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Early Adolescent Views on the Mediating Role of Social Network Sites Use on Peer Relations

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Student declaration

I, Veronica D'Rozario confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

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Abstract

With the proliferation and ever-growing popularity of social networking sites (SNSs) over the past decade, their impact amongst children and youth has made SNSs an integral part of their social lives. Subsequently, questions and concerns have arisen about young people's engagement with SNSs and their implications for their social development. Current research on the impact of SNSs on peer relations is only starting to be understood and still a matter of intense debate. To date, little research has focused specifically on the early adolescent phase or considered the impact based on pupils' social prominence or gender. This study built on previous research by examining the way early adolescents use SNSs with consideration of gender and social prominence. The study also explored the views of early adolescents on the perceived impact of SNS use on their peer relationships. The mixed-methods study was conducted with Year 8 pupils and involved the completion of 180 questionnaires followed by 14 semi-structured interviews. Analysis of the data showed that early adolescents frequently and avidly used SNSs and there were significant gender differences related to their use of SNSs. Many participants perceived that SNSs affected their relations with peers in both beneficial and detrimental ways. Key findings showed that SNSs were perceived to broaden opportunities to enhance peer relations, but at other times, complicated or amplified the social dynamics or experiences with peers online. Limitations, implications for EP practice and recommendations for future research are discussed.

Impact Statement

This thesis provides valuable insights into the current context of early adolescents' engagement with social network sites (SNSs) and the implications of SNS use on their peer relationships. The UK Council for Child Internet Safety (UKCCIS) was established in 2010, signifying government efforts to address increasing public anxieties over the growing use of online media, particularly SNSs amongst children and young people (CYP). The present research findings inform current societal concerns and debates and offer a more balanced portrayal of early adolescents' social and peer relationship experiences from their use of SNSs. The results of this study highlight the significance of SNSs as an additional social context for early adolescents who are using SNSs more intensely to connect with peers and show that SNSs mediate their 'online' and face-to-face peer relationships in both positive and negative ways, indicating some differences for gender and social prominence.

With thesis being a major requirement towards qualifying as an Educational Psychologist (EP) through the doctoral programme, this research offers a distinct contribution of knowledge relevant to the professional context with important implications for EP practice. EPs are best placed to work systemically with schools, families other professionals within children's services and can raise awareness of the prevalence of SNS use amongst early adolescents through training and consultation. This may enable greater understanding and support amongst parents or adults who work with CYP and facilitate change in their views about the impact of SNSs on adolescents' social development by also recognising the benefits of SNSs on CYP's social worlds. As such, this thesis highlights the importance of accessing and listening to the views of adolescents to understand their social and peer relation experiences through their engagement with SNS. Findings from this thesis offers EPs the opportunity to assist staff in developing tools for identifying vulnerable or isolated CYP who may have varied SNS experiences and be more susceptible to social risks online so that the right intervention or support can offered. The present study also provides a template for EPs to encourage and guide school staff and families in approaching conversations with CYP about their online activities and interactions to promote positive online experiences. This research acknowledges potential risks associated with SNS use, which has implications for policy development.

Table of Contents

List of Appendices **Page**

List of Tables **Page**

List of Figures **Page**

1. Introduction

1.1 The Context of Social Network Site Use Amongst Adolescents

Over the last two decades, one of the most significant developments in the social world has been the rise of social network sites (SNSs). As SNSs as a technological platform has grown exponentially over time, adolescents have equally embraced these advances for their own use and are amongst the larger demographic of active daily users (Lenhart, et al., 2015; Ofcom, 2017; Shapiro & Margolin, 2014). SNSs have not been the first, nor the only, social and technological tool to support communication and interaction amongst adolescents with other people online. Over the past decade, SNS use amongst adolescents has been unprecedented, becoming a youth-driven cultural phenomenon that has enabled a platform for connecting with others (Boyd, 2014).

Although the minimum age requirement for most SNSs is 13 years, the age of first time users is getting significantly younger, with some as young as 5-7 years (Lenhart, 2009; Livingstone, Mascheroni & Murru, 2014; Ofcom, 2017). Given the ease of accessing electronic devices (e.g. smartphones and tablets), research shows that adolescents are spending more of their time interacting through SNSs (Livingstone, et al., 2014). A recent UK study by Ofcom (2017) showed that on average, 94% of children aged 8-11 are online for almost 13.5 hours each week, while 99% of 12-15 year olds spend 21 hours a week online, with over three-quarters having at least one SNS profile. Adolescents often start and finish their day logging onto SNSs, which can interrupt adolescents' time alone or face-to-face interactions (Shapiro & Margolin, 2014). As friendship formation and peer relations become of paramount importance during adolescent development, the balance shifts in their relationships from parents to peers (Brown & Larson, 2009; Clark, 2009). SNSs have inadvertently added a new 'virtual social context' to their socialisation, therefore having a profound impact on the social lives of children and young people (CYP).

1.2 The Public Context

As widespread use of SNSs continues to permeate the lives of CYP, there is general panic about the harmful effects this is having on their wellbeing and psychosocial development (Clark, 2009). While perturbing media headlines such as 'Facebook spells end of lasting friendships' (Smith, 2008) or 'Cyberbullying now just a part of life' (Delma-Morgan, 2013) tend to overstate the issue, it is easy to see why parents and professionals are concerned about the social risks for adolescents.

Boyd (2014) suggested that the negative rhetoric surrounding SNS use possibly stems from a gap in perspectives between adults and adolescents. To an adult, it may be easy to project initial conceptions of 'social isolation' onto adolescents who are attached to their mobile or computer screens compared to 'real' people, when in fact, adolescents' participation on SNSs may give more control over their social interactions with peers and help them feel less socially isolated (Boyd, 2014). It is also hard to dismiss the broader cultural, economic and social context which has changed over time. Today's young people no longer benefit from the same freedoms afforded by previous generations. For example, parental fears, policy changes concerned with anti-social and risk-taking behaviour, closure of youth centres and limited access to public spaces have meant that adolescents are less able to interact face-to-face with peers outside of home and school (Baines & Blatchford, 2011; Blatchford & Baines, 2006; Boyd, 2014). Given these restrictions, the advancement of digital communication has arguably provided new opportunities for adolescents to explore and engage in peer relationships online.

Against the backdrop of fear, government initiatives following the Byron Report (Byron, 2009) have led to the development of The UK Council for Child Internet Safety (UKCCIS) to develop guidance and measures to keep CYP safe online. While this is indeed a positive approach, not enough priority is given to developing a more coherent view on the influences of SNSs on CYP's social world.

1.3 The Shortcomings of Previous Research

While research has focussed on adolescent peer relationships for many decades, the impact of SNSs on peer relations is only starting to be understood and remains a matter of intense debate. Past research into peer relationships in the 'offline' world (i.e. face-to-face) has documented adolescents' strong need to form personal connections through friendships and to seek affiliation within peer groups across their developmental stages (Brown & Larson, 2009, Crosnoe & Johnson, 2011). While the extent of literature on peer relationships can help provide a better understanding about social relationships online, this warrants caution when applied to a 'virtual context', leading to several assumptions that require further exploration.

Following the explosion of SNSs which dominate the lives of CYP, or so-called 'digital natives', research examining how SNS use influences adolescents' social connectivity began to emerge rapidly (Chambers, 2013; Shapiro & Margolin, 2014; Subrahmanyam & Smahel, 2011). Comprehensive studies suggest an opposing picture, largely based on which age group was sampled, whether 'emerging adults' (18-25 year-

olds) or adolescents (13-17 years) (Shapiro and Magalin, 2014; Subrahmanyam & Smahel, 2011). Research conducted on 'emerging adults' shows that SNS use is linked to perceived 'social capital' (the benefits gained from social relationships with others), in maintaining and enhancing the quality of social relationships (Ellison, Steinfield & Lampe, 2007; Lampe, Ellison & Steinfield, 2007). On the contrary, much research on mid and older adolescents (13-17 years), has focused on the risks (Ofcom, 2017) or negatives of SNSs, particularly online bullying (Lilley, Ball & Vernon, 2014; Modecki, Minchin, Harbaugh, Guerra & Runions, 2014). The spotlight on these problems may be partially linked to media interest and public discourse, but this also highlights a considerable lack of research into benefits of using SNSs to understand the social world of younger adolescents. Such distinct differences in research reflect an incomplete depiction of the mediating role of SNSs on younger adolescent peer relationships. The current study aimed to address this issue and provide a more balanced perspective on the impact of SNSs on early adolescents' social development and peer relations.

Over the past decade, several large international and national surveys have investigated how CYP are using SNSs (Lenhart & Madden, 2007; Livingstone & Haddon, 2009, Livingstone et al., 2014). These findings have been invaluable in providing emergent knowledge about CYP's online practices, but the evidence base is far from conclusive. Previous research focussed on the most popular sites at the time e.g. MySpace, which are no longer used by adolescents today. As SNSs continue to evolve and new sites or apps are introduced, the features of these sites have also changed dramatically. SNSs such as Instagram and Snapchat, launched mainly as photo and video-sharing SNSs, are increasingly popular. This creates potential difficulties in the generalisation of some of the findings from previous studies and therefore highlights the importance of this research.

A review of several key articles suggest that SNSs present both benefits as well as challenges to young people's online and face-to-face peer interactions (Isbister, 2013; Reich, Subrahmanyam & Espinoza, 2012; Shapiro & Margolin, 2014). However, there are limitations to the existing literature, the findings of which have been difficult to synthesise and draw conclusions from. The majority of research on SNSs and social relations has been conducted with older adolescents and young adults (Shapiro & Margolin, 2014). Studies have also tended to consider the adolescent sample broadly, gathering data from a wide range of ages e.g. 9-18 years (Livingstone & Haddon, 2009). Doing so ignores decades of adolescent research showing qualitatively different developmental trends across various stages of adolescence (Waters & Sroufe, 1983). It is

therefore difficult to establish whether adolescents use SNSs differently, or if SNSs affect peer relationships differently, across developmental stages. Moreover, while both international and national surveys show that CYP are engaging with SNSs at an earlier age (Lenhart et al., 2015; Ofcom, 2017), there is a scarcity of evidence on early adolescents (ages 10-14), a gap which this research addresses.

In addition, only one other study (Isbister, 2013) has investigated the link between adolescents' level of social prominence within their school setting and their SNS use. However, Isbister (2013) only explored the views of adolescents with distinct sets of peer groups. There has been a growing recognition that other factors in an adolescent's life, such as their 'offline' social functioning, should also be considered in the overall influence of SNSs. Surprisingly, no other study has previously considered the views of adolescents without friendship groups ('isolated'). Given the ease of accessibility of online communication, it is important to include the views of 'isolated' adolescents on their SNS experiences in relation to their peer relationships.

1.1 The Current Study and Aims of Research

The UKCCIS (2017) Evidence Group emphasised the importance of new research as a result of the continued changes in CYP's engagement with digital media. They stated that research findings offer an indication of the extent of issues, informing subsequent policies and practice but also "provides an often necessary corrective to unfounded public anxieties" (p.1).

This thesis therefore aims to contribute to the evidence-base by gaining a more nuanced understanding of the mediating role of SNSs on adolescent peer relationships, using both quantitative and qualitative approaches. Given the dearth of research on the early stages of adolescence, this study will focus on young people aged 12-13, a period identified by researchers as still within the 'early adolescence' stage (Clarke, 2009). This study aimed to (1) investigate early adolescents' use of SNSs (e.g. type and frequency of SNS use, who they interact with, and online SNS activities); and (2) further examine how this is associated with their face-to-face relations with peers.

More importantly, this study gained the views of early adolescents identified as socially prominent or isolated in their school setting. Their experiences were explored to gain a deeper understanding of the influences of SNSs on their relations with peers online and offline. This research sought to offer a balanced view by focusing on how young people's SNS use might both be helpful or a hindrance to their peer relationships. This

study also considers possible gender differences in the use and influence of SNSs amongst early adolescents, in response to the paucity of research in this area.

This study sought to lend some credence to the broader discussion about the impact of digital media use amongst CYP, and contribute to educational psychology practice by raising awareness and promoting helpful discussions with schools and families, to support understanding of CYP's ever-changing online realm.

2. LITERATURE REVIEW

2.1 Chapter Summary

This chapter explores relevant research literature in line with the aims of this thesis. This review begins by discussing the definition of social network sites and considers some of the main features of SNSs. Next, this chapter explores salient themes from scientific studies on face-to-face peer relationships, particularly in early adolescence to provide a context for the study. This is followed by a discussion of contrasting findings from existing theories of computer-mediated interactions and research investigating the impact of SNSs on peer relationships. The chapter concludes with a critique of existing studies relevant to the current research, which has investigated the overall impact of SNSs on adolescent peer relations more widely and presents the research questions for this study. Please see Appendix B for an account of the literature strategy search.

2.2 Definition: What are social network sites?

This research focuses on the mediating role of SNSs on early adolescent peer relationships, rather than 'social media'- a term often referred to when discussing young people's use of online communication tools. While SNSs share much in common with other genres of social media, this research recognises that different types of digital media have distinct affordances (Boyd, 2010b; Subrahmanyam & Smahel, 2011). It is possible that SNSs allow novel opportunities for interactions, consequently shaping the way individuals engage in these online environments (Boyd, 2010b; Ellison & Vitak, 2015). Therefore, considering the features of SNSs offers a valuable framework for making sense of adolescent social practices (Boyd, 2010b).

As SNSs are rapidly evolving, there has been lack of consensus amongst researchers for a working definition for SNSs, apart from the one offered by Ellison and Boyd (2013) who identified three central characteristics. They defined SNSs as:

> "a networked communication platform in which participants 1) have uniquely identifiable profiles that consist of user-supplied content, content provided by other users…2) can publicly articulate connections that can be viewed and traversed by others; and 3) can consume, produce, and/or interact with streams of user-generated content provided by their connections on the site" (Ellison & Boyd, 2013, p.159).

This definition contains functions of SNSs previously described such as: a profile including identity of the user, an articulated set of friendships, and the opportunity to negotiate and build connections (Boyd & Ellison, 2007). With newer forms of SNSs,

profiles are co-constructed between user and contact, and content is shared, typically through a media stream (Ellison & Boyd, 2013).

User profiles are especially important on SNSs, setting a major context for self-representation (Boyd, 2010b; Ellison & Boyd, 2013). Profiles include various tools that make it easy and accessible to post content, update personal basic information, list friends, groups and networks, and enhance the profile through other modalities (e.g. uploading music, photos or videos) or through 'status updates'. The individual can consciously construct how they would like to be perceived by others in the digital environment. There are also features that encourage others to contribute to the user's profile or content by registering interest or providing feedback or 'comments' (Boyd, 2010a). Therefore, the individual's self-representation is not fully within their control, but is rather a collection of information added by themselves and others (Ellison & Boyd, 2013).

SNSs have also merged as a technological platform which has integrated contacts, photo albums, messaging, chats, social gaming and blogging functions into a more seamless mode of communication than was previously possible (Livingstone et al., 2014). Chambers (2013) added that the design of SNSs has enabled adolescents to effortlessly record and share information publicly. The nature in which personal profiles, content or interactions on SNSs can be broadcast to other individuals, small and broader peer groups 'en masse' is unrivalled in the current digital age (Boyd, 2010b). This can be both powerful for young people but also arguably problematic.

It is important to note that while new SNSs are frequently introduced and the sites deemed popular amongst adolescents continually change (Lenhart et al., 2015; Livingstone & Haddon, 2009), the primary drivers of SNSs have always been the same. SNSs were created to make it easier to connect with existing friends including those from wider social networks or those who have shared some offline connection (Ellison et al., 2007). This is encouraged by the increased sophistication of multiple modes of communication to sustain on-going relationships with others (Ellison, et al., 2007; Ellison & Boyd, 2013).

SNSs have also made it possible for individuals to reach out beyond face-to-face relations to engage virtually with others through common interests or identity (Boyd, 2010a). This can be particularly motivating for adolescents who feel marginalised in school. Boyd (2010a) suggested that adolescents with less popular interests at school, such as gaming or 'creative production', might be drawn to online social platforms to find connections beyond school.

