further, the asynchronous nature of online communication can help adolescents to develop their social skills and curate identity. However, shifting social norms that now govern much online interaction can feel restrictive and create notable pressures. Expectations for adolescents to quickly respond to content or reply to messages

bring a sense of obligation and the prominence of social media in modern society makes it feel mandatory. Fear of social exclusion and interpersonal consequences plays a notable role in adolescents' usage of digital technologies.

Many adolescents appear content with the amount of time they spend engaging with digital technologies. Whilst this takes awareness of usage patterns and can require periods of effortful self-correction there is a sense that technology fills as much space in their life as they want it to and is being made to work for them. Others, however, describe high degrees of internal conflict around their usage and unhealthy relationships with their devices. Having grown increasingly dependent on digital technologies, adolescents can find it hard to effectively moderate their usage and excessive time spent online can come at the expense of other pursuits and responsibilities.

Adolescents find that time spent using digital technologies can help them to navigate developmental challenges and affective states. The entertainment provided by online content can help to relieve boredom or distress, by providing enjoyment and a positive

distraction. However, the use of digital technologies can also impact negatively upon physical health and emotional wellbeing. Visible metrics can promote an unhealthy reliance on external validation and online content can drive negative social comparisons. Issues with sleep were notably prominent and linked to fragmented attention and an inability to maintain focus.

The findings of the SLR help capture the nuanced nature of adolescent's relationships with digital technologies. As has previously been suggested, there is considerable heterogeneity in CYP's relationship with digital technologies when it comes to any effects on their wellbeing (Johnson & Knobloch-Westerwick, 2014). It is not simply beneficial for some and harmful for others.

#### Limitations

When conducting any qualitative synthesis, and in the case of the current literature review a meta-ethnography, there are key issues and challenges to be considered (Toye et al., 2014). Summation of qualitative findings has been argued to be detrimental to the integrity of the research being synthesised, due to inevitable thinning out of original descriptions and meanings, and a dilution of the power of human experiences (Sandelowski, 1997). This was something I tried to remain conscious of and attend to throughout the project.

Attempting to synthesise a large number of papers meant an inevitable trade-off between breadth and depth of scrutiny (Campbell et al., 2011). Whilst I felt like I had fully immersed myself in the data and built as much familiarity as was possible, I do wonder how different it might have been with fewer papers. The interpretative nature of metaethnography of course means that any representations are open to dispute and multiple alternative explanations remain possible (Noblitt & Hare, 1988). Whilst acknowledging that, I feel that the themes produced capture something meaningful about CYP's complex relationship with digital technologies and might add to the debate in some way.

Linked to this is the challenge of being the only researcher involved in the project. The rigour of qualitative research and richness of understanding is typically enhanced when there are multiple perspectives (Campbell et al., 2011; Silverman, 2011) and metaethnography is suited by a more collaborative approach and group reflexivity (Barry et al., 1999). Whilst unavoidable, it feels like a clear limitation.

## Future Research

Much of what is known about digital technologies comes from research in high income economies (Twenge et al., 2019). With globalization and increased adoption of technology now the key driver of growth in the area, further efforts need to be made to understand the impact more broadly. It would also be interesting and worthwhile to better

understand how the relative collectivism of a country or culture might shape usage.

Compulsive use is perhaps most strongly linked with negative outcomes (Boer et al., 2020; Shannon et al., 2022) and in the current study it emerged as a notable factor in relation to diminished control and agency. Focus and research moving forward should therefore be directed towards understanding how online spaces can be made safer and how CYP can be supported to more effectively regulate their use, balance offline and online lives, and avoid any sense of dependency on digital technologies.

# Implications for Clinical Practice

As they attempt to navigate through an increasingly complex digital world, CYP face unprecedented challenges (Gardner & Davis, 2014) and they require support and understanding not judgement. With constant innovation from developers and ongoing advancements in artificial intelligence, digital technologies are only likely to play an even more prominent role in the future.

Professionals working with CYP need to be aware of the risks associated with the use of digital technologies (Reid & Weigle, 2014) and it appears both a positive and necessary step to include questions about these relationships in clinical assessments (Royal College of Psychiatrists, 2019). However, to connect effectively with CYP in this area and engage in meaningful discussions a balanced, open and curious approach is required. The positive role that social media and smartphones often play in CYP's lives needs to be acknowledged along with an appreciation of what they might be helping to facilitate.

There is also a need to consider how CYP's knowledge of and relationship with digital technologies can be harnessed to link them in with additional options for support and an increasing array of online tools and resources. Clinical psychologists are already making good use of social media to make information and resources accessible. More can be done in

this area with continued understanding of its potential benefits and ongoing investment and innovation (Bucci et al., 2019)

## **Empirical Paper Summary**

The research paper used a CGT approach to explore adolescents' experiences of lockdowns. Whilst initial focus was directed towards experiences of social connection, what emerged was a model that captures lived experiences of lockdown journeys and associated meanings.

As they adjusted to the sudden imposition of social restrictions, participants settled into a new way of living with a reluctant acceptance that it was going to be less temporary in nature than first assumed. As time passed, fatigue around adherence to rules and the impact on sense of closeness to others became more prominent and participants were required to find ways to adapt. Use of digital technologies helped to maintain connection and enjoyment was found in virtual spaces. Reflecting on their home environments, participants noted how they benefitted from a sense of space and access to outdoor areas. Fortunate to have strong systems of support around them, participants were able to spend time with family in a way that strengthened bonds.

Managing notable disruption to their education brought various challenges. Remote learning disconnected participants from usual sources of support, and an absence of structure and routine impacted upon levels of motivation. Uncertainty around the future and thoughts of how they might be impacted by lost learning grew, as school responses to the challenge of continuing to provide education varied. As schools reopened, participants somewhat tentatively returned to classrooms where further adjustment was required to function effectively in a much-changed environment.

As lockdowns came to an end, participants reflected on their journeys, with consideration given to what had been lost or gained. Prolonged periods of social restriction

led to a re-evaluation of what felt most important and a recognition of the unique rewards that face-to-face connection can provide. Excitement around a return to something closer to normality and future opportunities was experienced along with a commitment to explore new surroundings and take on fresh challenges. Such feelings were somewhat tempered, however, by contemplation of what had been lost. As participants and their peers started new chapters of their life, consideration was given to lost opportunities for satisfactory endings and an absence of closure.