SNS users engage in ‘friending’ practices to seek connections and confirm associations with others who request ties and articulate with whom they want to connect (Ellison & Boyd, 2013). Relationship labels differ between sites (‘Friends’, ‘Followers’ or ‘Fans’). While some SNSs do not require a two-way confirmation, the majority of sites do. As the level of connection between people can vary, the term “Friends” can seem misleading as this label does not represent friendship as we know it in the context of school and community (Boyd, 2010a).

Through posts, comments or stream-based content, SNSs also offer a context for expressing connections with others, where textual and visual symbolism can be used to publicly display the level of friendships (Chambers, 2013). Livingstone, et al. (2014) and Isbister (2013) suggested that the features of SNSs have potentially mediated the “language of social relationships” and nature of social relations in everyday life (p.15). As Livingstone (2008) explained, “today, people construct their ‘profile’, make it ‘public’ or ‘private’, they ‘comment’ or ‘message’ their ‘top friends’ on their ‘wall’, they ‘block’ or ‘add’ people to their network” (p.4).

In essence, the technical affordances that define SNSs have become increasingly fluid, allowing people to be more connected (Ellison & Boyd, 2013). As such, SNSs have become a new social context where adolescents can ‘hang-out’ and socialise in an informal way with other ‘friends’ in their online social networks (Chamber, 2013; Reich & Subrahmanyam, 2012). While there is an impression that adolescents effortlessly embrace ever-changing trends and seamlessly manage their interactions in these “friendship-driven spaces”, the tools to socialise and navigate their existing relationships can be complicated (Livingstone, 2008; Ellison & Boyd, 2013, p.13).

Parents who have been left on the outskirts of this social change are either not recognising or understanding what CYP are doing, and may fail to fully grasp the true nature of this new social dynamic. In addition, adolescents naturally partake in their online activities unsupervised, exacerbating the lack of parental understanding which is crucial to tackling many of the challenges they face during their social development (Chambers, 2013).

In recent years, newer SNSs known for photo and video-sharing features (e.g. Instagram and Snapchat), have gained immediate widespread attention amongst CYP. The Pew Research Centre reported that these SNSs became the second and third preferred choice (Snapchat, 52% and Instagram, 41%) behind Facebook (71%) (Lenhart et al., 2015). As the intensity in speed at which new SNS innovations are occurring in parallel with the development of adolescents today, this research is mindful of the possible effects

that changes in features of SNSs may have on their social practices, norms and expectations of peer relations (Ellison & Boyd, 2013).

All of this raises the question as to how this generation of adolescents are developing with the advances of SNSs so integrated in their lives. This research examines the online social practices of early adolescents, particularly how they are using current SNSs to network with their peers and connections online. As SNSs blur the boundaries between online and offline worlds, this research sought to explore the associations between adolescents' SNS use with both their online and offline connections. Although there have been more research efforts to explore adolescents' experiences on the implications of SNS use on their peer relationships, these studies tend to hold a negative view, and there remains a dearth of evidence focused particularly on the early adolescent perspective. Additionally, the voices of 'isolated' pupils have never been previously considered. This research sought to redress this imbalance by exploring the SNS use and peer relationships of isolated and popular early adolescents.

2.3 The Study of Peer Relationship Development in Early Adolescence

2.3.1 Developmental changes

Researchers have for decades identified peer relationships as one of the most important features of adolescence (Brown & Larson, 2009). This research focuses on adolescents between the ages of 12-13, and considers literature on peer relationships relevant to the early adolescent developmental stage. Against the backdrop of a time period where an individual experiences significant changes in his/her life, early adolescence is viewed as the beginning of a major transitional stage (Coleman, 2011). Berndt (1982) suggested that a number of factors attributed to this developmental stage partly elevate the growing significance of peers. First, the onset of puberty marks the beginning of changing physical characteristics and sexual maturation. These developmental changes come at a pertinent time as it can often coincide with the adolescent's transition to secondary school - a new social environment. Here, the early adolescent acquires greater independence from their parent as they increasingly turn to friends for companionship (Furman & Buhrmester, 1992), and devote greater time and energy to peer relationships (Laursen, 1996; Clarke, 2009). In addition, there are psychological changes, marked by the advancement of their cognitive abilities including social cognition which enables them to acquire a better understanding of their social world (Berndt, 1982; Selman, 1980).

2.3.2 Friendships

One of the most important aspects of peer relationships is friendships, and for decades the study of 'friendship' in adolescence has received considerable attention in literature (Serafica & Blyth, 1985). The term 'friendship' has been described by researchers as a dyadic relationship between two peers where there is reciprocity and mutual liking (e.g. Bagwell & Schmidt, 2011). As adolescents increasingly spend more time with peers, studies suggest that friendships start to become of central importance and sophisticated in early adolescence, taking on a new meaning (Bigelow & La Gaipa, 1975; Crockett, Losoff & Peterson, 1984; Mendelson & Aboud, 1999). For example, Bukowski, Hoiza and Boivin (1994) identified several features of friendship that are valued during early adolescence. These include companionship (engaging together in activities that are enjoyable and entertaining), help (offering assistance or guidance), closeness (empathetic understanding, validation and acceptance), emotional security (comfort and confidence that friendship is secure) and reliable alliance (loyalty and trust).

Bagwell & Schmidt (2011) highlighted strong evidence of supportive relationships within friendships during early adolescence as young people begin to emotionally distance themselves from their parents. Emotional closeness and self-disclosure gradually increase as peers fill some of the parental roles by providing advice and comfort (Sharabany, Gershony, & Hofman, 1981). Friendships are instrumental during adolescence as they contribute significantly to quality of life (Bagwell & Schmidt, 2011; Crockett, Losoff & Peterson, 1984). Bagwell and Schmidt (2011) also suggest that friendships in early adolescence support the development of social skills, personality and social behaviour. With regards to possible gender differences, some researchers suggest that girls favour closer and intimacy-enhancing relationships compared to boys who favour companionship, competition and control (Berndt, 1982; Brown & Larson, 2009). However, the overall pattern of sex difference in dyadic friendships is more complex (Bagwell & Schmidt, 2011).

2.3.3 Peer groups

The transition from childhood into early adolescence is also marked by increasing complexity and intensity within the peer context (Brown & Larson, 2009). New relationship structures are formed as adolescents pursue group membership, rapidly immersing themselves in various peer affiliations or cliques (small clusters of peers who interact regularly) as their background, values or common interests draw them together (Brown, 2004; Brown & Larson, 2009). In addition, the majority of early adolescents

make the move from self-contained primary classrooms into a larger setting in secondary school, whereby there is a constant shift between classes and sets of peers. This fosters their assimilation into the wider cohort within school and local community, as they spend much of their time interacting in larger peer groups or crowds (Blatchford, Pellegrini & Baines, 2016; Coleman, 2011). As a result, Cotterell (2007) stated that a complex matrix of peer relationships or networks emerges, where there is flexibility, fluidity and overlap in group membership, and relationships that vary in "closeness, duration and mutual regard", as most adolescents learn to negotiate relationships across multiple groups (Brown, 2004, p.365).

During this time, adolescents can act on personal choice of who to have ties with (Matsuda, 2005). Through systematic research, investigators found that adolescents tended to select and associate with similar peers, sharing background, interests or tastes (e.g. Brown & Larsen, 2009; Kandel, 1978). Though sense of belonging may arguably be a core need across all ages, Brown (1990) asserted that this takes precedence during early adolescence, as young people turn to their peers rather than adults for a sense of social identification and acceptance (Halliman, 1995; Kroger, 2000). Indeed, studies found associations between pupils' sense of acceptance within peer groups and higher self-esteem and academic achievement (Osterman, 2000).

The growing significance of peer relationships means that early adolescents become increasingly aware of the self and peer context (Coleman & Hagell, 2007). Peer groups commonly generate their own behavioural codes or cultural norms which may include particular attitudes, presentation, communication styles and dress code (Harris, 1995). Through the early adolescents' involvement across multiple discrete peer groups, adolescents are able to trial different styles and identities, highlighting the significance of peer relationships in the development of adolescents' perceptions of their self (Adamson & Lyxell, 1996; Wentzel, Baker & Russell, 2009).

Social interactions experienced by adolescents in groups will consequently influence their behaviours and attitudes towards school or other aspects of life. The role of peer group relationships or processes in the social development of adolescents has therefore also been a persistent interest amongst researchers; particularly relating to peer group influences (Brown, 2004; Brown, Bakken, Ameringer & Mahon, 2008; Hartup, 2005). Various studies have documented either negative or positive peer effects in early adolescence, for example, influencing deviant behaviour (Dishion, Spracklen, Andrews & Patterson, 1996), encouraging socially responsibility (Wentzel, 1998) or conformity to peer group norms (Eder, Evans & Parker, 1995).

Brown (2004) explained that there are a number ways peer influences can occur in groups including: (1) overt 'pressure' (although the researcher perceived this as relatively rare), (2) 'modelling' (unintentional behaviours other adolescents seek to emulate), (3) "structuring of opportunities" (context for certain behaviours e.g. drug use) or (4) 'normative regulation' (changing behaviour to fit into peer group norms e.g. through teasing or gossip) (p. 376). Interestingly, Coleman (2007) reported that studies have also shown that early to mid-adolescents are most susceptible to peer group influences as concerns about peer acceptance peak during this developmental stage. The nature of peer group influences nevertheless is complex. It remains a challenge to accurately measure peer influences, which could be mediated by the nature of behaviour being affected and the personal characteristics of both the influenced or influencer (Brechwald & Prinstein, 2011; Brown & Larson, 2009; Hartup, 2005).

2.3.3.1 Peer group membership

Peer groups become the catalyst for the young person's conceptualisation of status differentiation as social status gains significance during adolescence (Brown & Larson, 2009). As cliques, peer groups or crowds form within a setting, a new and complex, layered and hierarchical social system notably appears. Certain individuals or peer groups gain more status, popularity or visibility (Horn, 2006). Adolescents give careful considerations in choosing and negotiating their relations with peers, aware of the effects of certain relationships for their reputation or status (Cillessen & Rose, 2005).

With the view that hierarchies emerge within peer groups or systems, researchers have developed quantitative measures to explore the attributes of groups or adolescents who were categorised in terms of their sociometric status or 'social prominence' (e.g. popular, rejected or neglected based on nominations) (Cillessen, Bukowski & Haselager, 2000). These concepts are based on the notion of 'liking' or 'perceived popularity' (Blatchford, et al., 2016). Methods used to derive a CYP's sociometric status, including measures of 'peer acceptance' and 'peer rejection' have traditionally been obtained through pupil nomination of peers they like most (LM) to interact with (or be with) and those they like least (LL) to be with. Research investigating the related outcomes in relation to group differences found that peers who were socially accepted were likely to have better life outcomes, suggesting that "social acceptance is also a good indicator of adjustment" (Brown & Larson, 2009, p. 77). While being socially prominent may reflect how integrated an adolescent is in his/her peer system (Brown & Larson, 2009), social acceptance and popularity are not synonymous (Cillessen & Mayeux, 2004; Gorman, Kim & Schimmelbusch, 2002). Investigators have discovered that for adolescents, peers

who are identified as popular may not necessarily be liked by others but may be viewed as someone with power or high social standing in their peer group or social network, which other individuals then might aspire to become members of (Eder, 1985).

There has been a relative lack of research into the implications and experiences of adolescents who are not sought out for friendships, being isolated by the social groups surrounding them. In Margalit's (2010) view, those with low social status are considered at risk of loneliness. She added that isolated individuals are disadvantaged because forming dyadic and peer group relationships and the need for acceptance are critical to early adolescent development. However, Coleman (2011) argued that adolescents who identified as having 'less friends' or 'isolated' within school tend to be a heterogeneous group with a range of individual differences. For example, there are 'solitary' adolescents who still adjust well to situations, and others who may draw support from siblings or other family members. A study by Kiesner, Poulin & Nicotra (2003) which considered peer relations across the school and home context amongst early adolescents (aged 12) showed that friendship groups outside of school became a buffer for adolescents identified as having low peer acceptance and few friends in school. While adolescents spend the majority of their time in school, peer contexts also extend to other social settings which may provide an avenue for socialization and opportunities to seek group membership beyond school (Crosnoe & Johnson, 2011).

2.3.4 SNS context

As SNSs hold such an appeal for many early adolescents, it could be hypothesised that the technical affordances of SNSs may serve some of the peer relationship tasks salient to this developmental phase. Although the ubiquity of SNSs marks a significant change to the adolescent experience, it could be argued that the underlying motivations of young people, to become more autonomous, form closer ties with other individuals and peer groups, and explore their identity, intersect with their use of SNSs (Shapiro & Margolin, 2014). Within the changing context, where there are more restrictions and significantly less freedom for adolescents to spend time with their peers in public spaces compared to previous generations, SNSs have provided them with a new online social environment. Through SNSs, they can gather in a virtual space which meets their peer relationship needs, to connect and socialise with a wider network of peers (Cotterell, 2007), extend their interactions and cultivate relationships in service of the elements of friendship (Bukowski, et al., 1994), and develop their individuality through their association with others (Adamson & Lyxell, 1996; Wentzel, et al., 2009). In addition, SNSs may offer

adolescents who do not have friendships in school, the opportunity to broaden their interaction with others.

2.3.5 Negative aspects of early adolescent peer relationships.

Parallel to the growing importance of peers during early adolescence are the challenges that they face in their attempts to negotiate peer relationships successfully. Researchers have long acknowledged the complexities entrenched in adolescent social relations which can be fractious (Baines & Blatchford, 2011; Brown, 2004; Brown & Larson, 2009; Isbister, 2013).

One example, increases in overt aggression towards same-sex peers by individuals, particularly adolescent boys, has been well documented. Observational data from in-depth longitudinal and multi-method studies conducted by Pellegrini (e.g. Pellegrini & Bartini, 2001; Pellegrini & Long, 2002) showed that after moving into a new secondary setting, early adolescent boys initiated physically rough and aggressive interactions with peers in efforts to gain social dominance amongst rivals or weaker peers. Pellegrini (2008) explained that "aggression is often used in the service of establishing status with peers, in the form of dominant relationships" (in Blatchford, et al., 2016, p.132). He added that this is prominent during times of transition where early adolescents are confronted with the need to re-establish new social groups and define their status within the social structure of a larger secondary setting (Pellegrini, 2008). Moreover, adolescents tend to view 'toughness' amongst boys more positively compared to earlier developmental stages, perhaps as this represents a resistance to adult authority at a time when they are keen to assert their independence and individuality. While boys are more likely to endorse physical aggression, studies have shown that girls more typically engage in relational aggression (Crick & Grotpeter, 1995; Voulgaridou & Kokkinos, 2015). Relational aggression is generally conceptualised as nonphysical behaviours that seek to socially harm or manipulate others' relationships, for example, excluding peers from social groups (Bjorkqvist, Lagerspetz, & Kaukiainen, 1992), gossiping and spreading rumours (Gentile, Coyne, & Walsh, 2011). Voulgaridou and Kokkinos (2015) stated that relationally aggressive behaviours could be either confrontational (e.g. openly ridiculing or name-calling) or non-confrontational (e.g. denigrating someone's character behind their back). Though not empirically validated, researchers hypothesized that relational aggression is used to gain alliances against other same-sexed peers or rivals to increase their social success (Moretti, Holland & McKay, 2001).

In line with the focus on peer-related aggression, research has investigated bullying, a topic which continues to be the focus of public concern and academic research. Following James' (2010) definition, bullying happens when a group of people or individuals intentionally inflict or direct 'negative actions', whether emotional or physical or both, towards another weaker individual or group unprovoked, and where differential power and repetition are defining features. However, James' (2010) summary of current evidence states that much remains inconclusive with regards to the causes and characteristics of individuals involved. While the language of bullying often emerges, the types of bullying practices range widely, and perceptions of what bullying is varies across the world and even within the UK (Smith, Cowie, Olafsson & Liefooghe, 2002). The definition and characteristics of bullying can be imprecise due to its subjective nature – what makes a 'negative action' cruel or harmful "is not only about the act itself but how it is intended, perceived and experienced" (Boyd, 2014, p.140). There is literature pertaining to peer-related aggression and bullying which is too large to be discussed in this thesis. However, this highlights some of the challenges present within adolescent peer relationships.