#### Limitations

## A Grounded Theory?

In the initial stages of development, consideration was given to the relevant merits of various qualitative approaches and how they might fit with intended aims. Due to the unprecedented nature of the pandemic and associated restrictions in the lives of CYP, it was felt that a constructivist grounded theory (CGT) approach would support the exploration of what at the time was an under-researched phenomenon.

As a result of my own journey through lockdown and its impact upon various aspects of my professional and personal life, I very much shared the experience under study. It felt important to acknowledge my own increasingly complex personal history with COVID-19 and allow it to be an integral feature of the project (Charmaz, 2014), scrutinized throughout in a way that went beyond mere casual acknowledgement of subjectivity.

Despite the obvious benefits of a CGT approach, there remained notable caution with regards to various practical considerations and how genuine adherence to central principles might be achieved. Thought was given to how theoretical sampling, and the concurrent collection and analysis of data might impact the recruitment process. How a point of theoretical saturation might be realistically reached was also considered along with what that

might mean for the number of interviews and amount of data required (Guest et al., 2006; Thomson, 2015).

During the initial stages of recruitment there was a lack of response from schools to any information sent. Although steps were taken to try and address this with the offering of drop-in sessions or presentations to pastoral support teams and pupil representatives, there was little improvement (see Figure 1).

A social constructionist approach to grounded theory encourages researchers to make measured assessments of their methods and of themselves as researchers (Charmaz, 2008). Methodological reflexivity needs to be ongoing so that researchers can respond accordingly to challenges (Varpio et al., 2020). It became increasingly clear that recruitment difficulties were going to prevent the iterative process of simultaneously sampling, collecting and analysing data. Further, whilst the extent to which a point of genuine theoretical saturation can be reached has been questioned (Braun & Clarke, 2019; O'Reilly & Parker, 2013), it was evident that a potentially smaller number of interviews than had been planned for was likely to impact on saturation and therefore the quality and rigour of the study (Fusch & Ness, 2015) (see Figure 2).

The idea of meaning saturation (Hennink et al., 2017) focuses on researchers achieving sufficient depth of understanding around emerging themes and completeness of the coding process (Hennink et al., 2017; Yang, Qi & Zhang, 2022). Discussions with a research supervisor provided reassurance around adherence to this and focus turned towards the analytic process, closeness to the data, and the development of a rich understanding (LaDonna et al., 2021).

Initial findings and emerging themes felt tightly connected to the data. There was little apparent contradiction, and any new data appeared to support existing categories. Although more preliminary than had initially been hoped for, exploration of

participants and their journeys through lockdown felt sufficient and meaningful. When contemplating and discussing emerging themes and the outlining of interlinked stages of a lockdown journey, it was acknowledged that the study was more likely to provide a description of the phenomenon rather than generation of a theory. Akin to what Pidgeon & Henwood (1997) termed grounded theory lite.

Given the challenges outlined with the application of a CGT informed approach, it is worthwhile reflecting on how the research may have developed differently under the frameworks provided by alternative methods of qualitative analysis. With focus on personal sense making and the ways in which individuals come to understand emotionally impactful experiences (Smith & Nizza, 2022), an Interpretative Phenomenological Analysis (IPA) based approach would have likely aligned well with the aims of the study. Similarly to CGT, IPA acknowledges the inherently subjective nature of interpretation (Smith, Flowers & Larkin, 2022) and would have promoted a keen focus on researcher reflexivity throughout.

Due to the impact of COVID-19 restrictions on various aspects of my own life, processes such as bracketing would have provided opportunities to routinely separate out personal beliefs and assumptions. Critical reflection of this nature would have likely increased transparency and helped to negate any unwanted distortion of personal experiences. Further, due to difficulties experienced with recruitment and the relatively small number of study participants, IPA might have been better suited due to its emphasis on smaller, homogenous samples and detailed idiographic analysis (Larkin & Thompson, 2012).

Thematic analysis (TA), particularly in its most reflexive form (Braun & Clarke, 2019), also stresses the active role that the researcher plays in the development of knowledge and would have promoted reflection on the impact of personal experiences. TA's focus on

rich and detailed description would have also aided the desire to amplify young voices through close exploration of the emotional, relational, and contextual dimensions of their experiences. In comparison to CGT, TA would have provided the flexibility to still produce a theoretical model without it being a methodological requirement.

## Implications for Clinical Practice

The YP interviewed for this study demonstrated strengths and capabilities that allowed them to adaptively respond to unprecedented levels of disruption in their lives. However, what perhaps stood out most from the descriptions of their experiences is the importance of the systems and structures around them. Resilience was shaped by feeling a part of something and a shared effort to make things feel more manageable for all. Participants benefitted from parents and caregivers who had the time and space to be practically and emotionally available. Those working with CYP need to continue driving focus away from viewing challenges with mental health as individual failings and towards an understanding of how the systems and structures around them are operating.

Digital technology helped CYP to stay connected with their friends and access support despite various barriers. As a result of their generally balanced and positive engagement with smartphones and social media, participants were well positioned to manage some of the challenges associated with lockdown. Practical guidelines around supporting CYP to maximise the benefits of digital technologies whilst avoiding some of the dangers have been produced (Marciano et al., 2022). Further work in this area is likely to be highly valuable. Whilst much recent focus has been directed towards the potential negative impact of CYP's use of smartphones and social media, less focus has been directed towards digital exclusion and the impact of having insufficient access to technology.

## The Digital Divide

Due to the nature of modern society and its reliance on technology, lack of access to online spaces and digital devices has wide reaching implications (Wong et al., 2009). Digital exclusion is closely linked to structural inequalities and poverty (Bach, Shaffer & Wolfson, 2013). Whilst the digital divide is not a new phenomenon the coronavirus pandemic has rightly intensified focus on the scale of imbalance in this area and the short- and long-term impacts of vastly different levels of access to technology (McKibbon & Fernando, 2020). Initiatives to help address this are already in place (HM Government, 2021). However, further work needs to be done in the area, with research required to further explore how it relates to and is shaped by other forms of marginality and inequality (Helsper, 2012).

# Digital Literacy

If CYP are to feel a genuine sense of agency in relation to their usage of digital technologies, ongoing efforts need to be made to increase digital literacy. With the future likely to be increasingly dominated by advancements in digital technologies, digital literacy and global competence need to be promoted so that CYP can make informed choices and navigate digital spaces safely (Festl, 2021; Head et al., 2020).