Researchers have also recognised some of the complexity in the dynamics and nature of social interaction processes that contribute to the strains and tensions in early adolescent peer relationships (Allen, Porter, McFarland, Marsh & McElhaney, 2005; Brown, 2004). For example, a qualitative study by Chu (2005) who investigated the gender socialization of 65 boys aged 12-18 found constrains in their motivation to seek closer relationships with other boys due to the negative influence from their peer group culture. Chu (2005) highlighted the social pressures and conflict felt by the boys' wider network as they sought to conform to the masculine norms of behaviour reinforced by their larger peer group.

While early adolescence is a time of tremendous change, with opportunities for growth, autonomy, independence and establishing relationships, findings from the studies above highlight some of the challenges that adolescents experience in their peer relations. While literature on face-to-face adolescent peer relationships could arguably act as a blue print from which to explore the implications of SNS use amongst adolescents, this warrants caution when applied to a new social context for peer interactions. Questions arise as to how the affordance of SNSs may potentially mediate some of the negative aspects of everyday friendships and peer group relations both in their online and face-to-face interactions.

2.4 Peer Relationships in Early Adolescence: Growing Up in the Digital Age

2.4.1 SNS use amongst adolescents

Public discourse has been critical, perceiving that adolescents are addicted to the attention received on SNSs, favouring quantity over quality in friendships, disclosing information publicly and connecting with strangers online (Peter, Valkenburg & Fluckiger, 2009). While the detrimental implications of SNSs are often discussed, it is equally important to understand adolescents' choices and motivations, and the potential positive influences of SNSs on their peer relations (Clark, 2009; UKCCIS, 2017). In order to address this, it is first necessary to gain insight to how early adolescents are using SNSs.

SNSs have gained such widespread use amongst adolescents globally that Lenhart (2012) remarked that being present on SNSs is almost synonymous with being on the internet. The Pew Research Centre reported that 24% of 12-17 year olds are almost continually online, with over two-thirds using one or more SNSs (Lenhart et al., 2015). A large-scale study conducted by Livingstone, Haddon, Gorzig and Ólafsson (2011a) on 25,142 CYP aged 9-to-16, across 25 European countries including the UK, showed that 59% of the participants had an active SNS profile. Compared to most of Europe, UK participants had significantly more SNS contacts, with 16% adolescents reporting over 300 SNS contacts and 26% with 100 to 300 contacts, although, contrary to public fears, half of participants reported under 50 SNS contacts. Moreover, the majority (87%) of all participants were in touch with individuals they knew face-to-face first. Only 25% communicated with a person they only met online; with more boys (31%) than girls (20%). While recognising that there is a percentage of CYP who connect with others online without offline connections, evidence suggests that most young people are complementing their offline relationships with the use of SNSs.

Due to the paucity of research on SNS use at the time, Livingstone et al.'s (2011a) study was useful in providing background information about CYP's general use of SNSs. The study also challenged popular conceptions by showing most contacts online were known from CYP's social circles offline. However, the findings need to be interpreted with caution as there was considerable variation between countries. The study was also conducted almost a decade ago, just a few years after SNS use became prevalent. Given how rapidly SNSs are evolving in tandem with possible changes in adolescents' preferences and use of SNSs, timely evidence is needed (Shapiro & Margolin, 2014). Moreover, evidence from early adolescents, particularly in exploring how SNS use is associated with their online and offline peer circles, is still scarce. There remain questions

if and how SNS use might differentially benefit or disadvantage peer relations, all of which highlights the importance of this research.

2.4.2 Computer-mediated communication theories

Although the use and impact of SNSs on the social relationships of adolescents is a growing area of research, a review of literature presents a contradictory picture, particularly when considering computer-mediated communication (CMC) theories which were created to conceptualize how users respond to the features of CMC versus face-to-face interactions (Best, Manktelow, & Taylor, 2014; Walther, 2011). Valkenburg and Peter (2007) explained that these theories seem either to subscribe to the assumption that SNSs would hinder or promote social engagement amongst adolescents.

Through the stimulation hypothesis, McKenna & Bargh (2000) argued that the affordances of online engagement make it easier for adolescents to self-disclose online, facilitating a sense of closeness, and an increased quality in friendships. In addition, the rich-get-richer hypothesis regarded highly sociable adolescents to be at an advantage when using SNSs, as it posits that opportunities for adolescents to extend their communication online led to the strengthening of relationships (Kraut et al., 2002; Lee, 2009). However, this theory also hypothesized that individuals who were less sociable, had poorer social skills and fewer social networks in the physical context, were less able to build quality friendships through online means. This is because their levels of sociability online mirrored their existing poor social skills, leading to low quality connections instead of fostering relationships offline. This theory paints a rather negative outcome for individuals who may not have distinct sets of friendships or peer groups. Some researchers further suggest that spending too much time on SNSs may increase the risk of social isolation (O'Keeffe & Clarke-Pearson, 2011). While these theoretical perspectives offer a model for hypotheses about the ways in which SNS use may be beneficial or detrimental to adolescents' peer relations, a review of CMC literature by Walther (2011) suggests some criticism of the assumptions made, arguing that the research field "suffers from a lack of coherence, reflecting a field with more work being done, than consensus on what work should be done". (p. 444).

2.4.3 Differing views in research on adolescents' use of SNS and peer relationships

Research investigating the general use and role of SNSs in adolescents' social lives and peer relations over the past decade have also showed findings which have been

contradictory. This was because a large proportion of earlier literature on SNSs and connectedness, which tended to be carried out on 'emerging adults' (18-to-25 years), showed positive effects of SNSs on their online and offline peer relations, but presented more negative implications for adolescent peer relationships (13-to-17 years).

Research with 'emerging adults' indicated that SNSs were linked to perceived 'social capital' (the advantages and resources received from one's social relationships with others) (Ellison, et al., 2007; Lampe, et al., 2007; Subrahmanyam & Smahel, 2011). Research on 'social capital' also examined two further subcomponents – 1) 'bridging social capital' (where an individual draws resources from a network of weaker ties), for example, by taking up group membership online based on similar interests; and 2) 'bonding social capital' (where an individual draw resources from a network of strong ties), the latter of which may include benefits in the form of emotional support (Ellison, et al., 2007).

Recognising the absence of similar empirical research with early adolescents, Antheunis, Schouten & Krahmer (2016) examined this for 3068 Dutch adolescents aged 11-to-14. Antheunis et al. (2016) investigated the link between their use of 'Hyves' (a very popular SNS with similar features to Facebook for adolescents in the Netherlands) and three variables perceived to be important social aspects for young people including friendship quality, and both 'bridging and bonding social capital' through the completion of questionnaires. Results from the quantitative data revealed a strong correlation between quality of friendship, both subcomponents of social capital and SNS use. Antheunis et al. (2011) suggested that the affordance of SNSs enhanced early adolescent peer relations - that the more time is spent using SNSs, higher levels of feeling a part of the wider social network or community online (bridging social capital) were felt as the adolescents were also equally able to rely on connections online for advice or assurance (bonding social capital). One of the limitations of the study was that while a causal direction was assumed, it is conceivable that the converse could be claimed whereby SNS use may have been influenced by the existing social capital of the adolescents (Antheunis et al., 2016). Another limitation is that the quantitative data does not shed light on the full complexity of the meanings related to the unique adolescents' experiences and perceptions of SNSs on their social relationships.

The study by Antheunis et al. (2016) - the first to systematically examine the role of SNS use on aspects of peer relations amongst early adolescents, has been important in highlighting how SNS use can support their socialisation. This is because media coverage on SNS use has tended to amplify negative dominant discourses. The rise in popularity

of SNSs for ever-younger adolescents has generated increasing societal concerns, with the preconception that although SNSs allow adolescents to socially connect and form friendships with a wider network of peers, the "notion of 'friend' has become meaningless" (Livingstone, et al., 2014, p.2). Turkle (2011) suggested that adolescents are merely 'connecting' with others to publicly display a larger number of SNS friends, giving the illusion of friendship, though in fact they are losing their social connectedness and may feel alone.

Predictably, a large proportion of literature on adolescents' SNS use has also focused on risks and negative effects, including social isolation, depression and in particular cyberbullying (O'Keeffe & Clarke-Pearson, 2011; Smith, 2012; Tokunaga, 2010; Vandebosch & Cleemput, 2008). Over the past decade, research on cyberbullying has grown rapidly alongside intense media scrutiny linking incidents of 'online-bullying' with the proliferation of SNS use amongst young people. The literature on cyberbullying will be discussed briefly due to its relevance in the development of adolescent peer relationships. Following Smith's (2012) definition, cyberbullying is an intentional negative action that a group or individual carries out against another person (or group) repeatedly and over time using electronic means. Smith (2012) also distinguished cyberbullying from the traditional or offline definitions of bullying based on seven other identifiable features: (1) technological expertise; (2) primarily indirect and may potentially be anonymous; (3) relative distance as perpetrator may not see victim's reaction; (4) various and complex bystander roles; (5) possible status gained if made known by perpetrator; (6) potentially visible to a wide audience online, (7) seemingly inescapable for the victim (p.94).

The prevalence and extent of cyberbullying compared to bullying offline remains inconsistent and unclear (Modecki, et al., 2014; Vandebosch & Cleemput, 2008). A recent review by UKCCIS (2017) on reported incidences in the UK varied greatly from 6% to 25%. For example, a survey by Ofcom (2016) which included CYP's experiences of both online and offline bullying found that 11% (ages 8-11) and 13% (ages 12-15) reported being bullied in the past year. For the 8-to-11 year olds, online bullying was less prevalent (2% through social media, 1% group chat or text messages) than face-to-face bullying (6%). Adolescents aged 12-to-15 reported similar rates of bullying across the board (6%). However, higher incidence rates were found by Lasher and Baker (2015) in a study involving 14-to-15 year olds in a much larger sample of 11,116 adolescents with 11% having experienced cyberbullying online or by phone. In contrast, in an online survey, Lilley, et al., (2014) investigated over 1000 11-to16 year olds' experiences on SNSs. 28%

responded that they had encountered something that personally upset them in the last year, based on the spectrum of possible 'upsetting' events listed by the researchers deemed as cyberbullying. Of that proportion, 37% had been 'trolled' (defined as any negative, sarcastic, unkind rumours or comment circulated online), 18% encountered violent and aggressive language, 22% were and felt excluded from a certain peer or social group online, while 14% felt social pressure over their presentation and behaviour.

Interestingly, a meta-analytic review by Modecki et al. (2014) of 80 studies on the relative prevalence of bullying between both the online and offline contexts found that rates of face-to-face bullying were in fact twice as high as cyberbullying. Upon examination of the selected studies, Modecki et al. (2014) highlighted several issues with cyberbullying research that may explain the differences in findings. As with offline bullying, perspectives on what constitutes cyberbullying vary considerably, consequently affecting how it is measured. Research on cyberbullying has also been largely quantitative by means of online questionnaires (Vondebosch & Cleemput, 2008). Given the sensitivity of the topic, adolescents may be reluctant to disclose their personal experiences. Alternatively, adolescents may also overlook experiences that are not in line with the range of descriptors provided in the questionnaire.

More important however is the point made by Vandebosch & Cleemput (2008) that measuring the adolescents' experiences with a wide spectrum of possible scenarios is not an adequate method without considering the context in which these activities take place. Nuance is often lost as what is characterised and defined, as cyberbullying as conceptualised by researchers, may not necessarily be perceived in the same way by adolescents. With SNS use becoming more pervasive in the lives of adolescents, it is hard to ignore the continuity between their online and offline experiences (Haddon & Livingstone, 2014), and that SNS-mediated acts of meanness may be interwoven with existing offline peer group conflicts (Vandebosch & Cleemput, 2008). In addition, it should be acknowledged that adolescence is a time of grappling with a number of developmental tasks, including learning how to relate to others or fit in the wider world, understand what is acceptable, while simultaneously facing social pressures. As Livingstone (2008) remarked, "friendships have always been made, displayed and broken" (p.394). Such issues raise questions about how early adolescents may be experiencing the strains or peer relational problems as a result of the use and affordances of SNSs.

2.5 SNSs mediating adolescent peer relations: A more nuanced investigation

Although there has been a rapid growth in literature on SNS use amongst adolescents, less is known about the more specific contributions of SNSs to peer relationships. In other words, how might adolescents' online or face-to-face relationships with peers be mediated by SNS use and its affordances? This section reviews several recent studies which addressed this, to gain a better understanding on the impact of SNS use on peer relationships.

Using a mixed-methods approach, Tokunaga (2011) examined the personal accounts of 197 students from two universities based on their engagement with other users on SNSs. Tokunaga wanted to understand the types of 'negative events' that might emerge through SNS use. Through the completion of open-ended questions, participants were instructed to describe previous negative encounters they experienced over SNSs that caused an interpersonal strain in the relationship. Tokunaga defined 'interpersonal strain' as a relationship that was weakened by any event, characterised by a sense of distrust, dislike, worry or relational damage felt by the person. Using content analysis, Tokunaga (2011) identified 10 types of negative events representing behaviours or actions on SNSs which led to a strain in the relationship. The three most widely experienced types were: (1) ignoring or denying friend requests; (2) deleting public messages or identification tags; and (3) "ranking disparities on Top Friends applications" (p.427). Other negative types were (4) finding demeaning/belittling comments on user's own message board, (5) discovering gossip on another's message board, (6) remark or question posted on another's board ignored or (7) prevented from joining a group/undesirable group created about person without consent/knowledge.

Tokunaga's (2011) study provided some insight into how features of SNSs introduced novel approaches to social practices unique to the SNS context, which resulted in relational strain. Tokunaga however acknowledged that some of the 'negative types' could be considered as events occurring face-to-face and may not be exclusive to the use of SNSs, for example, individuals may experience peer rejection both online and offline. It would have been useful to further explore with the participants how these negative events are different as a result of their participation on SNSs (Vandebosch & Cleemput, 2008). One of the key limitations of the study was that the study was conducted on emerging adults (above 18 years). This limits the generalisability of the types of negative events encountered on SNSs through this research. Tokunaga's (2011) study also only explored the negative outcomes on participants' interpersonal relationships in relation to

SNS use. This does not encapsulate the full range of experiences adolescents may encounter online.

A growing number of researchers have sought to gain a more balanced understanding of how SNSs may intersect with social relationships during adolescence. Shapiro & Margolin (2014) conducted a review which compared the empirical findings from 13 studies which had investigated the nature of adolescents' use of SNSs and link with peer relationships. They aimed to examine the association between SNS use and adolescent peer relationships, including concepts such as friendship quality. One of the key findings from the review was that the use of SNSs amongst adolescents facilitated their social developmental tasks by allowing them to maintain and extend their ongoing offline relationships, with SNSs affording them opportunities to keep in touch with existing networks of friends, and "make plans and get to know people better" (Shapiro & Margolin, 2014, p.8). On average, less than a third (29%) reported that they used SNSs to find new friends. Through a review of cross-sectional studies which explored the relationship between friendship quality and how often adolescents used SNSs, the researchers found that SNS use was linked to increased closeness and higher relationship quality. Despite the overall finding that highlighted a number of positive influences of SNSs such as strengthening existing relationships, and broadening opportunities to build wider connections, the researchers also found that the influences can be moderated by factors such as (1) the nature of SNS feedback and (2) self-esteem. That is, adolescents, who may include those with lower self-esteem, who post a higher number of negative messages may be more susceptible to further negative feedback from others.

Shapiro and Margolin's (2014) paper was useful in providing a better understanding of positive consequences related to adolescent SNS use. Interestingly, evidence from the review indicated that an individual's 'social functioning' was a factor to consider in the overall impact of SNS use. It was unclear if the use of SNSs for certain adolescents has a detrimental influence on their peer relationships or whether these adolescents gain less social benefits from their participation on SNSs (Shapiro & Margolin, 2014). The findings from this review however need to be interpreted with caution. Out of the 13 studies, eight studies were based on graduate samples while another three studies considered the adolescent sample broadly (e.g. ages 13-to-19, 12-to17). In addition, it is important to note that since 2006 SNSs have evolved dramatically. This has consequently altered young people's emerging online practices, as the younger generation use SNSs more intensively, all of which reduces the generalisability of the findings. Moreover, further exploration of the personal views of early adolescents is needed to gain

a deeper insight into their social experiences and how they believe that their engagement with SNSs affects their relations with peers online and offline. Shapiro & Margolin (2014) pointed out the importance of an adolescent's social functioning in the overall implications of SNS use, which highlights the importance of this thesis in gaining the perspectives of 'isolated' individuals on their social experiences and how SNS use differentially impacts on their relations with peers.

With growing evidence, particularly amongst undergraduates, showing that predominantly online peers are those localised in their offline networks, researchers have more recently examined the extent to which adolescents' online 'friends' and friends known face-to-face overlap (Reich, et al., 2012). In a study by Reich et al. (2012), two questionnaires, one paper and one online, were distributed to 251 students across three high schools (aged 13-19 years), The questionnaires gathered general information about their SNS use, including SNS activities, reasons for participation online and their views on how SNS use affected their relationships. The participants were also asked to provide the names of 10 individuals they frequently communicated with through SNSs and in-person. Results revealed that around two-thirds of participants' online friends moderately overlapped with their face-to-face friends and only 17% of the participants showed no overlap between both circles of friends. Their results indicated that adolescents used SNSs mostly to interact with peers whom they already knew face-to-face. Adolescents also felt that their relationships with peers were affected when using SNSs in both positive and negatives ways, whereby the affordances of SNSs facilitated closer relationships (43%) or led to detrimental influences and caused problems (25%). However, around a fifth (19%) of adolescents reported that using an SNS helped them 'fix a problem' through the affordance of a safe online space to talk. Reich et al. (2012) reported that the results suggested that overall, adolescents used online contexts to strengthen offline relationships but that the impact of SNSs on peer relationships is mixed. However, the relatively large sample of Latino youth (70%), followed by European American adolescents (20%), limits generalisability of the findings.

Similar conclusions were drawn by Isbister (2013) who found that there were mixed influences in the way SNS use mediated adolescent peer relationships. Isbister (2013) used a two-phase mix-method approach to investigate the use of SNSs amongst mid-adolescents (ages 14-to-15) and the implications of SNS use on peer relations across two secondary schools in the UK. 243 participants completed a questionnaire about their general use of SNSs and the number of online and offline friends they had. While Reich et al.'s (2012) study only considered the overlap between participants' online and offline

networks, Isbister (2013) examined the link between SNS use and face-to-face peer networks. A unique aspect to his study involved exploring the link between SNS use and the participants' perceived prominence or sociometric status within their peer group and cohort (for example, central, secondary, peripheral). From the sample, 21 participants were also interviewed on their perceptions of the influences of SNS use on their peer relationships.

Isbister (2013) found that SNS use amongst mid-adolescents was pervasive. 95% of participants were SNS users and reported having one or two accounts, with Facebook identified as the most popular SNS. Participants were described as 'experienced' and 'mobile' users as they frequently logged onto SNSs daily or several times a week and most commonly had 201-300 online contacts. SNS contacts were also likely to be higher the younger the participants were when they first started using SNS or if they logged on more frequently. Isbister's (2013) study did not find any connection between the number of real friends and SNS use, leading the researcher to suggest that there is "some degree of incongruence between peer relations online and peer relations in real-life" (p.104). However, the frequency of SNS use was linked to participants' individual and group prominence. The findings showed that mid-adolescents who logged onto SNSs several times weekly were likely to be identified as having a higher group or individual status within their year. But the number of SNS contacts did not relate to prominence within school.

Through thematic analysis, Isbister (2013) identified a number of themes from participants' responses which suggested that features of SNSs brought both advantages and disadvantages to their socialisation with peers. Some of the positive influences of SNS use identified by the researcher included the (1) possibility of expanding one's social horizon; (2) opportunities to express one's personality to others; (3) convenience of communication; and (4) entertainment. On the other hand, Isbister (2013) found that the use of SNSs brought several negative consequences to adolescent peer relations including (A) erosion of privacy; (B) less social cues during interaction; (C) needing to explicitly state friendship status; (D) impersonation risks; and (E) time concerns. Isbister (2013) noted that the influences of SNS were mixed and 'multi-faceted' as it could enrich and enhance social relationships but also complicate and undermine peer relations simultaneously.

Isbister's study sought to fill a significant gap in research with adolescents, which has been predominantly negative, by providing a balanced and wider understanding of how the use and features of SNS may affect the complexities of peer relationships during

mid-adolescence. Exploring the experiences and perceptions of the adolescents was important to gain a deeper insight into the new phenomenon unique to the current generation. For the interviews, Isbister (2013) selected participants who were perceived to have higher prominence, stipulating that the nature of SNSs was 'inherently social'; as a justification for excluding 'isolated individuals'. Given the evidence of the pervasiveness of SNSs in adolescent lives as well as the importance of peers during adolescence, it is surprising that little is known about the experiences of adolescents who may not be a part of friendship groups in the school setting. With increasing knowledge that SNSs may offer a potential avenue for socialization beyond the school context, the current study therefore aimed to explore the perspectives of 'isolated' individuals as well, to capture that the full breadth of adolescent experiences on SNSs.

2.6 Conclusion

The growth of social networking has been unprecedented. As adolescents are deeply immersed in these online spaces, SNSs have inadvertently added a new 'virtual social context' to their socialisation (Livingstone & Haddon, 2009). Whilst there is a rapidly growing body of research on the use of SNSs amongst adolescents and its implications for their social development (e.g Shapiro & Margolin, 2014), there is still a significant lack of research explicitly focused on younger adolescents, despite decades of literature suggesting that developmental tasks may manifest differently across the adolescent stages.

Compared to earlier studies on Internet use or other modalities of communication, research on SNS use and peer relations in adolescents is still relatively new. As highlighted in the literature review, current research shows diversity in evidence and research perspectives on the impact of SNSs on peer relationships depending on participants' age range (adolescence may also include 'emerging adults' or graduates) (Shapiro & Magolin, 2014; Tokunaga, 2011), research fields (e.g. CMC theories or face-to-face adolescent peer relationship theories), area of focus (e.g. social capital research versus cyberbullying research) or measurements used. This has resulted in limited insight into the implications of SNS use on peer relations in adolescence. More recently however, a number of research studies have sought to gain a more balanced understanding about the impact of SNS use on peer relationships (e.g. Isbister, 2013; Reich et al., 2012). However, a number of these studies had sampling or methodological limitations therefore reducing the generalisability of their findings.

The current study therefore seeks to extend previous research, by using quantitative and qualitative approaches to gain a more nuanced understanding of the potential role of SNSs in early adolescent peer relationships. This study will first investigate how early adolescents are using SNSs, before examining how this is associated with their offline peer relations. The study will also explore the perceptions of adolescents of how their participation on SNSs influences their peer relationships.

Whilst there has been a growing recognition that an adolescent's 'offline' social functioning should be considered in the overall influence of SNSs, there has been a relative lack of research into the implications and experiences of adolescents without friendship groups. Past literature has tended to paint a more positive outcome for individuals who are socially accepted. With the ease of accessibility of online communication, it is important to include the views of 'isolated' early adolescents on their SNS experiences. Moreover, there is at present too little evidence to comment on gender differences in relation to their use and experiences of SNSs. It could be hypothesised that there are gender differences given that there is well-established evidence for gender differences in peer relationships offline.

This research therefore aims to provide a more balanced portrayal of early adolescents' overall social and peer relationship experiences from their engagement on SNSs and considers gender and social prominence, to compensate for the paucity of evidence which accommodates such differentiation.

This study aims to answer the following research and sub-research questions:

RQ1: How do early adolescents use SNSs and how is this associated with their 'offline' peer relations?

RQ2: What do early adolescents perceive are the positive and negative influences of SNS use on their peer relationships?

> ***Sub-RQ A***: How do adolescents who are socially prominent in their groups/year compare with adolescents who are socially isolated?
>
> ***Sub-RQ B:*** Are there gender differences evident in the perceived use and influences of SNSs?

3. Methodology

3.1 Chapter Summary

This chapter will first set out the research design of the current study, explaining the epistemological stance and rationale for the chosen research methods. This is followed by a description of the participants, methods used and data collection procedures. The chapter ends with an outline of the ethical issues raised and data analysis procedures.

3.2 Epistemological Position

In doing research, the researcher aims to achieve a desired outcome. In this process, there are certain assumptions or perceptual orientations that may influence what (and how) the researcher will learn or achieve during the research process. This study approached the research questions through a pragmatic viewpoint. Johnson and Onwuegbuzie (2004) suggest that pragmatism is a philosophy which offers a useful middle ground "philosophically and methodologically" when undertaking research (p.17). Pragmatism values the use of a moderate and practical approach whereby the selection of research methods, techniques and procedures is determined by 'what works' and how well they can best help understand and answer the research questions (Creswell, 2013; Robson, 2011). Pragmatism therefore endorses flexibility and 'pluralism' - the use of both quantitative and qualitative approaches as an effective way to address the research problem or issue and philosophically underpins mixed methods studies (Creswell, 2013; Johnson and Onwuegbuzie, 2004).

Pragmatism is criticised as a philosophical support for the mixed method approach, particularly for its lack of clarity and consistency around the ways by which knowledge is conceptualised. To overcome this, it is important to articulate the underlying ontological assumptions and orientation of the researcher to provide clarity and explain how the research was shaped (Creswell, 2013). The development of the research questions led to different perspectives, although pragmatism accepts that there can be single or multiple realities that are open to empirical inquiry (Creswell and Clark 2011) and therefore the perceptions likely change throughout the research phases. In investigating the online social practices of early adolescents (RQ1), a positivist position was adopted because the researcher sought to examine how early adolescents engaged with technology structures (i.e. SNSs), which introduces distinct affordances and features; and may possibly shape participation. Pre-determined measures following predictions guided by existing literature were also used to gather data. The researcher also took the perspective that the adolescents' use of SNSs is reciprocal, assuming that their

experiences are not simply dictated by SNS affordances but may also be a reflection of their developmental social task. By exploring the views of adolescents on the influences of SNS on their peer relationships (RQ2), a constructivist position was also adopted. The researcher acknowledges that a person's understanding is based on their lived experience and worldview (Robson & McCartan, 2016). It was recognised that the participants and the researcher may have different understandings of online terms or social experiences, therefore it was particularly important to elicit their views and capture the multiple interpretations from early adolescents of their unique experience of using SNSs to create a shared understanding.

3.3 Research Design

This study adopted a mixed methods approach which consisted of two distinct data collection phases. During Phase 1, a questionnaire with both quantitative and qualitative measures was used. Through the quantitative measures in Phase 1, the adolescents' reported use of SNSs and how this associates with their online and face-to-face peer relationships was investigated. The quantitative measures were also used to generate a Social Cognitive Map (Cairns, Perrin & Cairns, 1985), providing an indication of each adolescent's social position within existing peer groups across their year group. The quantitative aspects of the questionnaire addressed RQ1 and its sub questions. The qualitative measures, which consisted of open-ended questions were used in the questionnaire as an opportunity to gain the adolescents' viewpoint about how they perceive their use of SNSs mediated their peer relationships. The qualitative measures addressed RQ2.

Following this, qualitative measures were also employed in Phase 2 through semi-structured interviews. Phase 2 enabled a more in-depth exploration of the adolescents' perceptions about the role of SNSs on their peer relationships, both online and offline and addressed RQ2. Figure 1 provides an overview of the structure of the research design and methods used.

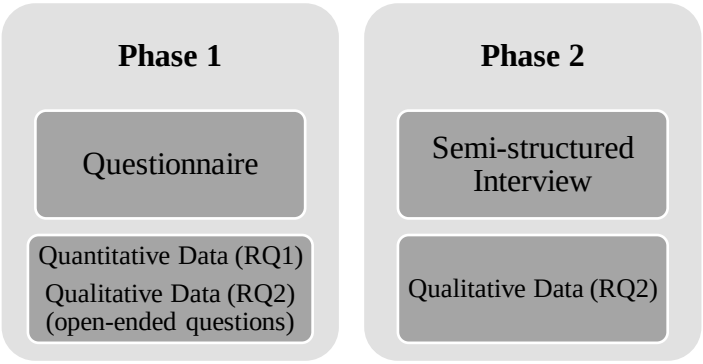

Figure 1. Research Design and Methodology Approaches

3.3.1 Rationale for using a sequential mixed method design

According to Johnson, Onwuegbuzie and Turner (2007), mixed methods research is defined as the combination of "elements of qualitative and quantitative research approaches (e.g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques)" (p.123). A core assumption of this form of inquiry is that the mix of both quantitative and qualitative approaches offers a broader breadth and corroboration (Johnson, Onwuegbuzie and Turner, 2007) as well as informing a fuller understanding of the research problem than could achieved through a single method alone (Creswell, 2013). Quantitative methods within the questionnaires were considered vital in capturing the reported online behaviours and practices of participants in relation to SNSs. However, where closed questions may have limited the adolescents' responses based on predetermined categories, qualitative responses to the open-ended questions (Phase 1, questionnaire) and semi-structured interview in Phase 2 were crucial in further illuminating meanings, motives and patterns related to the adolescents' SNS use and how they perceive this influences their relationships.

Within mixed methods, there is a range of types and variation of mixed methods designs, reflecting the purpose of the research and timing of data gathering and analysis. As this current study involved two phases, whereby findings from data collection and analysis in Phase 1 helped build on the second qualitative Phase 2, this research is an explanatory sequential mixed methods design (Cresswell, 2013). Exploring the experiences and perceptions of the adolescents was important to gain a deeper insight into the new phenomenon unique to the current generation.

The researcher chose this sequence for the research design for to a number of reasons. Firstly, it was considered necessary to gather data about early adolescents' use of SNSs based on pre-existing questions and pre-determined variables from questionnaires which have previously been used on older aged samples. The use of similar

questions adapted and derived from previous instruments enabled the researcher to gain some context for comparison i.e. if early adolescents were engaging with the affordances of SNSs in a similar or different way to other aged groups. Secondly, questionnaires were also chosen for Phase 1 because the quantitative results from the Social Cognitive Map (SCM) questions (see 3.4.2.1 for further details about the SCM procedure) were needed to purposefully select participants for the interview in Phase 2. Given that this study focused on social prominence (in addition to gender) comparisons, the SCM procedure, which is administered through a questionnaire, was instrumental in the identification of participants' individual prominence within their setting and required responses from a large number of participants. In addition, conducting the interviews in Phase 2 allowed the researcher to expand upon and deepen the findings from the questionnaire data. Finally, the researcher did not choose to use the interviews in Phase 1 because this would have meant a small sample size, which may not have captured enough variance in the early adolescents' online SNS use and experiences to inform the development of questions for the questionnaire in Phase 2.

Phase 1 and Phase 2 were also designed so that the data forms could be integrated and complement each other. In an attempt to 'triangulate' the findings from different perspectives, this facilitated a broad, rich and deep understanding of the research questions (Johnson, et al., 2007). Kopinak (1999) suggested that an advantage of triangulation is that it "increases the congruence of the research findings by providing more detail, multi-layered and multi-dimensional perspectives of the phenomenon under study" (p.171). The use of a mixed methods approach has been particularly important for this research as there is an increasing reliance on empirical research by professionals including researchers, policy makers, industry, children protection experts and others worldwide to guide their understanding of this phenomenon of online use of SNSs. Listening to CYP to understand their perspectives on their experiences and attitudes has been equally important.

3.4 Phase 1

Phase 1 was designed to gather quantitative data about how adolescents are using SNSs (RQ1), identify the students' social prominence within their year (through SCM) and explore the associations between the participants' use of SNSs and peer relations, gender as well as social prominence (RQ1). This phase was also designed to collect initial qualitative data from a large number of participants about what they perceive as some of the social provisions or challenges of using SNSs in relation to their peer relationships to

help answer RQ2. The data collected from Phase 1 was used to inform some of the further questions for the interview schedule in Phase 2.

3.4.1 Participants

This study was conducted in a Local Authority within a London Borough with a mixed socio-economic profile and ethnic mix. The researcher had initially hoped to recruit two large secondary schools to allow greater (1) comparisons of social prominence and genders differences; and (2) representation of the adolescents' SNS experiences reflective of the diversity of the local population. Both schools, were invited to participate and were selected through convenience sampling as the researcher had been known through placement work as a Trainee Educational Psychologist (EP). One school later declined; thus the sample in this study only came from one mainstream secondary school. Despite the smaller sample size, the focus on a single school enabled the interpretation of findings rooted within a specific context.

3.4.1.1 Context of School

The secondary school is a large mainstream Academy located within a local area that has seen large demographic changes by ethnicity over the last 20 years and serves a socially disadvantaged area which is in the top 20% most deprived on a national scale.