## Reflexivity

Reflexivity is a key factor in robust qualitative research (Barrett, Kajamaa & Johnston, 2020; Olmos-Vega et al., 2022). Conscious of the need to avoid what might feel like a superficial approach, consideration was given to a range of ideas and associated challenges (Finlay & Gough, 2008; Walsh, 2003). To help ensure that it remained an active process throughout the duration of the project, I maintained a reflexive journal which aided tracking of thought processes, fleshing out of theoretical ideas, and management of

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frequently reoccurring uncertainties. Memos also became a key tool, providing a textual documentary (see Figure 3). In addition, using the framework set out by Olmos-Vega et al (2022), I tried to consider reflexivity across four categories: personal, interpersonal, methodological and contextual.

With reference to personal reflexivity, I tried to maintain consideration of how my clinical experiences or existing theoretical knowledge might be influencing any decisions or reactions. Further, I was thinking about how being a parent might impact upon the research and my interpretations or responses (see Figures 4 and 5). With reference to interpersonal reflexivity, consideration was given throughout the interviews and transcribing stages to potential changes (see Figure 6).

Considering methodological reflexivity was particularly helpful in working through challenges throughout the project and managing uncertainty about adherence to key grounded theory principles (see Figure 7). Case memos also aided reflection on interviews and highlighted any adjustments that might need to be made to the interview guide (see Figure 8). Understanding and giving due consideration to contextual factors felt the most challenging aspect of the reflexive process (see Figure 9).

#### Impact on Personal Clinical Practice

In terms of my own personal clinical work, the knowledge and understanding I have developed throughout this research project has had a notable influence on the conversations I engage in with the YP and families I work alongside. It is increasingly the case that any discussions around YP's use of and relationship with digital technologies are accompanied by a sense of tension. Often, YP feel a need to defend and justify their usage, whilst parents or caregivers tend to express a sense of frustration or powerlessness. The ability to acknowledge the complexity of the challenge and step back from any sense of blame or judgement has been key.

When working with YP, it feels important that I am able to adopt a neutral stance and demonstrate a genuine sense of curiosity around the role that digital technologies play in their lives. Further, that we are able to reflect honestly upon and give thoughtful consideration to what it might provide or potentially displace. Providing YP with a space in which they can speak openly and without fear of judgement about online experiences has become a key aspect of my clinical work, as has the ability to understand and empathise with the impact of associated pressures and demands. Whilst some YP feel they achieve an effective balance, others are acutely aware of potentially harmful aspects and acknowledge how difficult it can at times be to take a step back from digital spaces.

The opportunities provided by this study to further develop my understanding has enabled me to engage in informed discussions with YP about both the social advantages and consequences of their use of digital technologies. Psychoeducation around why, developmentally, YP are uniquely vulnerable to certain harms and susceptible to structural mechanisms utilized by platform developers to hook them in and drive increased usage feels important. In modern clinical practice, understanding of YP's online lives not only supports safeguarding and management of risk but also helps to strengthen rapport and the development of therapeutic alliances.

## Future Research

The various restrictions in place at the time of data collection provided a notable challenge in terms of recruitment. This was in addition to existing barriers around youth participation that include research literacy, exclusion criteria, challenges around consent, and adult-centric power dynamics (Dong et al., 2023). Whilst within research there is often a stated desire and commitment to promote increased youth participation, it does not always translate meaningfully into practice.

On reflection, under different circumstances, I feel that data collection would have

been aided greatly by a focus group-based approach and the creation of spaces in which YP could engage with one another around key topics. Group discussions can feel less intimidating and more conversational in tone, whilst peer validation can encourage a greater degree of openness. When well facilitated, focus groups can provide a sense of psychological safety for those involved in discussions and their interactive nature can help support more meaningful conversations.

There has been a recent rise in youth participatory approaches in terms of both perceived importance and prevalence (Montrose-Moorhead et al., 2019) and they have been associated with improved outcomes (Valdez, Valdez & Garcia, 2021). When thoughtfully implemented, such approaches help to promote youth empowerment, increase social injustice, and facilitate improved access to evidence (Torre et al., 2012). Whilst the conversations I had with YP felt meaningful and provided rich data, a focus on one-to-one semi-structured interviews likely had unintended consequences in terms of participation and the nature of the sample.

Whilst the empirical paper was focused on the exploration of YP's experiences of social connection during lockdowns, it is important to acknowledge that, as a construct, social connection has perhaps become increasingly difficult to define. Understanding what it means and looks like for a YP to feel connected in this modern digital context should therefore be a key focus of work in the area going forward. Wherever possible, researchers should continue to strive to amplify young voices so that new modes of sociality can be better understood and traditional frameworks and perspectives updated.

The YP who took part in this study spoke with notable insight about the pivotal role that a sense of social connection plays in their lives and extent to which they can be impacted by its absence. Descriptions of what social connection means to YP included feeling part of something wider, availability of peer support, sharing of interests or passions, and the inclusivity and acceptance provided by group membership. With the line between offline and

online worlds growing increasingly blurred though and consideration being given to the relative merits of digital over physical interaction, how YP achieve a meaningful sense of social connection is evolving. Recent research in the area has highlighted the importance of understanding how different mechanisms and constructs, such as digital maturity, elevate online contact to something that goes beyond mere interaction and provides a genuine sense of connectedness (Koch et al., 2025). Further exploration is required.

Due to rapid innovation and the dynamic nature of digital life, social behaviours and trends are shifting so quickly that publishing cycles and policy developments are struggling to maintain pace. Whilst the scale of the challenge is clear, interdisciplinary collaboration, youth-inclusive practices, qualitative insights, and greater use of participatory methods will increase the likelihood of future research in the area making a meaningful contribution and highlighting how digital technologies can enhance rather than undermine YP's sense of connection.

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# **Tables and Figures**

Table 1. Example Memo − 1

Ongoing restrictions are making recruitment difficult with many schools effectively locked down and reluctant to welcome any external visitors that they might deem unnecessary. What is necessary at this point though? Wouldn't it be helpful for pupils to have the opportunity to explore and share their experiences of lockdown? I need to consider more closely what some of the barriers might be and how I might be able to work around them. The lack of any response at all to the 18 emails I sent out last week is making me feel pretty despondent at the moment. As I looked for information and contact details on school websites there was lots of focus on supporting emotional wellbeing. I can't help feel there is a tension between that and the lack of response. Although it might just be I'm approaching it in the wrong way. Going to speak to some friends who are teachers and get their thoughts.