In this London borough, 54.2% of the population were White British or Irish, 8.3% were from other White backgrounds, approximately one-fifth of the population were Black African, Caribbean or from other Black backgrounds, and 11.7% were from Asian backgrounds. The school population in the current study however, does not reflect the demographics of the wider population. Despite over half (53%) of the community identifying as White British, the majority of the students who attend this school come from diverse ethnic and cultural backgrounds with the following largest ethnic groups: (46%) black or black British heritage; 25% coming from White-British backgrounds; 10.6% Asian or Asian British; 10.2% White other and 4.8% mixed. The percentage of pupils whose first language is not English is above national average.

The academy, with 1200 pupils aged between 11 and 16 years on roll, has specialisms in sport and enterprise. In the most recent Ofsted report (Office for Standards in Education Services and Skills), the school maintained a 'Good' rating and was recognised for improvements in their quality of teaching, safeguarding and inclusive approach and attention to pupils' welfare, particularly from disadvantaged backgrounds and Special Educational Needs. Around a quarter of the students are disabled or have special educational needs, which is above the national average. The number of pupils

with a Statement of Special Educational Needs (SEN) or an Educational Health Care Plan (EHCP) is also above the national average.

With the Academy being in the top quintile for deprivation, 44% of students are eligible for Pupil Premium although it is believed that the number entitled to this funding is far higher. The proportion of pupils eligible for Free School Meals (FSM) is significantly above average. The government provides additional funding to support these students because they are at risk of underachieving. The attainment of most pupils on entering the school is below average. The Ofsted report stated that there is some variability in the achievement of different groups, although it was acknowledged that school leaders recognise these differences and are working hard to eliminate them. In particular: disabled students and students with special educational needs make slightly less progress than others. Secondly, Black African students make considerable progress, but White British students typically do less well than other students. In addition, disadvantaged White British boys were most at risk of underachievement and demonstrated low attendance.

3.4.1.2 Participant details

Owing to the rise in the personal use of online technologies amongst adolescents over the last decade, no particular inclusion criteria were proposed for the recruitment of participants in Phase 1 other than being an early adolescent. This study recruited across all Year 8 students (12-13 years). Year 8 students were chosen over Year 7 as they were in their second year of secondary school so were considered to be more settled in their social structure within school and would not be affected by any major exams. Although the minimum age is restricted to 13 for the majority of SNSs, the researcher considered it was necessary to focus on a younger age sample due to the paucity of research on the role of SNSs on peer relationships in early adolescence.

All parents of pupils from the year group were sent letters outlining the project with an option to ‘opt out’ from the study. From the total of 240 pupils in Year 8, 17 parents declined consent. A further 28 pupils did not want to participate while 15 more pupils identified themselves as non-users of SNSs. 180 pupils participated in the study and completed the questionnaires. 97 (53.9%) participants were males while 83 (46.1%) participants were females. Demographic information is found in Table 1.

Table 1. *Frequencies and percentages showing the prevalence of each ethnic group in the total sample*

Ethnic group	Frequency	Percentage
White	56	31.1
Black	93	51.7
Mixed Race	20	11.1
Asian	8	4.4
Other	3	1.7

3.4.2 Method: Questionnaire

The consideration of a questionnaire as a research method/instrument in Phase 1 was influenced by the practicalities of being able to gain responses from a large sample of adolescents in an attainable and quick way (Mertens, 2014). A large number of participants was needed in order to gain enough numerical data to build a representative picture of the local context of adolescents' use of SNSs and how this is associated with their peer relationships. In addition, the questionnaire allowed the researcher to purposefully select types of participants by identifying boys and girls based on their social prominence in peer groups for the follow-up qualitative inquiry (Phase 2).

The questionnaire predominantly contained quantitative measures. Items in the questionnaire were adapted based on the Social Networking Site questionnaire from Isbister (2013). Several items were also derived from the EU Kids Online Survey (Livingstone, Haddon, Gorzig & Olafsson, 2011b). The questionnaire was also discussed with both supervisors and amended based on these discussions. Adolescents were presented with 35 questions which were organised within three main sections. The first part (Q1-Q15) contained closed including forced-choice questions designed to investigate participants' SNS online practices and aspects of their virtual and real-life friendships. The second part (Q16-Q19) involved open-ended questions which asked about their SNS experiences and viewpoint about the positive and negative aspects of using SNSs in relation to their peer relationships. The third part (Q20) included a question designed to capture the social groups within their year group (see Social Cognitive Maps below). Participants were also asked to provide demographic information including their gender and ethnicity. Table 2 provides an account of the researcher's consideration of questions for the questionnaire.

Table 2. *Questionnaire design considerations and reflexivity*

Research Question	Area of inquiry	Questionnaire Material	Design Considerations and Reflexivity
RQ1	General use of SNSs	SNSs used, *Starting age, *Frequency of Use, Number of profiles, *Location/Device of SNS use, *Time spent on SNSs, (Isbister, 2013) Privacy settings (Livingstone, et al., 2011b)	• Questions for general use of SNSs were adapted from Isbister (2013) and (Livingstone, et al., 2011b). • Due to the paucity of research on SNS use in early adolescents, the researcher decided to use existing questionnaires that have been used on older sample to gain some context for comparison. • The researcher chose Livingstone et al.'s (2011b) questionnaire because it had been done in 25 other countries and is an reliable cross-cultural tool. • A number of questions were adapted to be enable more accuracy (e.g. using 'age' started instead of 'Year group' started). • Use of supervision to review wording. • Pilot study indicated removal of certain questions.
	Friending practices	*SNS activities, (Isbister, 2013) Friend request response, Disclosure, Friend request response, frequency of contact with friends met/not met face-to-face (Livingstone, et al., 2011b)	•Number of SNS activities added based on the ever evolving SNS affordances. •Informal discussions with young adolescents to gain a sense of what they face with regard to friending practices to ensure the questions were appropriate. Mindful that my experiences of SNSs were likely to be different. •Some questions were adapted to provide smaller ranges to improve accuracy (for example, '1-2 hours' changed to 'about 1 hour'). This was discussed during supervision.
	Online and Offline	*Number of SNS contacts, *Number of 'actual' friends, *Number of friends met face to face (Isbister, 2013)	• Answer choices to questions were adapted (e.g. smaller number ranges to increase accuracy) • Wording was changed to 'actual friends', but the researcher intentionally did not specify what 'actual friends' meant in order to tap into individual understandings of friendship. • To explore whether early adolescents' were supplementing or complementing their offline connections, the researcher decided to measure both. This also helped to explore their notion of friendship. • Literature: CMC studies and hypotheses.
RQ2	Influences of SNSs	Q16 to Q19 Isbister, 2013)	• Reflected with supervisor about how questions should be worded to ensure adolescents' understood the question and reduce any inadvertent impact on their responses. For example, the word 'strain' was changed.

Note. *indicates questions which were adapted by the researcher.

3.4.2.1 Social Cognitive Map.

Social Cognitive Map (SCM) procedure is defined as a method for identifying peer groups and constructing peer networks via the triangulation of multiple peer self-reports about individuals that interact together within a setting (Cairns, Perrin & Cairns, 1985). As formalised by Cairns and Cairns (1994) and implemented in SCM 4.0 (Leung, 1998), it has become a commonly used sociometric technique for peer group identification and assessing peer social structures within school settings. The SCM technique comprises of three distinct stages which involve: " (1) collecting peer reports of social groups, (2) aggregating those peer reports in a single [co-nomination] matrix, and (3) analysing similarity patterns in the [co-nomination] matrix" to identify peer groups (Gest, 2008, p. 575).

According to Farmer and Xie (2012), there are three fundamental assumptions on which the SCM procedure is grounded. (1) When CYP are in a social setting (e.g. school), they tend to develop shared behaviours that result in the formation of distinct and multiple peer groups and the emergence of hierarchical social structures (Farmer, Lines, & Hamm, 2011). (2) These social structures tend to be dynamic and reflective of the developmental process as CYP negotiate relationships with numerous peers in their school setting (Cairns & Cairns, 1994). (3) The final assumption of the SCM procedure is that as the structure of these peer groups tend to be public, each CYP has a mental representation or 'cognitive map' of the social networks and system in their setting (Cairns & Cairns, 1994). From this viewpoint, the child's 'map' extends "beyond simple reports of peer interactions and represent judgement about affiliations and social dynamics within the peer system" (Farmer & Xie, 2012, p.598). It is through these three assumptions that the SCM technique was developed, to capture the CYPs' social world or 'social cognitive map' within the school setting.

(1) Collecting peer reports of social groups

In the first stage, the SCM procedure identifies peer groups and social structures by analysing the collection of participants' self-reports and response to two questions. For this study, data for the SCM was gathered through two questions asked as part of the questionnaire administered in phase 1. In Q20,participants were asked, 'Do you hang out with any group(s)?', and they were required to identify and list friends 'who hang around together' within their year group, beginning with their own peer group. Following this, participants were asked, 'Are there people in your year group that you think tend to hang around together a lot?' In this section they were encouraged to identify and list each member of as many friendship groups as they could recall (for up to six groups).

Through the individual perceptions of social groups in their year, each participant's report is deemed as their respective 'social cognitive map' (SCM) of their year group.

(2) Aggregating peer reports in a single [co-nomination] matrix

Using the SCM 4.0 software, each participant's SCM were combined into a 'symmetric matrix' with one row and column created for every individual within the year group, irrespective of their participation. Co-nominations were summarised in the off-diagonal cells, producing a 'co-nomination matrix' which generated two points of information: (1) the frequency of each pair of pupils named together, relative to the total number of nominations that each received; and (2) the frequency of each pair of pupils named with every other peer within their year group.

(3) Analysing similarity patterns in the [co-nomination] matrix" to identify peer groups

A 'correlational matrix' was further generated by the SCM program, from the information in the co-nomination matrix which examined the correspondence of each pair of pupils' co-occurrence profiles. Working across the co-occurrence and correlational matrices, , the SCM program was used to identify:

> distinct peer groups and the placement of individual students within the social system by utilizing information about the correlation of each co-occurrence profile, the number times that pairs of youth are named together, and a series of algorithms that take into consideration the correspondence of these two sets of information as well as the characteristics of the data (Farmer & Xie, 2012, p.599).

The output thus provides a summary of the frequency with which a pair of adolescents or group are nominated as being in the same social cluster or clique. This summary also gives measurements of: 1) the group's centrality in relation to their year group cohort, based on the number of given nominations to each group; and 2) the participant's centrality within the group, based on the number of nominations given to each individual. From the threshold of nominations, participants and groups can be categorised as central, secondary, peripheral or isolated. The threshold for determining how central an individual or group was in relation to their peer groups and cohort is dependent on how many participants contribute data through their reports. In this study, the following threshold were used: 1) Central/Nuclear = 20+ nominations, 2) Secondary = 9 to 19 nominations, 3) Peripheral = 1 to 8 nominations and 4) Isolated = <1 nomination.

The SCM approach has a number of strengths. Firstly, peer reported group membership data used by SCM is relatively cheap and fast to collect, when compared to direct observations. Secondly, measuring CYP's peer networks directly through self-

report is often infeasible as they are susceptible to social desirability biases while missing data occurs if CYP choose not to participate. In SCM methods however, the multi-informant reports provide a robust basis for the application of social network analysis tools by generating 'dense' co-nomination matrices (Gest, Moody, and Rulison 2007). This results in increased reliability and validity of the identification of peer group structures and patterns of relational ties amongst all individuals of the social network, regardless of whether or not the individual provides a peer report. Lastly, data on the validity of parent and teacher reports of adolescent peer relationships within school settings is sparse, however the SCM method has been validated in a number of empirical studies (Gest et al., 2003).

The use of the SCM enabled the researcher to explore the associations between each participant's individual and group 'offline' social prominence with their reported use of SNSs and online friendships. This analysis has been previously investigated by Isbister (2013); however in his research, only the experiences of participants identified as belonging to distinct social groups (central, secondary and peripheral) were further explored, while individuals who were classified as 'isolated' did not meet his inclusion criteria and therefore were not interviewed. The current study also explored the experiences of 'isolated' adolescents. The analysis from the SCM allowed the researcher to identify and select participants who were socially prominent within their year groups (central) as well as those not identified as associating with any peer groups (isolated) for the follow-up interview in Phase 2.

3.4.2.2 Piloting

The questionnaire was piloted with three Year 8 adolescents from another school who were not part of this study. From their feedback, minor changes were made. These included removing two SNSs (Flickr and Formspring) which seemed to no longer be well known amongst their age group, adding a type of SNS activity ('to play games with other people') and making changes to the layout (clearer spaces between multiple choice options). Apart from this, adolescents reported understanding the questions presented. See Appendix G for a copy of the finalised questionnaire.

3.4.3 Data Collection

All ethical procedures were followed and upon parental consent, participants completed the questionnaire during their daily group tutor time. This took place in their classrooms with approximately 26 to 29 pupils in total and in the presence of their form tutors. The researcher was present during data collection to answer questions, explain the purpose of

the research to participants and their rights regarding participation before obtaining their written consent (please see Appendix F). Students who declined to participate in this study remained present in the classroom but were instructed by their form tutors to carry on with their work or reading quietly so as to not interrupt the other participants. The questionnaire took 20 minutes to complete.

I considered a written questionnaire more suitable than an online version because it allowed the researcher to better coordinate pupil participation and respect the rights of parents who declined their child's participation in the study. Following a discussion with members of staff that some pupils with additional needs or who are underrepresented including pupils potentially identified as isolated would be less confident in sharing their views, a paper and pencil questionnaire administered during school time was judged to be more useful to avoid sampling bias within the Year group. It was agreed that the form tutors present would be able to assist pupils who needed some guidance or help. Participants were required to write their full names down in the questionnaire to enable the researcher to recognise them from the SCM information so that selected participants for Phase 2 could be contacted. Participants were also able to opt out for Phase 2 if they did not want to be considered for a further interview. Upon completion of the questionnaire, participants were debriefed and given opportunities to ask or discuss any questions.

3.5 Phase 2

Following the collection of data in Phase 1 from a large group of participants, Phase 2 was designed to provide insight to the quantitative data. Phase 2 was also designed to corroborate and extend the initial qualitative data gathered in Phase 1 by further exploring the perceptions of participants on their online SNSs practices and what influence these had on their peer relationships. This information was used to abstract further themes from qualitative data to answer RQ2.

3.5.1 Participants

As this study compared sex and levels of social prominence in relation to SNS use and its influences on online and offline peer relationships, participants were screened for their eligibility to meet selection criteria for Phase 2, based on their responses to the questionnaire in Phase 1. These criteria include:

- Informed pupil and parental consent to be interviewed
- Had attended a UK primary school throughout their primary school years

- Been an SNS user for more than two years
- Currently using at least one SNS (including Snapchat or Instagram)
- Logs in to their SNSs more than several times a week
- Identified as socially prominent (central) or isolated based on the SCM analysis

Out of 180 participants who completed Phase 1, 59 participants met the inclusion criteria and were eligible for the interview. Of the 59 participants, 50 pupils were identified as being central to their peer groups and in relation to their cohort, while nine pupils (five males and four females) were categorised as isolated.

It was decided that a total of 16 participants would be recruited for Phase 2. Participants identified as being central within their cohort and year group were randomly selected from each peer group (computed through the SCM software) with a balanced number of males (n=4) and females (n=4). The number of pupils who were identified as isolated and who met the criteria was a small and hard to reach sample. It was therefore decided that all nine pupils would be selected for the interview. All parents or guardians of the 17 selected pupils were subsequently given a parent letter to 'opt-in'.

Although all parents consented to the study, two female participants identified as isolated dropped out from the study: one pupil moved schools while another withdrew consent. One male participant from the 'central' group also subsequently withdrew consent on the day of the interview. In total, 14 pupils across all subgroups participated in the interviews as seen in Figure 2. In this sample, there were 6 girls and 8 boys aged between 12 and 13 years (mean =12.6, SD= 0.31). The sample was ethnically diverse, with a larger proportion of participants from Black British backgrounds (57.1%) followed by 21.4% Mixed Race; 14.2% White British and 7.1% Asian. Please refer to Table 2. From the sample, there were an equal number of participants identified as either socially prominent (central) or isolated (based on the SCM analysis). In order to ensure that the participants' identities were protected, each individual was given a code (Pupil ID). As contextual information is intended to illuminate the data about this sample, information about the participants' (1) the first age of SNS use; (2) types of SNSs used; and (3) number of SNS friends was derived from the responses in their questionnaires (see Appendix J). Given the small sample of participants' interviewed and who had been identified by school staff, no further details will be given due to ethical reasons (i.e. risk of compromising their identification).

Male participants Central group n = 3	Female participants Central group n = 4
Male participants Isolated group n = 5	Female participants Isolated group n = 2

Figure 2. Number of participants in each subgroup.

Table 3. *Pupil participant details based on gender, ethnicity and SCM category*

Pupil ID	Gender	Ethnicity	SCM Category
FC1	Female	White British	Central
FC2	Female	Black African	Central
FC3	Female	Black African	Central
FC4	Female	Black African	Central
MC1	Male	Asian Oriental	Central
MC2	Male	Mixed Race	Central
MC3	Male	Black African	Central
FI1	Female	Black African	Isolated
FI2	Female	Black African	Isolated
MI1	Male	Mixed Race	Isolated
MI2	Male	Mixed Race	Isolated
MI3	Male	Black African	Isolated
MI4	Male	White British	Isolated
MI5	Male	Black African	Isolated

3.5.1 Methodological tool: Semi-structured interview

Semi-structured interviews were used for the second phase of this research. This method was chosen in order to provide participants with the flexibility to describe their experiences of SNSs in rich detail. The semi-structured interviews also offered further depth to their points made, extending on the initial categories generated from participants' responses to the open-ended questions in the questionnaire from Phase 1.

Pre-determined questions were used to allow adolescents to 'tell their story' and share their insights, helping the researcher to make sense of their individual experiences and allow comparisons to be drawn from their responses (Mertens, 2005; Robson, 2011; Searle, 2002). The interview schedule was developed to explore the perceptions of adolescents in order to answer RQ2. Following a review of similar research, questions in the interview schedule were derived or adapted from these previous studies (Isbister, 2013; Livingstone, et al., 2011b). The interview schedule questions addressed a series of topics including: 1) rapport-building questions about their secondary school background and as well as their peer groups or friendships in and out of school; 2) their use of SNSs when they first started; 3) activities carried out on SNSs; 4) the experiences of using

SNSs; 5) perceptions about SNS/actual friends and; 6) general views about SNS use. Prompt questions were added to encourage participants to extend their responses on their use of SNSs (Braun & Clarke, 2006). The semi-structured interview was also particularly important to inform understanding of the nuances of how adolescents managed their peer relations through the ever-changing affordances of SNSs; such information would not have been captured through the questionnaire alone.

Bearing in mind that the young participants may have also used different terms to name online content or social experiences, the interviews provided the researcher a useful 'way-in' to exploring each adolescent's own perspectives on the online social context (Robson, 2011). In exploring the positive and negative aspects associated with using SNSs, the discussion may have elicited personal accounts of negative experiences due to the complexities inherent in the use of SNSs as well as adolescent relationships. A semi-structured interview conducted individually was therefore judged be more appropriate than other methods, such as focus groups, as I anticipated that participants would feel more at ease in opening up about their experiences without the pressure of perceived judgement from their peers.

The interview schedule was discussed with both research supervisors. Before the interview, a pilot interview was conducted with a Year 8 male pupil who did not attend the same school. During the interview, the pupil appeared able to offer in-depth answers to the questions, so that only minor changes were made based on the feedback on the wording of one question. (Please see Appendix K for a copy of the finalised interview schedule). Table 4 provides an account of the researcher's design consideration and reflections when developing the interview questions.

Table 4. *Interview schedule design considerations and reflexivity*

Research question	Area of Inquiry	Interview Material	Design Considerations and Reflexivity
RQ1	Background context	Q1-3 *Example question*: "Do you have any friendships outside of school?"	• Warm-up questions. Pilot study indicated needed to build rapport. • The researcher wanted to find out background/general information and their perceptions about school and friendships/peer networks in (and out) of school. Particularly for 'isolated' participants i.e. consideration that adolescents can have peer relations in other settings. • Literature: Peer relations/group membership in early adolescents
	General Use	Q4-8 *Example question:* "What do you and your friends usually do on SNSs" (Isbister, 2013)	• Exploring their early experiences of SNSs use and SNS activities. • Literature: what are SNSs to early adolescents? SNS use in the context of early adolescent developmental phase. • This was an opportunity to explore what they think about the SNSs features/functions and how they perceived it influenced their peer relations. • The research chose these questions to add breadth and more nuanced responses to supplement the questionnaire data. • These questions were used to find out about the language used to describe online experiences.
RQ2	Perception of friending practices and friendships	Q9-11 *Example question:* In your opinion, are 'SNS friends' the same as 'actual' friends; How do you decide who to accept (and reject) as a friend.	• Questions added after supervision. • Further understanding their views on friendships online and offline, curious if there was a link. • Further exploring their decision making and perception around 'friending' practices. Curious about the process and dynamics navigating this. • Literature: stimulation hypothesis, rich-get-richer hypothesis, Tokunaga (2011)
	Perceptions of SNS Influences	*Q12-19 *Example question:* When you filled out a questionnaire, you mentioned on time when using SNS that…(Isbister, 2013) Q15 Bullying	• Exploring specific experiences of SNSs from their responses in questionnaire and how SNSs contributed to it. • Exploring their similar/differing views on early adolescent's use of SNSs generally. • Being mindful of phrasing much was SNS influences vs everyday social norms. • Avoiding leading questions. • Literature: positive/negative aspects of early adolescent peer relations in the real world and based on SNS studies, prevalence and perspective on cyberbullying.

Note. *indicates questions which were adapted by the researcher.

3.5.2 Data collection

Before starting data collection in Phase 2, all participants who were selected for Phase 2 were notified by their form tutor and met with the researcher collectively for a short session, without disclosing any information regarding the selection criteria, or their 'social prominence' category from the SCM analysis. The session allowed the researcher to refresh the participants' memory about the study, remind them that they had agreed to be contacted for an interview, explain the nature and structure of the interview and offer participants a space to raise any questions. At the end of the session, parent consent (opt-in) letters were given to participants who were still willing to be interviewed. Once parent consent was gained, a face-to-face semi-structured interview was carried out with 14 participants in the school premises. All pupil interviews were conducted in a quiet corner of the library, which was closed for the duration, to ensure confidentiality for participants.

Before commencing the interview, some time was spent building rapport, briefly informing participants of the process of the interview, endeavouring to ensure participants felt at ease and were aware of their rights. Written confirmation of their consent to proceed was also obtained. With the participants' permission, the interviews were audio-recorded with a Dictaphone and I reassured participants about confidentiality and their right to withdraw at any time. Participants were also shown their questionnaire (completed in Phase 1) during the interview, as some of the interview questions referred back to their initial responses. With the awareness that participants might possibly interpret the questions differently, effort was made to seek a mutual understanding by asking clarifying questions and double-checking their responses.

3.6 Ethical Consideration

This research has been reviewed by the Education Research Ethics Committee at UCL Institute of Education for ethical approval. Several measures were taken in each phase to ensure that the research was ethically sound as outlined below.

3.6.1 Informed consent

3.6.1.1 School and parental consent.

Once ethical approval was gained, an information sheet outlining the aims and nature of the study, including a consent form, was provided to the Head Teacher (Appendix C) of the school. Once consent was gained from the Head Teacher, all parents of pupils in Year 8 were also given a letter containing information about Phase 1 of the study (Appendix D) which gave them the option to opt their child out of the study if they wished.

For Phase 2, parents of students who responded ‘Yes’ (in the questionnaire) to be contacted further and who met the inclusion criteria for an interview were given a second letter and consent form. The parents were asked to sign this consent form, confirming their permission to opt their child in for the interview (Appendix E).

Following completion of the study, findings and implications from the research were shared with staff through training. Summary of key findings was shared with parents in a written report and with pupils during assembly.

3.6.1.2 Participants

During Phase 1 of this research, prior to the administration of the questionnaire in the classroom, the students in their tutor groups were informed orally about the aims of the study. A consent form was attached in front of the paper questionnaire to check their signed consent. Before the questionnaires were given out to students, they were also told that they could change their mind and withdraw from the study at any time. This reminder was also stated in the students’ consent form (visual prompt included, please see Appendix F). For Phase 2, at the beginning of the interview sessions, students were individually reminded about their rights as participants before obtaining their written consent.

3.6.2 Vulnerable participants

I recognised the potential challenges pupils identified as ‘isolated’ faced when discussing friendships and peer groups during the interview. The researcher also acknowledged potential feelings of distress from pupils when sharing information about their experiences of SNSs, particularly those who may have experienced or are experiencing negative issues concerning SNS use, such as online risks including private or sexual matters through their navigation of peer relationships, both online and offline. To address these issues the students were closely monitored by the researcher for signs of distress during the administration of the questionnaire and interviews; any pupils showing distress were identified and highlighted to relevant staff members. Additionally, the researcher’s email address was written in the information sheets, this was to address any parental worries about what the study might elicit in their child and enable them to contact the researcher with questions or to gain further support.

Furthermore, to ensure sensitivity to the participants’ needs, the questionnaire and semi-structured interview schedule had been piloted to ensure that questions were worded carefully.

3.6.3 Sensitive topics and safeguarding

As the researcher intended to ask participants questions about their use and experiences of SNSs which may elicit discomfort amongst those who had previously or were experiencing difficulties in relation to their use of SNSs, care was taken in ensuring students understood that they could withdraw participation at any time during the study. Participants were also reminded that their responses would be kept confidential and their identities remain anonymous, except when information shared was judged to compromise their safety and put them or others at risk.

During the interviews, students were also reminded that they did not have to share any information that they were uncomfortable talking about. For both Phase 1 and Phase 2, students were briefed and debriefed about the purpose and the outcome of study. After the administration of the questionnaire or interview, pupils were given opportunities to share comments, ask questions or discuss concerns. They were also allowed to omit questions. An agreement was made with school to name a designated staff member to whom the student could be signposted, should they seek further support. Students were also given an information sheet on access to online services which provide support (e.g. Childline) and information (e.g. ThinkYouKnow).

Although the participants' identities remained anonymous and data were kept confidential for the purposes of the study, students were requested to write their name down during the administration of the questionnaire as this was required for the SCM analysis. However, a written name also ensured that any pupils who were considered to be unsafe in light of their responses could be identified and highlighted to an agreed member of staff in the school. This procedure was made known to the students prior to the start of the questionnaire. Following the completion of Phase 1 data collection and during data input, I noticed that a pupil had disclosed that s/he were also using 'Tinder', a dating app for adults. Concerned that the child would be at risk to potential exploitation, I raised this with the designated pastoral staff member who agreed, to address this matter with the pupil in a sensitive manner.

3.6.4 Confidentiality and data protection

All data collected from the questionnaires and interviews were stored on password protected files on an encrypted USB. Each participant was given a code during input of data from the questionnaire and when the interview recordings were transcribed. All consent forms by parents and participants were also kept safely and separately from participants' codes.

3.7 Analysis

3.7.1 Quantitative data analysis

3.7.1.1 SPSS data analysis

The quantitative data from the questionnaire, which included responses to closed questions, Q1 to Q15 from 180 participants were coded and manually entered into an Excel (2018) spreadsheet. SPSS 25 (IBM, 2017) was used to analyse the data using a range of descriptive statistics (e.g. frequency tables, bar graphs and cross tabulations). Chi-square tests for association were carried out where test assumptions were met. Chi-square tests were considered most appropriate for quantitative analysis as this test allowed for the comparison of categorical variables. T-tests and ANOVAs were not used as both tests assume the comparison of means on a continuous variable across groups.

RQ1*:* How do early adolescents use SNSs and how is this associated with their 'offline' peer relations?

The data was analysed to investigate the research question above. The researcher looked at a range of categorical variables which were grouped into three areas (see Table 2). Both gender and social prominence comparisons were examined for all categorical variables to examine the following sub-research questions:

> ***Sub-RQ A***: How do adolescents who are socially prominent in their groups/year compare with adolescents who are socially isolated?
>
> ***Sub-RQ B****:* Are there gender differences evident in the perceived use and influences of SNSs?

An initial analyses of the variables for social prominence comparisons tended to reflect little difference by individual prominence, possibly due to the small sample size of isolated individuals. A decision was therefore made to exclude the analyses of those variables. Table 5 shows the categorical variables examined for gender or social prominence comparisons (marked X) that will be presented in the Findings chapter.

Table 5. *How quantitative data will be presented in the Findings chapter.*

Areas	Categorical variables	Groups Compared	
		Gender	Social Prominence
General use of SNSs	Type of SNSs		
	Starting age	X	
	Frequency use on device	X	X
	Time spent on SNSs	X	
	Number of profiles	X	
	Privacy Settings	X	
Friending practices	Friend request response	X	
	Types of SNS contacts	X	
	Disclosure		
	Frequency of online activities		
Online and offline relations	Number of SNS contacts	X	X
	Number of 'actual' friends	X	X
	Friends met face-to-face	X	X

3.7.1.2 SCM data analysis

The quantitative data from Q20 (questionnaire) elicited self-reports of the participants' nominations of friends assigned to friendships groups within their year; responses were entered manually onto an Excel spreadsheet by the researcher and analysed using the Socio Cognitive Mapping (SCM) computer software (Leung, 1994).

3.7.2 Qualitative data analysis

The qualitative data included responses to four open-ended questions by 180 participants in Phase 1 and interviews from 14 participants from Phase 2. For Phase 1, all responses to the open-ended questions were entered manually by the researcher onto an excel spreadsheet and transferred as a data set onto the NVivo software (QSR International 2011).

The qualitative data was analysed using Thematic Analysis which is defined as "a method for identifying, analysing and reporting patterns and themes within data" (Braun & Clarke, 2006, p.79). As this study sought to identify some of the common elements in the adolescents' social experiences in relation to their peer relationships across the dataset, the use of Thematic Analysis was considered appropriate. Thematic Analysis was also chosen for its flexibility as a method of data analysis and compatibility with the pragmatic perspective adopted in this research, equally providing structure and allowing for complex and rich results with unanticipated insights to be sought from the data (Braun & Clarke, 2006). A Grounded Theory approach was not deemed as a suitable form of analysis for the data as this research did not intend to generate theory but rather to explore

and provide a meaningful understanding of each adolescent's experience linked with the collective experiences of others defined by a particular social and cultural context. The patterns and themes were interpreted and generated from the qualitative data in Phase 1 using an inductive or 'bottom up' approach as the study aimed to identify themes reflective of the data itself or participants' shared reality with regard to how SNS use mediates their peer relationships, rather than to test the extent of pre-existing theories.

The analysis of the qualitative data was carried out using the following steps stated by Braun and Clarke (2006). The analysis of the qualitative data (open-ended questions) in Phase 1 was carried out prior to data analysis (of transcripts of semi-structured interviews) in Phase 2. However, the process of analysis for both was carried out in the same way and will therefore be described simultaneously below. As maintained by the authors themselves, while the stages are distinct and clear, the researcher moved back and forth between the steps throughout the analysis.

First step: Familiarising yourself with your data

Phase 1: The dataset was read several times while initial ideas noted down.

Phase 2: All 14 interviews were audio-recorded and ranged in length from 18 to 35 minutes. All interviews were transcribed verbatim. As a result of time constraints, only half of the interviews were transcribed by the researcher and half by a third party. The researcher however ensured that the transcribed data matched the audio recordings accurately, by re-reading the transcript and listening to the audio recording numerous times to familiarise and fully immerse with the text, whilst noting down impressions and thoughts.

Second step: Generating initial codes

Data was reviewed and analysed comprehensively with chunks of data highlighted and coded using NVIVO 11 software, working through the questionnaire responses (Phase 1) and each transcripts (Phase 2), systematically with the aim of addressing the RQs.

Third step: Searching for themes

At this stage, the codes were cut up and grouped into categories or subthemes where patterns emerging from the preceding stage of analysis were noticed (Please see Appendix M). Observations were also made if groups of codes pertained to particular subgroups (e.g. male, female, central or isolated) at this point. Codes generated in Phase 2 were also checked against codes constructed within the Phase 1 analysis, noting any similarities or differences. During data analysis of the Phase 2 data set, the researcher decided to combine codes from Phase 1 and Phase 2, searching for subsequent subthemes and themes in order to best encapsulate the full data set. For example, a cluster of codes

from Phase 1 (‘naming and shaming not to your face’, ‘someone posting a sneaky insult,’ people like to indirect’) was merged with the Phase 2 code ‘Indirecting’. (See Appendix L for a copy of a transcript and identified codes; See Appendix N for an example of a Phase 1 and Phase 2 merged codes).