# Table 2. Example Memo − 2

I'm reading about different definitions of saturation and how it can vary depending on approach. I'm currently immersed (drowning) in the data and working through the various stages of coding. It feels like meaningful themes are emerging (although how they might relate to each other feels less clear) but how will I know when saturation has been reached and is it possible without more data or interviews. Time is passing and things need to

progress. Are there alternatives to saturation and what might that mean for what I actually end up with?

# Table 3. Example Memo − 3

Thinking and reading about epistemological and philosophical positions is interesting but hard to know where to stop or how deep to go? Lots of reading about GT approaches and the divergence between schools. Learning more about subjectivity (and trying to embrace it!!) but need to memo as much as I can to help with this. Main worry about GT at this point is the theory part, am I really going to be able to come up with something worthy of being called a 'theory' and what does that even cover?!

# Table 4. Example Memo – 4

Feeling hard to separate different roles. I suppose that's the point though, you can't. It's all in there in some way, shaping things. Just need to remain aware of it and document it when I can. Lots of discussions with young people at work around their experiences of COVID – can get confusing when listening back to interviews. Hard for them not to bleed into each other when I'm thinking about categories etc.

# Table 5. Example Memo − 5

Increasingly tired each day. Lot of heavy lifting transcribing and coding data (whilst questioning whether I'm doing it right). As things are beginning to emerge it's making me reflect more on my own journey and how we coped as a family. Nice to hear so many positive reflections on the role of family and strengthening bonds but leading me to thoughts about my own children and how good a job we did (or not) in helping them and meeting different needs.

# Table 6. Example Memo − 6

Listening to my own voice for such a long period feels uncomfortable but the transcription process, although painstaking (should it really be taking me this long?!), is definitely helping me to become more familiar with the data. It's letting me pick apart bits of the interview that can be improved too. Do I need to give people more space? My clinical experience is helping but the dynamic makes it feel different, I'm very much the interviewer and they're waiting for the next question. It seems like people feel comfortable and they tend to settle as things progress, but it's still exposing for them I think and a new experience for most. Important to build a level of trust that extends beyond rapport. Are my follow up questions open enough and am I really capturing the fullness of their experiences?

Table 7. Example Memo − 7

The initial coding seemed simple enough. How do I go beyond that though and towards further 'abstraction' – something deeper. Is it emerging from the data or am I just sticking it on? How do I avoid final categories that are mundane and don't add a great deal.

# Table 8. Example Memo − 8

This felt like an interesting and insightful interview - a great starting point with so much to consider and reflect on. There was the first indication that for many young people social media represents a distinct sphere - one reserved for friends. The young person referenced how the ways in which they communicate with family feel very different - more traditional in nature. Interested to explore to what extent this might also be the case for others.

There were interesting references to how this young person's needs and priorities had shifted as they grew older, with focus moving more towards their education and future goals. When talking about friendships, offline connection was something that was said to generally only take place at school, which I thought might have interesting implications for discussion of lockdowns and connection. The loss of contact with friends had felt okay at first, due to a feeling that any restrictions would be short-lived. As things progressed though, they recalled managing by withdrawing into their own bubble somewhat. Contact with friends had, by choice, been fairly minimal. There was a feeling that they valued the time and space this gave them to explore interests and pursue passions, particularly in respect to technology and

gaming. Use of social media was discussed alongside a need for balance, and they explained some of the challenges that can be associated with that, particularly when alternative options were limited.

When discussing experiences of COVID-19 and associated lockdowns/social restrictions, there were positive descriptions of family life and efforts made to support each other. A strengthening sense of family connection was a central theme. When talking about emerging from lockdowns and transitioning back to school at different points, it felt positive to hear descriptions of how quickly they were able to adjust after a short initial period of needing to get used to being around people again. This made me think about how common this kind of experience was for young people and the need to try and explore what the main contributory factors might be.

It felt positive that a space developed towards the end of the interview for reflection. There seemed to be a degree of sadness or regret when thinking about a lack of endings and friendships moving in different directions. Whilst there was some acceptance about it being out of their control, there was also a suggestion that if they could have the time back they would make a more conscious effort to stay connected with friends – and perhaps not look to be so independent.

Table 9. Example Memo – 9

Thinking about ideas around context (feels like it overlaps with some of the interpersonal stuff). If I'm not fully understanding it how I can I try to ensure it?! In terms of interviews, I guess it's about relative position of me and participants and understanding that we can't separate ourselves from our backgrounds and identities...



# **Section 4 Ethics Form**

Declan Jordan

Lancaster University

Doctorate in Clinical Psychology

# Lancaster Faculty of Health and Medicine Research Ethics Application



# Faculty of Health and Medicine Research Ethics Committee (FHMREC) Lancaster University

#### Application for Ethical Approval for Research

for additional advice on completing this form, hover cursor over 'guidance'.

## Guidance on completing this form is also available as a word document

Title of Project: A Grounded Theory Exploration: Adolescent Experiences of Social Connection During 'Lockdown'

Name of applicant/researcher: Declan Jordan

ACP ID number (if applicable)\*: N/A Funding source (if applicable) N/A

Grant code (if applicable): N/A

\*If your project has not been costed on ACP, you will also need to complete the Governance Checklist [link].

#### Type of study

Involves existing documents/data only, or the evaluation of an existing project with no direct contact with human participants. Complete sections one, two and four of this form

Includes direct involvement by human subjects. Complete sections one, three and four of this form

#### SECTION ONE

- 1. Appointment/position held by applicant and Division within FHM Trainee Clinical Psychologist, Doctorate in Clinical Psychology, Division of Health Research
- 2. Contact information for applicant:

E-mail: d.jordan3@lancaster.ac.uk Telephone: 07447063651 (please give a number on which you can be contacted at short notice)

Address: C34 Furness College, Lancaster University, Bailrigg, Lancaster, LA1 4YG

3. Names and appointments of all members of the research team (including degree where applicable)

Dr Suzanne Hodge (Lecturer in Health Research) Division of Health Research, Lancaster University, LA1 4YG Dr Anna Duxbury (Clinical Tutor) Division of Health Research, Lancaster University, LA1 4YG Dr Anna Daiches (Clinical Director) Division of Health Research, Lancaster University, LA1 4YG

3. If this is a student project, please indicate what type of project by marking the relevant box/deleting as appropriate: (please note that UG and taught masters projects should complete FHMREC form UG-tPG, following