To increase validity of subthemes and themes, responses to the open-ended questions from the questionnaire from 10 participants and two transcripts of the interview were also coded, compared and discussed with two other trainee EPs on the course, making considerations and adjustments if there were alternative interpretations.

Fourth step: Reviewing themes

The themes identified were further refined, linking back to the subthemes and codes to ensure coherence. The dataset from Phase 1 and transcripts from Phase 2 were also reviewed so that themes reflected the codes and data extracts. The subthemes and themes were also discussed during research supervision where several themes were further merged together.

Fifth step: Defining and naming themes

The researcher further developed the names of subthemes and themes, and identified two overarching themes which would encapsulate the data extracts following discussion in research supervision. A clear definition to represent each theme and reflect the corresponding data was also generated at this stage.

3.8 Reflexivity

Thinking reflexively “about that which mediates their own thinking” was important to the researcher when considering the validity of this study (Moore, 2005, p.111). The researcher acknowledged that her own assumptions and preconceptions could inherently influence the decisions made and therefore considered personal biases throughout the research process. This included the researcher’s knowledge and social experiences in using SNSs throughout her early adulthood and knowledge about previous incidences in the school of the study population linked to use of social media (Yardley, 2008). Attempts were made to reduce this by carefully selecting prompt words to use during the interview process and during analysis of the qualitative data.

3.8.1 Participant bias

Through the administration of a questionnaire, participants were required to select and provide answers about how they are using SNSs in relation to their social experiences online and in school (SCM question). Relying on participants’ self-report may increase

potential inaccuracies in their answers as they may answer questions to be viewed more favourably by the researcher or adults. This was also considered during the interviews. Having worked as a Trainee EP, the researcher was aware of her position as a professional interviewing adolescents and the impact of this on participants' responses. Participants may have found it challenging to be honest and open and feel reluctant to disclose personal experiences for fear of giving a negative impression of themselves or being potentially reported to a key member of staff due to the school's strict social media policy. Lobe, Livingstone and Haddon (2007) highlighted the importance of valuing CYP, giving them the impression that they are taken seriously as only the adolescents themselves would be able to report on what their online activities are as they tend to occur alone and away from others. Participants were therefore informed about the significance and value of their answers, thoughts and insights and careful interpretation was also taken when data was analysed in an attempt to stay close to the participants' meaning (Livingstone & Lemish, 2001).

4. Findings

In this chapter, the findings from both qualitative and quantitative data analysis are presented. The quantitative analysis of data from the questionnaire will be outlined in this first section (4.1). The second section (4.3) outlines the qualitative analysis from the open-ended questions of the questionnaire data and semi-structured interviews.

4.1 Quantitative Findings

Part one presents the findings from the analysis of the quantitative data. The quantitative data aimed to address the following research and sub-research questions:

RQ1: How do early adolescents use SNSs and how is this associated with their 'offline' peer relations?

> ***Sub-RQ A***: How do adolescents who are socially prominent in their groups/year compare to adolescents who are socially isolated?
>
> ***Sub-RQ B:*** Are there any gender differences on the perceived use and influences of SNSs?

Results based on the scores of 180 completed questionnaires have been divided into 3 sections (4.1.2 to 4.1.4). The first two sections focus on different aspects of early adolescents' use of SNSs (general use, friending practices) while the third section (online and offline contacts) also investigates the links between online contacts and offline peers. Where appropriate, the data in these sections have also allowed for gender or social prominence comparisons to be made (to examine sub-RQs A and B).

4.1.1 Preliminary analyses

The quantitative data is presented using descriptive statistics. This includes bar graphs and frequency tables where percentages and frequencies (in brackets) are reported. The data was also analysed using cross tabulations; and chi-square tests of association when assumptions were met. The assumptions of a chi-square test for association included: (1) only two categorical variables, which are usually required to comprise nominal variables, but where ordinal data can be accepted; (2) levels within variables which are mutually exclusive and (3) that the expected value in all cells should be greater than five.

4.1.1.1 Social cognitive map (Peer group measure and social prominence)

The SCM software was used to analyse and identify (1) 'social network size' - determined by the group size of peer groups as an overview of participants' perceptions of peer social structures within their cohort (Cairns, Perrin & Cairns, 1985), (2) how central an individual was in relation to their peer group and cohort, as measured by the number of

peer nominations. Participants perceived as more socially prominent had more nominations.

75% (n = 135) of the participants completed the SCM question. Based on these responses, data analysis showed that the size of peer groups ranged from four to 18 members. The SCM also identified that the majority of the peer groups were same-sex in composition.

The response rate for the SCM questionnaire was higher at 87% (n=156), however SCM data from 21 participants were removed from the analysis due to errors and inaccuracies in responses. This included illegible handwriting, the omission of the surnames (first letter) and use of nicknames, which made it impossible for the researcher to identify the name of the peer that the participant was referring to. The SCM question for 24 participants was also left unanswered, possibly due to time constraints or a reluctance to share. It should be reinforced however that the SCM method is designed to account for a lower response rate.

As described in the Methodology, a fundamental assumption of the SCM procedure is that students' responses to the SCM question are, in fact, individualized cognitive maps that reflect the respondent's own conceptions of the classroom or school social structure. From this perspective, these maps go beyond simple reports of peer interactions and represent judgments about affiliations and social dynamics within the peer system. The threshold for determining the level of centrality (of either an individual or group) is dependent upon the number of participants contributing data and can also be adjusted according to the discretion of the researcher. In this study, the following default thresholds were used: 1) Central/Nuclear = 20+ nominations; 2) Secondary = 9 to 19 nominations; 3) Peripheral = 1 to 8 nominations and 4) Isolated = <1 nomination

Table 6 lists the four ranks of individual centrality and percentage of participants assigned to each category. 43.3% (n = 78) of participants were identified as nuclear individuals (those who had higher status in their groups and cohort) while 8.3% (n = 15) of the participants were identified as isolated individuals (those who did not belong to any group). Rankings can be found in methodology subheading 3.4.2.1.

Table 6. *Percentage of participants' assigned individual centrality*

Centrality	**Number of participants**	**%**
Nuclear	78	43.3
Secondary	57	31.7
Peripheral	30	16.7
Isolated	15	8.3
Total	180	100.0

4.1.2 General use of SNSs

The aim of this section was to explore general information about early adolescents' use of SNSs which included the number and current choice of SNSs used, the number of SNS profiles owned, age of first time use, weekly frequency and ways of accessing SNSs; daily hours spent on SNSs and their privacy settings.

4.1.2.1 Current choice of SNSs

Table 7. *Types and number of SNSs used*

Type of SNS	**1 SNS % (n)**	**2 SNSs % (n)**	**3+ SNSs % (n)**	**Total % (n)**
Snapchat	8.9 (4)	47.5 (75)	43.7 (69)	100 (158)
Instagram	4.1 (6)	48.0 (71)	48.0 (71)	100 (148)
Google+	8.5 (6)	15.5 (11)	76.1 (54)	100 (71)
Twitter	-	7.3 (3)	92.7 (38)	100 (41)
Facebook	-	5.3 (2)	94.7 (36)	100 (38)
Tumblr	-	-	100.0 (5)	100 (5)
Other	8.2 (4)	44.9 (22)	46.9 (23)	100 (49)
Total	14.5 (26)	45.3 (81)	40.2 (72)	100 (179)

From Table 7, the vast majority of the adolescents report using more than one SNS. Amongst adolescents who were using two or three+ SNSs, *Snapchat* and *Instagram* were the most widely used. It is apparent that *Facebook* is no longer reported as the main choice of SNS for participants using either one or two SNSs. Along with *Twitter and Google+*, *Facebook* seemed to be used in addition to other SNSs for adolescents who use three+ SNSs. A small number of adolescents also report using other types of SNS, including gaming-related SNSs. In response to the open-ended question 'Please list others (SNSs) you use', the majority of the respondents (n = 40) reported using *Xbox live* and *Playstation Plus.*

4.1.2.2 Age at first use of SNS

Table 8. *First use of SNS based on age*

Start age of use	Male (n = 97)		Female (n = 83)	
	% of participants	Cumulative % of participants	% of participants	Cumulative % of participants
Age 7 (or below)	1.0 (1)	1.0 (1)	2.4 (2)	2.4 (2)
Age 8	1.0 (1)	2.1 (2)	3.6 (3)	6.0 (5)
Age 9	13.4 (13)	15.6 (15)	6.0 (5)	12.0 (10)
Age 10	17.5 (17)	33.3 (32)	22.9 (19)	34.9 (29)
Age 11	36.1 (35)	69.8 (67)	32.5 (27)	67.5 (56)
Age 12	21.6 (21)	91.6 (88)	24.1 (20)	91.6 (76)
Age 13	9.3 (9)	100.0 (97)	8.4 (7)	100 (83)

Of the 180 participants, most of the adolescents, both males and females report that they were aged 10, 11 or 12 when they first started using SNSs (around Year 5, 6 and 7). There was a noticeable difference between gender with more males (13.4%) than females (6%) who start to use SNSs at age 9. By age 11, more than two-thirds of participants were already using SNSs for both males (69.8%) and females (67.5%) whereas almost all participants reported that they were using SNSs by age 12. This is despite the fact that the age restriction of most SNSs is 13 years.

4.1.2.3 Frequency of use of each device

Table 9. *Frequency of use of each device*

Devices	Several times each day % (n)	Daily or almost daily % (n)	At least every week % (n)	Less often % (n)	Never % (n)
Mobile phone	67.8 (122)	19.4 (35)	6.7 (12)	4.4 (8)	1.7 (3)
Laptop/computer at home	10.0 (18)	19.4 (35)	18.3 (33)	29.4 (53)	22.9 (41)
Laptop/computer at school	2.8 (5)	5.0 (9)	18.3 (33)	18.9 (34)	55.0 (99)
Tablet	7.8 (14)	12.2 (22)	11.7 (21)	38.9 (70)	28.3 (51)
Games console	7.8 (14)	12.2 (22)	11.7 (21)	25.6 (46)	42.8 (77)

From Table 9, it can be seen that the main way adolescents are accessing SNSs is through their mobile phones. A high percentage (87.2%) of adolescents frequently use SNSs on their mobile devices either several times a day, daily or almost daily. An examination of the responses also showed that around a third of adolescents log on to online SNSs through their laptop/computer at home either several times each day, daily or almost daily while around a fifth use SNSs on other devices including the tablet and games console.

A minority of participants (23.1%) have engaged online on SNSs through a laptop/computer at school either several times a day, daily or at least every week.

4.1.2.3.1 Frequency of SNS use of each device and gender

Table 10. *Frequency of SNS use of each device and gender*

Devices	Gender	Daily or several times each day % (n)	At least every week or less often % (n)	Never % (n)
Mobile phone	Male	81.4 (79)	15.5 (15)	3.1 (3)
	Female	94.0 (78)	6.0 (5)	-
A laptop/computer at school	Male	9.3 (9)	42.3 (41)	48.5 (47)
	Female	6.0 (5)	31.3 (26)	62.5 (52)
A laptop/computer at home	Male	35.1 (34)	42.3 (41)	22.7 (22)
	Female	22.9 (19)	54.2 (45)	22.9 (19)
A tablet	Male	17.5 (17)	49.5 (48)	33.0 (32)
	Female	23.5 (19)	53.1 (43)	23.5 (19)
A games console	Male	32.0 (31)	36.1 (35)	32.0 (31)
	Female	6.0 (5)	38.6 (32)	55.4 (46)

Separate chi-squared tests on each pair of associations were conducted to explore the association between gender and how often adolescents logged onto SNSs on each device. There was little association between gender and frequency of SNS use on a (1) 'laptop/computer at school'. Interestingly, there was a statistically significant association between gender and frequency of use on a games console, $\chi 2(2, N=180) = 20.872$, p = 0.000. The association was moderately strong (Cohen, 1988), Cramer's V=0.341.

Crosstabulation showed that male participants were significantly more likely to report using SNSs more frequently on a games console either daily or several times each day compared to female participants. Female participants most commonly reported 'at least every week or less often' or 'never' when logging on to SNSs through a games console. Chi-square test analysis showed that expected frequencies were less than five for crosstabulation between gender and frequency of SNS use on a 'mobile phone' and therefore did not meet the test assumptions. Overall, apart from a games console, there were no real significant gender differences in the number of times SNSs were used by adolescents on all the other devices.

4.1.2.3.2 Frequency of SNS use of each device and individual centrality

Table 11. *Frequency of SNS use of each device and individual centrality*

Devices	Gender	Daily or several times each day	At least every week or less often	Never
Mobile phone	Nuclear individuals	92.3% (72)	6.4% (5)	1.3% (1)
	Secondary individuals	89.5% (51)	8.8% (5)	1.8% (1)
	Peripheral individuals	70% (21)	30% (9)	-
	Isolated individuals	86.7% (13)	6.7% (1)	6.7% (1)
Laptop/ computer at school	Nuclear individuals	6.4% (5)	39.7% (31)	53.8% (42)
	Secondary individuals	7.% (4)	38.6% (22)	54.4% (31)
	Peripheral individuals	6.7% (2)	30% (9)	63.3% (19)
	Isolated individuals	20% (3)	33.3% (5)	46.7% (7)
Laptop/ computer at home	Nuclear individuals	35.9% (28)	43.6% (34)	20.5% (16)
	Secondary individuals	26.3% (15)	47.4% (27)	26.3% (15)
	Peripheral individuals	16.7% (5)	60% (18)	23.3% (7)
	Isolated individuals	33.3% (5)	46.7% (7)	20% (3)
Tablet	Nuclear individuals	20.5% (16)	52.6% (41)	26.9% (21)
	Secondary individuals	17.9% (10)	51.8% (29)	30 4% (17)
	Peripheral individuals	23.3% (7)	43.3% (13)	33.3% (10)
	Isolated individuals	21.4% (3)	57.1% (8)	21.4% (3)
Games console	Nuclear individuals	19.2% (15)	32.1% (25)	48.7% (38)
	Secondary individuals	26.3% (15)	33.3% (19)	40.4% (23)
	Peripheral individuals	13.3% (4)	46.7% (14)	40% (12)
	Isolated individuals	13.3% (2)	60% (9)	26.7% (4)

Chi-square test analysis showed that expected frequencies were less than five for crosstabulation between individual prominence and frequency of SNS use of each device did not meet the test assumptions. From the table, the overall data suggest that frequency of use of SNSs on each of the devices varies little by individual prominence. However, interestingly ‘isolated’ individuals were more likely to log onto SNSs using their games console at least every week or less often (60%) compared to ‘individuals identified as belonging to the ‘nuclear’ category.