June 2018

the procedures set out on the <u>FHMREC website</u>					
PG Diploma Masters by research PhD Thesis PhD Pall. Care					
PhD Pub. Health PhD Org. Health & Well Being PhD Mental Health MD					
DClinPsy SRP [if SRP Service Evaluation, please also indicate here: ] DClinPsy Thesis					
4. Project supervisor(s), if different from applicant: As above					
5. Appointment held by supervisor(s) and institution(s) where based (if applicable): As above					

# **SECTION TWO**

Complete this section if your project involves existing documents/data only, or the evaluation of an existing project with no direct contact with human participants

emention by the contract of th				
1. Anticipated project dates (month and year)				
Start date: April 2021 End date: August 2022				
2. Please state the aims and objectives of the project (no more than 150 words, in lay-person's language):				
Data Management  For additional guidance on data management, please go to Research Data Management webpage, or email the RDM support email: rdm@lancaster.ac.uk  3. Please describe briefly the data or records to be studied, or the evaluation to be undertaken.				
4a. How will any data or records be obtained?				
4b. Will you be gathering data from websites, discussion forums and on-line 'chat-rooms' no  4c. If yes, where relevant has permission / agreement been secured from the website moderator? no  4d. If you are only using those sites that are open access and do not require registration, have you made your intentions clear to other site users? no				
4e. If no, please give your reasons				
5. What plans are in place for the storage, back-up, security and documentation of data (electronic, digital, paper, etc)? Note who will be responsible for deleting the data at the end of the storage period. Please ensure that your plans comply with General Data Protection Regulation (GDPR) and the (UK) Data Protection Act 2018.				
6a. Is the secondary data you will be using in the public domain? no 6b. If NO, please indicate the original purpose for which the data was collected, and comment on whether consent was gathered for additional later use of the data.				
Please answer the following question <i>only</i> if you have not completed a Data Management Plan for an external funder				
7a. How will you share and preserve the data underpinning your publications for at least 10 years e.g. PURE?				

7b. Are there any restrictions on sharing your data?

#### 8. Confidentiality and Anonymity

- a. Will you take the necessary steps to assure the anonymity of subjects, including in subsequent publications? yes
- b. How will the confidentiality and anonymity of participants who provided the original data be maintained?
- 9. What are the plans for dissemination of findings from the research?
- 10. What other ethical considerations (if any), not previously noted on this application, do you think there are in the proposed study? How will these issues be addressed?

#### **SECTION THREE**

## Complete this section if your project includes direct involvement by human subjects

1. Summary of research protocol in lay terms (indicative maximum length 150 words):

The aim of the research study is to explore how periods of 'lockdown' during the coronavirus COVID-19 pandemic have impacted adolescents and their social connections with others. Changes during adolescence are known to lead to an increased drive to form and maintain close relationships with peers (Lamblin et al., 2017). It is likely therefore that school closures and other restrictions put in place throughout COVID-19 have had a unique impact on young people. As we move forward, and make changes to the way we live, it is felt that much can be learned from listening to the experiences of young people and understanding how they have responded to the various challenges faced. Through semi-structured interviews, and the use of qualitative methods to analyse the data gathered, the research will look to build a balanced understanding of how enforced social restrictions have impacted the lives of young people and their relationships.

# 2. Anticipated project dates (month and year only)

**Start date:** 04/2021 **End date** 09/2022

#### **Data Collection and Management**

For additional guidance on data management, please go to Research Data Management webpage, or email the RDM support email: rdm@lancaster.ac.uk

3. Please describe the sample of participants to be studied (including maximum & minimum number, age, gender):

The primary inclusion criterion is participants who at the time of conducting the research are in UK Key Stage 4 education. This is secondary school years 10 and 11, within which pupils are aged between 14 and 15 by August 31st. It is felt that, in comparison to younger children, participants from this age bracket will allow for richer data to be gathered. Young people in this age group are legally permitted to register accounts on various social media platforms and often have access to mobile technology through their own devices. Engagement with such technology as a means of maintaining social connection may be a particularly important factor to develop understanding around. Participants who are not able to read English or conduct the required interview in that language will not be able to participate. This is due to lack of available time and funding for translation or interpretation services.

The researcher will look to recruit between 10 and 15 participants, a number intended to allow for data sufficiency to be reached (Vasileious et al., 2018). In estimating required participant numbers, consideration has been given to the potential for younger people to provide less rich and detailed information than adults typically might. Purposive sampling of participants will occur at the outset of the study, with subsequent theoretical sampling adopted until saturation of the main body of data has occurred (Charmaz, 2014).

4. How will participants be recruited and from where? Be as specific as possible. Ensure that you provide the *full versions* of all recruitment materials you intend to use with this application (e.g. adverts, flyers, posters).

Research supervisor (Dr Anna Duxbury) has a role within the Lancashire Emotional Health in Schools Service and positive relationships with a number of schools. Information on the nature of the study (Appendix E) will be provided to head teachers, heads of year, and other relevant figures within these schools (i.e. safeguarding leads, school counsellors). This is in order that discussions can be held with regards to its potential to fit within and inform work currently underway relating to transitions and relationships. It is felt that schools involved with LEHSS will recognise the importance of understanding the impact of COVID-19 restrictions on their pupils and welcome an opportunity for them to discuss experiences, with access to support and signposting to available resources where required. Due to the connections LEHSS has established with schools across Lancashire, and the number of pupils that will be eligible to participate, no difficulties acquiring the required sample size are envisaged. The researcher has also made preliminary approaches to secondary schools in their local area and received positive responses from head teachers about potential involvement.

#### **Recruitment Materials**

To inform potential participants of the study and to assess initial levels of interest, recruitment posters (Appendix A) have been created and will be made available within participating schools. If deemed beneficial, drop-in meetings could be held for any additional questions to be asked/further information to be provided. Ample time will be given to allow anybody interested to consider their participation. An outline of the study, its design and intention have been included within a participant information sheet (Appendix B) that also outlines other necessary details, including contact information, process for confirming assent, handling and storage of data, maintenance of privacy, and right to withdraw. Interested potential study participants will be asked to provide contact details so that the researcher can arrange an initial phone call and check that all required information has been provided and engaged with. A suitable time and platform for the interview will then be determined. The recruitment process will close once the required number of participants has been reached. Dates and times for interviews will then be arranged individually.

5. Briefly describe your data collection and analysis methods, and the rationale for their use.

#### **Data Collection**

Semi-structured interviews will be conducted to gather data. Whilst the initial aim was for these interviews to be carried out face-to-face, ongoing COVID-19 related restrictions mean that interviews will need to be conducted via telephone or online video call (MS Teams or Zoom). Participants will be required to access Zoom or MS Teams via a suitable device; however, both pieces of software are free to download meaning there will be no financial obligation. Whilst there are paid versions of both Zoom and MS Teams that provide users with additional features, they will not be required for the purpose of the interviews and no cost will be occurred. An interview guide (Appendix C) has been created and will be refined as the interviews progress.

## **Grounded Theory Theoretical Sampling**

A constructivist grounded theory study design (Charmaz, 2006) will be used to guide data gathering and analysis. Grounded theory was selected due to its appropriateness in substantive areas within which there are insufficient theories to explain social processes and human behaviour (Hutchinson & Wilson, 2001). Grounded theory is also inclusive of rigorous analytic procedures that promote reflexivity from the researcher (Charmaz, 2006). Through inductive analysis, it is hoped that the research will support the creation of a conceptual framework grounded in the data itself. As outlined in key texts, rather than being linear in nature, grounded theory research is designed to be an iterative and recursive process (Glaser & Strauss, 1967; Charmaz, 2006).

The use of a constructivist grounded theory study design is intended to help achieve quality and rigour through procedural precision. Grounded theory not only provides tools and structures for the analysis of data but also supports the gathering of additional focused data that then informs, builds upon, and allows for refinement of emerging analytic themes (Charmaz, 2003). Theoretical sampling will be used to identify and fill gaps from the initial analysis, whilst testing interpretations as the study progresses.

### **Transcription & Analysis**

Digital audio or video recordings of each interview will be transcribed verbatim by the researcher in a private space. Whilst it is acknowledged that this will be particularly time consuming (Walford, 2001), it is felt that it will promote full engagement with the data and assist in conveying meaning (Cohen, Mannion & Morrison, 2007). Data analysis will be conducted in adherence with the systematic framework set out in key texts (Charmaz, 2006). This will allow for the identification of recurring themes, which can be subsequently coded into a hierarchy of concepts and subjected to analytic interpretation. As with data collection, this will be a staged process, consisting of (i) initial deep analysis of data that has been divided up into smaller sections, and (ii) subsequent focused analysis of the most salient initial codes in order to aid organisation and synthesis of large amounts of data. Additional axial coding (Strauss & Corbin, 1990) may be utilised in order to relate categories to subcategories. Necessity for the use of axial coding is determinant on a range of factors and the nature of data collected (Kelle, 2005). Care will be taken to manage the researcher's own preconceptions or extant theories, due to acknowledgement of the potential for them to be forced onto data during the coding process.

6. What plan is in place for the storage, back-up, security and documentation of data (electronic, digital, paper, etc.)? Note who will be responsible for deleting the data at the end of the storage period. Please ensure that your plans comply with General Data Protection Regulation (GDPR) and the (UK) Data Protection Act 2018.

Digital audio recordings of each interview will be taken using a password protected & encrypted digital voice recorder. For interviews conducted via video call there will be an option to use in built screen recording. As soon as is possible, audio or video recordings will be securely transferred from the device directly onto the Lancaster University network within the researcher's individual storage area. This area can only be accessed by the researcher. Once files have been successfully transferred, they will be immediately deleted from the recording device. All subsequent transcription and analysis of data will be managed on the Lancaster University secure network. The researcher will hold guardianship of the data until the point at which the assignment is submitted, after which it will be transferred to the DClinPsy Research Co-ordinator for long-term storage. Data will be held for 10 years, after which it will be deleted in accordance with Lancaster University regulations. Contact details for participants will be documented on a password protected Excel file – the only copy of which will be stored on Lancaster University's secure network. Consent forms will be stored in the same location. Upon completion of the study, a summary of the research will be sent to any participants who requested to be given access. Due to the number of participants involved, it is not anticipated that the volume of data gathered will exceed 100gb. Participants will be anonymised in all

Effics
transcripts with a self-chosen pseudonym. Data files will only be available to the researcher and research supervisors.
7. Will audio or video recording take place?
a. Please confirm that portable devices (laptop, USB drive etc) will be encrypted where they are used for identifiable data. If it is not possible to encrypt your portable devices, please comment on the steps you will take to protect the data.
As noted above, digital audio recordings of each interview will be taken using a password protected & encrypted digital voice recorder. Alternatively, if conducted using video call then there is an option to use the screen recording functions provided within MS Teams or Zoom. As soon as is possible, audio or video recordings will be securely transferred and stored on the Lancaster University network within the researcher's individual storage area. This area can only be accessed by the researcher.
b What arrangements have been made for audio/video data storage? At what point in the research will tapes/digital recordings/files be destroyed?
Once digital audio or video files have been successfully transferred to the Lancaster University network, they will be immediately deleted from the recording device. Files will be deleted from their location on the Lancaster University network following the date that the work has been examined and/or published. This is to allow the researcher to check back to the original recording if required.
Please answer the following questions <i>only</i> if you have not completed a Data Management Plan for an external funder 8a. How will you share and preserve the data underpinning your publications for at least 10 years e.g. PURE?
All data will be stored by the DclinPsy programme and preserved according to Lancaster University's Data

8b. Are there any restrictions on sharing your data?

Supporting data will only be shared on request. Access will be granted on a case-by-case basis by the Faculty of Health and Medicine.

- 9. Consent
- a. Will you take all necessary steps to obtain the voluntary and informed consent of the prospective participant(s) or, in the case of individual(s) not capable of giving informed consent, the permission of a legally authorised representative in accordance with applicable law?

Due to the age of prospective participants, issues of consent versus assent have been acknowledged and discussed with research supervisors. In the absence of specific law, it is commonly assumed that the principle of 'Gillick competence' can be applied not only to consent for treatment, but for involvement in research (Griffith, 2016). In such circumstances, a child or young person's right to give assent is dependent on their capacity to understand the specific circumstances and details of the research being proposed.

To aid this, a participant information sheet (Appendix B) has been created with the intent of maximising understanding of what is involved in the study and to seek to ensure that any decisions around participation are both rational and informed. Age-appropriate language has been used and a final version constructed after checking with and receiving feedback from CYP in the chosen age group on an initial draft. Equal provision

was given to the creation of an assent form (Appendix D) through which participants will confirm that they have assented to take part in the study. Part of the assent form is a requirement for participants to confirm that they have fully read the 'Participant Information Sheet' and understood information related to various aspects of the study and their rights. Parent information sheets will also be provided in order to provide an overview of the research study and promote involvement where desired by participants.

The need to provide ongoing opportunities for continuing verbal consent throughout the research, rather than one-off permission, is acknowledged (Kadam, 2017). Efforts will be made to ensure that participants are made to feel comfortable with ending their involvement, if they wish to do so, prior to a final cut-off point due to data having been anonymised.

# b. Detail the procedure you will use for obtaining consent?

Written consent forms will be provided to each participant. The researcher will respond to interested participants by telephone call during which arrangements will be made for an interview. Participants will then be emailed confirmation of this and relevant assent forms. Once signed they can be handed in and collected from the participants schools by the researcher. Hard copies of any documents will be stored in a locked cabinet, prior to being scanned and electronically transferred onto Lancaster University's secure network.

10. What discomfort (including psychological e.g. distressing or sensitive topics), inconvenience or danger could be caused by participation in the project? Please indicate plans to address these potential risks. State the timescales within which participants may withdraw from the study, noting your reasons.

The researcher is a trainee clinical psychologist with support from three research supervisors, all of whom are experienced in conducting psychological research. The study has therefore been designed with the intention of minimising potential psychological distress for participants, along with any time burden. Whilst it is not anticipated that the interview will cause distress, due to the nature of the research there is the potential for participants to be reflecting on and discussing topics with some emotional resonance. Such topics may include isolation, impact of financial and other pressures on parents/caregivers, uncertainty, and health concerns. Information relating to appropriate sources of support if a participant is experiencing distress are provided in both the participant information and debrief materials (Appendix E) presented upon completion of the interview. Participants will be advised, both through information sheets and verbally prior to the interview, about the limits of confidentiality and required action in the event of risk of harm to self or others. Where there is potential for risk it will be discussed with members of Lancaster University staff prior to making the school aware.

11. What potential risks may exist for the researcher(s)? Please indicate plans to address such risks (for example, noting the support available to you; counselling considerations arising from the sensitive or distressing nature of the research/topic; details of the lone worker plan you will follow, and the steps you will take).

None identified

12. Whilst we do not generally expect direct benefits to participants as a result of this research, please state here any that result from completion of the study.

Not applicable.

13. Details of any incentives/payments (including out-of-pocket expenses) made to participants:

In order to assist with recruitment, I would like to include the option of an Amazon voucher for participants. This will be provided in the form of one £50 voucher drawn at random upon completion of data collection. It has been estimated that I will require between 10-15 participants in total. I have discussed this with my research supervisor and the courses clinical director, and they have confirmed that due to the nature of the study and the age of those potentially involved that it would be appropriate. I advised that due to current budgetary constraints on the course that I would be happy to self-fund this; however, I have also been advised to submit a request for it to be taken from my CPD budget

- 14. Confidentiality and Anonymity
- a. Will you take the necessary steps to assure the anonymity of subjects, including in subsequent publications? yes
- b. Please include details of how the confidentiality and anonymity of participants will be ensured, and the limits to confidentiality.

Contact details for participants will be kept on a password-protected Excel file, located on Lancaster University's secure network. Audio recordings of interviews will be taken on an encrypted and password protected digital recording device. Where possible, video calls will be recorded using software in built with MS Team or Zoom. Files will be transferred onto Lancaster University's secure network and then immediately deleted from the recording device. All files will be treated with great care and attention. Files will be stored in the researcher's individual area meaning that only they will have access. Written transcripts of interviews will be created by the researcher themselves with no external input. Transcripts will be made anonymous by removing any identifying information, including participants name which will be replaced by a pseudonym of their own choosing. Anonymised direct quotations from interviews may be used in the reports or publications from the study. All reasonable steps will be taken to protect the anonymity of the participants involved in this research project.

Care will be taken to explain the limits of confidentiality to each participant, both verbally and via the 'Participant Information Sheet'. Participants will be made aware that should anything be said during the interview that leads the researcher to think that either they or somebody else is at significant risk of harm then confidentiality will have to be broken. In such a case, information will need to be passed onto research supervisors in the first instance and then discussed with the participant's school. Where possible, this will be discussed with the participant prior to any information being shared.

Due to ongoing COVID-19 related restrictions, interviews will need to take place via telephone or video call. Participants will be advised both verbally and through the information sheet that it will aid them to be in a private space where they feel able to talk openly. Where video call platforms (namely MS Teams or Zoom) are used then professional accounts will be created and used solely for this research study. Participants will also be made aware that the internet cannot be guaranteed to be a completely secure means of communication.

4-10

#### **ETHICS**

15. If relevant, describe the involvement of your target participant group in the *design and conduct* of your research.

Young people from the target participant group have been involved in the design of the research study having been advised of the intended focus and confirming that social connection to others during 'lockdown' is a topic that is of interest and importance to them. Young people from the target participant group have also supported with the creation of accessible documents (that aim to use age-appropriate language) by reviewing draft copies and confirming that the relevant details are sufficiently understood.

16. What are the plans for dissemination of findings from the research? If you are a student, include here your thesis.

Submission of research in a thesis as partial fulfilment for the degree of Doctor in Clinical Psychology. This includes plans to submit research for publication following viva. The research may be presented at relevant professional conferences. Results of the research may be submitted for publication in an academic/professional journal. A summary of the research findings will be made available online for involved participants/schools to access.

17. What particular ethical considerations, not previously noted on this application, do you think there are in the proposed study? Are there any matters about which you wish to seek guidance from the FHMREC?

When conducting research with CYP, key ethical concerns often relate to potential issues around informed consent, confidentiality, and power relations (Kirk, 2007). As a result, much consideration has been given to these areas during the design of the current research study and they will remain a priority throughout as an ongoing and reflexive part of the project

Research involving CYP is increasingly influenced by a greater recognition of their rights and a desire to reconceptualize them as active agents (David, Edwards & Alldred, 2001). The decision to seek informed assent from participants directly, rather than parental consent, has been made with the intention of acknowledging young people's role in contemporary society and their developing ability to make informed choices. The current research study has been driven in part by a belief that the voices of CYP have been absent from much of the debate around COVID-19 and the potential short- and long-term impact of associated restrictions. It is deemed important therefore that the consent process of the current study promotes agency and acknowledges the ability of young people within this age group to balance information, understand the requirements, and decide themselves whether they wish to talk about and share their experiences. Whilst the researcher is aware of the role that personal investment in a project may have on assessment of competence to take part (Hunter & Pierscionek, 2007) it is felt that a balanced judgement can be made without the need to involve others in the process.

In respect to an imbalance of power, particularly that which perhaps exists between a young participant and an adult researcher, it is hoped that a qualitative approach can help to support a more balanced distribution (Ebbs, 1996). Specifically, the use of a constructivist grounded theory approach is intended to help blur the distinction between researcher and participant (Gergen & Gergen, 2000) and stress the importance of knowledge being co-produced. Efforts have been made, within all recruitment documentation and information sheets, to highlight that a central aspiration of the project is to provide an opportunity for CYP to speak. Further, that the researcher's role is to seek to develop a greater understanding and appreciation of their unique perspectives.

It is acknowledged that research done through, or in conjunction with, schools can contain a hidden pressure to participate due to factors such as feeling like it is part of schoolwork or feeling a need to respond and give a

positive impression of the school / gain teachers approval (Denscombe & Aubrook, 1992). Efforts have been made to minimize this through the design of recruitment posters and the wording of information sheets.

Ongoing COVID-19 restrictions unfortunately mean that interviews will not be conducted face to face. Conducting interviews remotely (via video or telephone call) limits the extent to which the researcher is able to detect any distress and may alter the level of risk to the participant. Relevant resources have been included in documentation in the event of any distress being experienced.

ETHICS 4-12

ETHICS 4-13

4-14 ETHICS

# **Ethics Approval**

REC Meeting 18/02/21

Lead Reviewer: YS

Name of applicant/researcher: Declan Jordan, Trainee Clinical Psychologist, Doctorate in Clinical

Psychology

Research Supervisors: Dr Suzanne Hodge (Lecturer in Health Research), Dr Anna Duxbury (Clinical

Tutor), Dr Anna Daiches (Clinical Director)

**Title:** A Grounded Theory Exploration: Adolescent Experiences of Social Connection During 'Lockdown'.

This application has no governance checklist attached.

Aim: The aim of the research study is to explore how periods of 'lockdown' during the coronavirus COVID-19 pandemic have impacted adolescents and their social connections with others.

Generally, this application has no unaddressed ethical issues noted, except one minor (see section 3).

## Section 1

No issue

# Section 2

Not applicable

# **Section 3**

Interviews to be conducted via telephone or online video call (MS Teams or Zoom).

**Clarify:** How will researchers ensure MS Teams or Zoom does not put financial obligation on the participants?

## Recommendation

Approval upon submission of governance checklist

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# Appendices



Faculty of Health and Medicine Research Ethics Committee (FHMREC) Lancaster University Application for Amendment to Previously Approved Research

1.	Name of applicant:
	Declan Jordan
2.	E-mail address and phone number of applicant:
	d.jordan3@Lancaster.ac.uk
۱ 3.	Title of project:
	A Grounded Theory Exploration: Adolescent Experiences of Social Connection During 'Lockdown'
4. 5.	
	In order to assist with recruitment, I would like approval to include the option of an Amazon voucher for participants on any future posters/communication. These could be provided in the form of one £50 voucher drawn at random or individual £5 or £10 vouchers for each participant. It has been estimated that I will require between 10-15 participants in total. I have discussed this with my research supervisor and the courses clinical director, and they have confirmed that due to the nature of the study and the age of those potentially involved that it would be appropriate. I advised that due to current budgetary constraints on the course that I would be happy to self-fund this; however, I have also been advised to submit a request for it to be taken from my CPD budget.
<ul><li>6.</li><li>7.</li></ul>	change of researcher, and the new researcher is a student, a full application must be made to FHMREC
	I am hoping that a small voucher as recognition for participant time and their contribution to the study will aid with recruitment. I have so far contacted a number of schools (years 10 and 11) but have only had minimal response and no definite interest in participation.
da	nce:

- a) Resubmit your research ethics documents (the entire version which received final approval, including all participant materials, your application form and research protocol), with all additions highlighted in yellow, and any deletions simply 'struck through', so that it is possible to see what was there previously.
- b) This should be submitted as **a single PDF** to <u>Becky Case</u> There is no need to resubmit the Governance Checklist

Applicant electronic sign	gnature: Date			
D. Jordan	09/07/20	)21		
Student applicants: please tick to confirm that you have discussed this amendment application with your supervisor, and that they are happy for the application to proceed tethical review				
Project Supervisor name (if applicable):	Date application discussed			
Dr Suzanne Hodge, Dr Anna Duxbury, Dr	06/07/2021			

You must submit this application from your Lancaster University email address, and copy your supervisor in to the email in which you submit this application



Assent Form
<b>Study Title:</b> A Grounded Theory Exploration: Adolescent Experiences of Social Connection During 'Lockdown'.
We are asking if you would like to take part in a research project exploring the impact that recent COVID-19 restrictions and 'lockdowns' have had on the lives of young people, particularly their ability to connect socially with others.
Before you consent to participating in the study, we ask that you read the participant information sheet and mark each box below with your initials if you agree. If you have any questions or queries before signing the consent form please speak to the principal researcher, Declan Jordan, using the contact details provided at the bottom of this sheet.
I confirm that I have read the information sheet and fully understand what is expected of me in this study.
In confirm that I have had the opportunity to ask any questions and to have them answered.
I understand that my interview will be audio recorded and then made into an anonymised written transcript.
I understand that audio recordings will be kept until the research project has been examined.
<ol> <li>I understand that my participation is voluntary and that I am free to withdraw at any time and without giving any reason.</li> </ol>
I understand that once my data have been anonymised and incorporated into themes it might not be possible for it to be withdrawn, though every attempt will be made to extract my data, up to the point of publication.
I assent to anonymised information and quotations from my interview being used in reports, conferences, and training events.
8. I understand that the researcher will discuss data with their supervisor as needed.



<ol> <li>I understand that any information I give will remain confidential and anonymous unless it is thought that there is a risk of harm to myself or others, in which case the principal researcher will/may need to share this information with their research supervisor.</li> </ol>	
<ol> <li>I assent to Lancaster University keeping anonymised written transcriptions of the interview for 10 years after the study has finished.</li> </ol>	
11. I assent to take part in the above study.	
Name of Participant	
Signature	
Date	
Name of Researcher	
Signature	
Date	
Contact Dataile	

#### Contact Details:



d.jordan3@lancaster.ac.uk



TBC