4.1.2.4 Daily hours spent on SNS

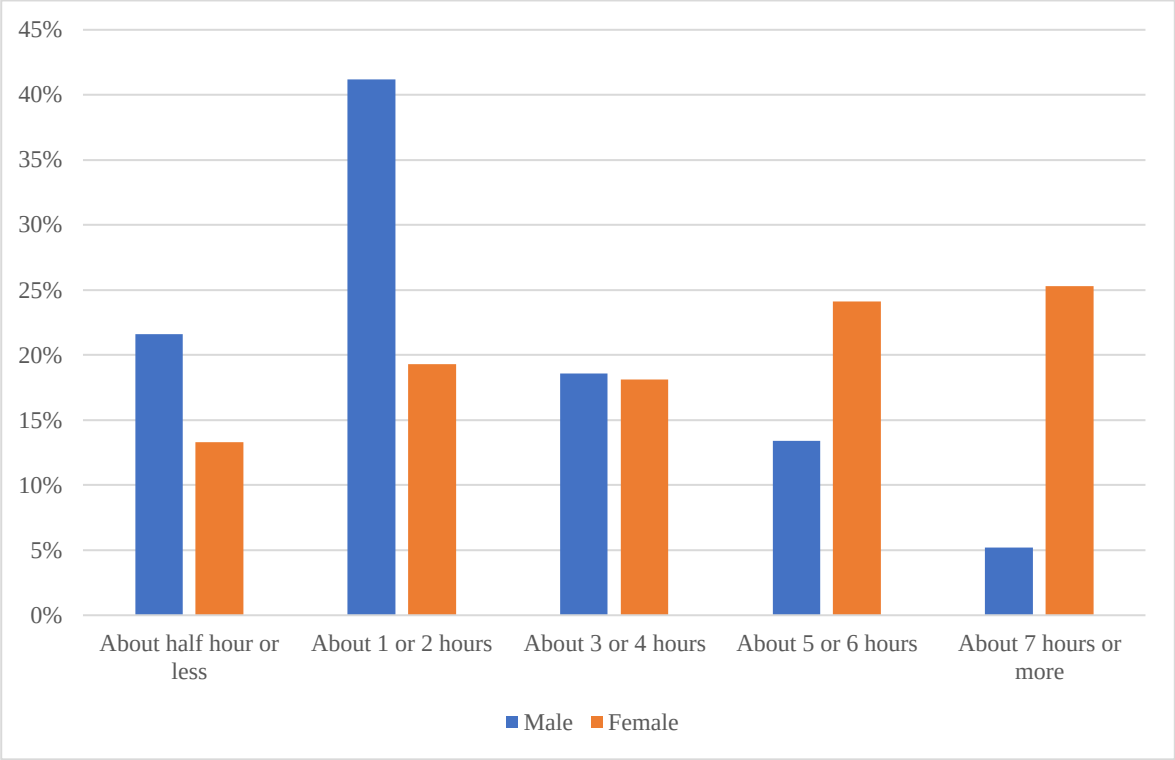

Figure 3. The number of hours spent on SNSs in a day

Table 12. *An association between gender and number of hours spent on SNSs in a day*

Gender	About half hour or less % (n)	About 1 or 2 hours % (n)	About 3 or 4 hours % (n)	About 5 or 6 hours % (n)	About 7 hours or more % (n)
Male	21.6 (21)	41.2 (40)	18.6 (18)	13.4 (13)	5.2 (5)
Female	13.3 (11)	19.3 (16)	18.1 (15)	24.1 (20)	25.3 (21)

A chi-square test for the association between gender and the number of hours adolescents spent on SNSs daily was conducted. As can be seen in Table 12, there was a significant relationship between gender and hours of use on SNS, $\chi 2(4, N = 180) = 24.071$, $p = 0.000$, V=0.366. Overall, female participants are more likely to spend a lot more time on SNSs in a day between 5 or 6 hours or 7 hours or more. By contrast, a high percentage of male participants more commonly report spending about 1 or 2 hours on SNSs (41.2%) or about half hour or less (21.6%) compared to females.

4.1.2.5 Number of SNSs profiles

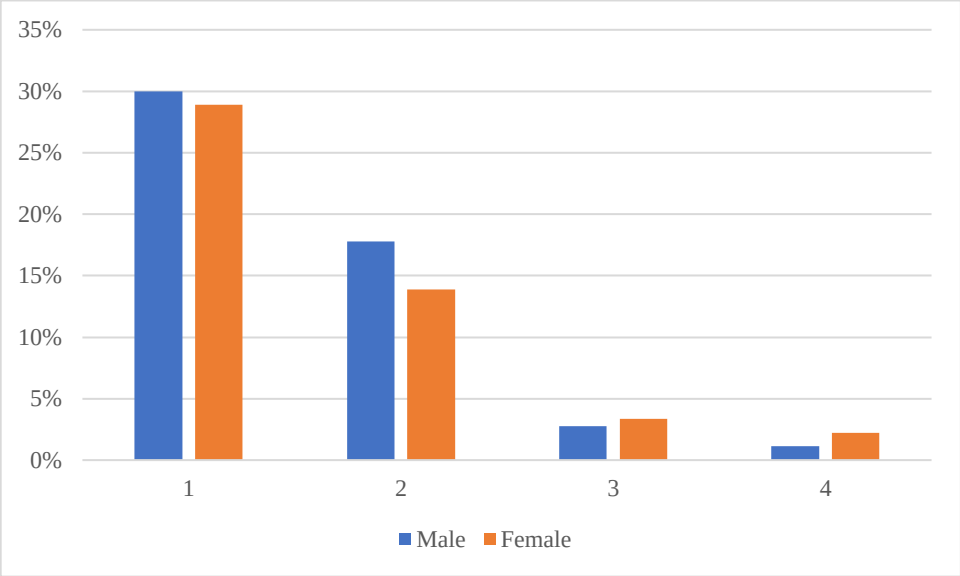

Figure 4. The number of profiles adolescents have on their SNSs.

From the bar chart, we can see that there is not much gender difference in the number of profiles participants have on each of their SNSs. By far, almost a third of male (n=54) and female (n=52) participants report that they only have one profile. 17.8% of males (n=32) and just 13.9% of females (n=25) report having two profiles. A small minority of 6.1% males and 3.3% female participants have three or four profiles.

In response to the open-ended question of 'if you have more than one account, can you explain the reason for this?', content analysis identified a number of main categories with two most prevalent being that respondents report that they have a backup account when they get hacked (n=33) or if they forget their log-in (n=14). What is interesting about a small number of responses to the open-ended question is that 10 respondents report that they had different profiles for different networks of online friends e.g. "one for people I know, and another for people I meet online from around the world".

4.1.3 'Friending' practices

The aim of this section was to explore some of the social practices early adolescents engaged in on SNSs when connecting with online contacts. This included how they respond to 'friend requests', the types of 'online friends' they communicated with and the types of online social activities they participated in.

4.1.3.1 Responses to ‘friend’ requests online

Table 13. *An association between gender and response to ‘friend’ requests on SNSs*

Gender	Accept all request	Accept only if friends in commons	Accept only if know them	Accept only if know very well
Male	29.9% (29)	30.9% (30)	30.9% (30)	8.2% (8)
Female	14.5% (12)	26.5% (22)	50.6% (42)	8.4% (7)

A chi-square test revealed that there was a statistical difference in the association between gender and responding to ‘friend’ requests, $\chi 2(3, N=180) = 9.314$, p = 0.025, V = 0.227. Differences in gender were noted with substantially more male participants than females more likely to accept all requests; or accept only if they have friends in common. In contrast, over half of females would only accept friend requests if they know them.

4.1.3.2 Frequency of contact with different online ‘friends’ on SNSs

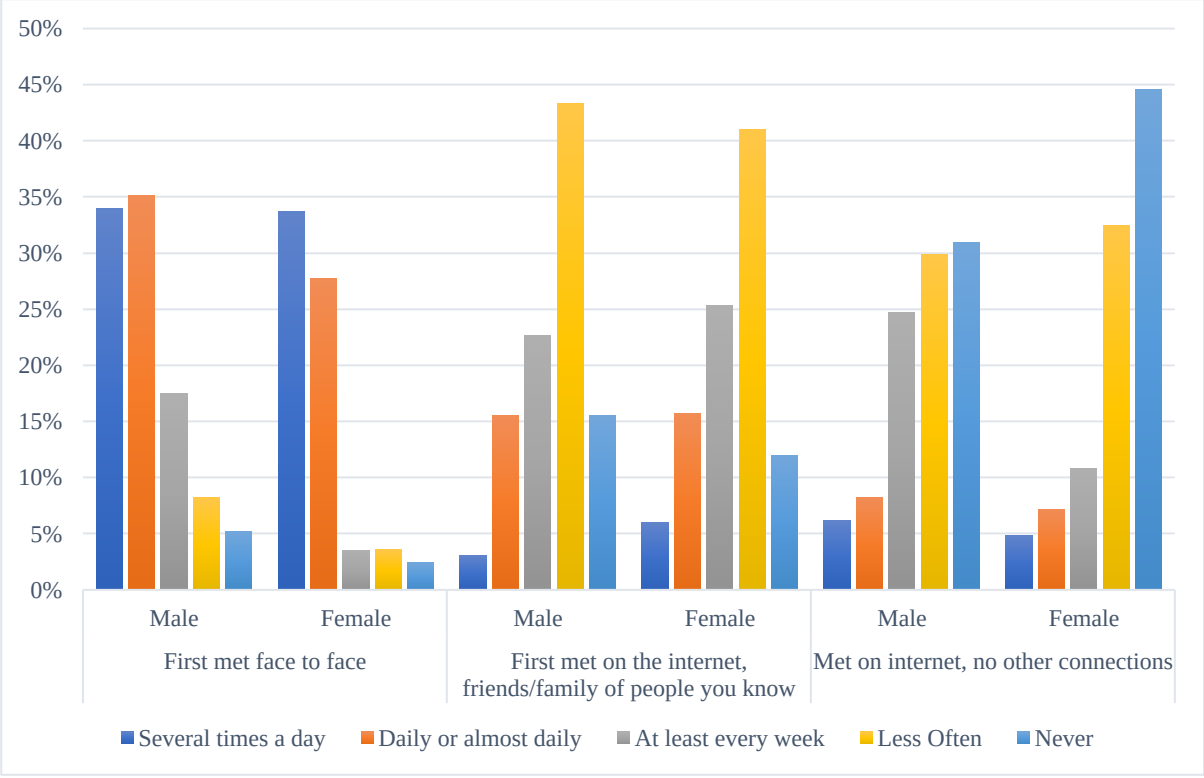

Figure 5. Frequency of contact with different online ‘friends’

Table 14. *Frequency of contact with different SNS 'friends'.*

		Several times a day % (n)	**Daily or almost daily % (n)**	**At least every week % (n)**	**Less Often % (n)**	**Never % (n)**
First met face-to-face	Male	34.0 (33)	35.1 (34)	17.5 (17)	8.2 (8)	5.2 (5)
	Female	33.7 (28)	27.7 (23)	32.5 (27)	3.6 (3)	2.4 (2)
First met on the internet, friends/family of people you know	Male	3.1 (3)	15.5 (22)	22.7 (22)	43.3 (42)	15.5 (15)
	Female	6.0 (5)	15.7 (13)	25.3 (21)	41.0 (34)	12.0 (10)
Met on internet, no other connections	Male	6.2 (6)	8.2 (8)	24.7 (24)	29.9 (29)	30.9 (30)
	Female	4.8 (4)	7.2 (6)	10.8 (9)	32.5 (27)	44.6 (37)

As can be seen in Figure 5 and Table 14 above, the frequency with which early adolescents are in contact with different SNSs contacts varied little by gender. Most male and female participants report being in contact through SNSs with friends who are known face-to-face first, either several times a day or daily/almost daily but with more females (32.5%) than males (17.5%) having online contact at least every week.

Although only a small percentage of males and females report being in contact with people on a SNS that they only know through the internet and did not know before several times a day or daily/almost daily, the data also suggests that substantially more males (39.1%) than females (22.8%) were in contact with individuals whom they met on SNSs but with no prior contact face-to-face.

4.1.3.3 Frequency of online SNS activities

Table 15. *An association between gender and frequency of online SNS activities*

Item	Activity on SNS (1=always up to 5=never)	Male	Female	Most frequent by gender	Mann-Whitney Test between male and female (Statistically significant)
1	Chat with friends seen everyday	M=1.8866 SD=1.14452	M=1.5181 SD=0.83171	F	Yes
2	Chat with friends and family not seen everyday	M=2.6289 SD=1.20173	M=2.0120 SD=1.04174	F	Yes
3	Look for old friends lost touch with	M=3.1667 SD=1.22832	M=2.8193 SD=1.29864	F	No
4	Check up on latest news amongst friends	M=2.4845 SD=1.16470	M=2.3253 SD=1.21081	F	No
5	Talk to people not known yet	M=3.0722 SD=0.92700	M=3.6313 SD=1.19775	M	No
6	Manage my profile	M=2.7629 SD=1.23973	M=2.6024 SD=1.15758	F	No
7	Upload photos, music, and/or videos to share	M=2.9278 SD=1.22685	M=2.6265 SD=1.19665	F	No
8	Organise group or event	M=3.1340 SD=1.37408	M=2.4578 SD=1.27165	F	Yes
9	Play games with other people	M=2.4227 SD=1.33725	M=3.5904 SD=1.43166	M	Yes

The table above shows how frequently early adolescents engage in different types of activities on SNSs. It is apparent from the data presented that female participants tend to engage in all SNS activities more frequently than males, apart from ‘playing games with other people’. Both male and female participants most frequently ‘chat online with their friends whom they see every day’ and ‘check up on the latest news among their friends’. An SNSs activity which male participants most frequently report, is playing games with other people. Female participants on the other hand also report frequently ‘chatting to friends and family that they do not see every day’.

Non-parametric Mann-Whitney tests were run for each activity to determine if there were differences in the frequency scores between males and females. This reveals that there are a number of statistically significant differences between genders. The results of the Mann-Whitney U tests for the activities indicated the following items as significant:

- Item 1 - female participants (M = 82.74) are significantly more likely to talk to friends seen daily compared to male participants (M = 97.14), U = 3381.50, z = -2.075, p = 0.038

- Item 2 - females (M = 76.28) compared to males (M = 102.66) are significantly more likely to chat with family and friends not seen daily, U = 2845.5, z = -3.511 , p = 0.000
- Item 8 – female participants (M = 77.05) showed significantly higher frequency in organising groups or events than male participants (M = 102.01), U = 2909.5 , z = -3.279, p = .001
- Item 9 – males (M = 72.88) are significantly more likely to play games on SNSs with other people compared to females (M = 111.10), U = 5735.0 , z = 5.029 , p = .000

These results indicate that there are differences between males and females in aspects of SNS use.

4.1.4 SNS contacts and offline friends

The aim of this section was to gain insight into the number of SNS contacts early adolescents have, and how many SNS contacts they perceived as 'actual friends'. This section also explored the link between their online contacts and 'offline' friends.

4.1.4.1 Number of SNS contacts

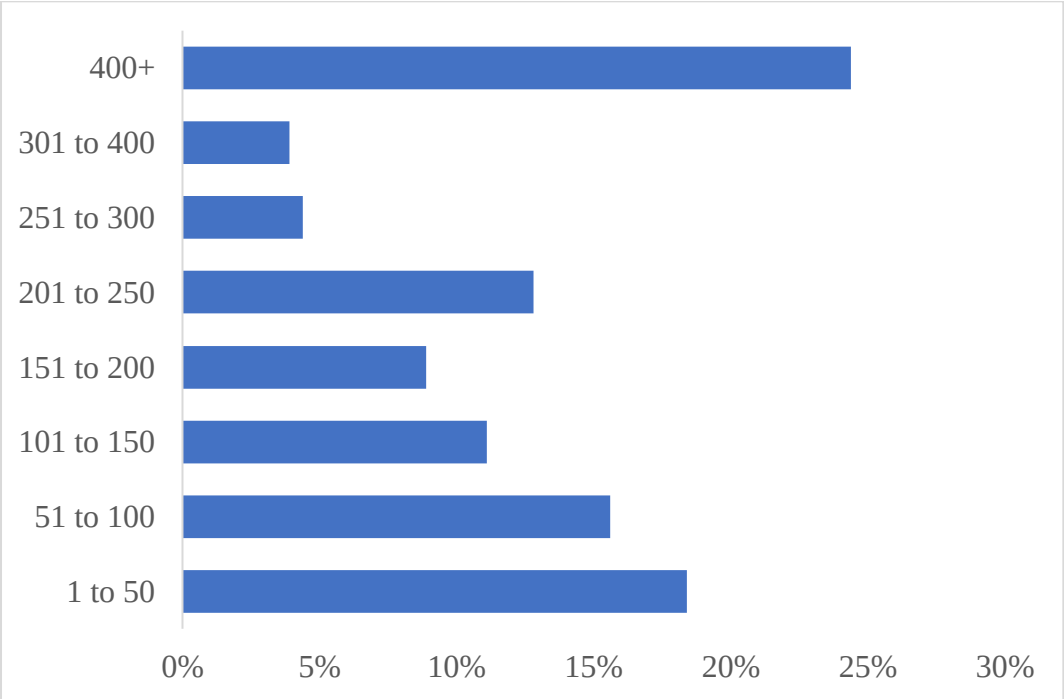

Figure 6. Number of SNS contacts

Figure 6 shows no visible distribution between participants' responses and the number of online contacts on SNSs. The largest percentage of adolescents (n=44) with around 1 in 4 report having more than 400+ SNS contacts. This was followed by around 34% participants who reported having less SNS contacts, between '1 to 100' (n=61) contacts.

4.1.4.1.1 Number of SNSs contacts by gender

Table 16. *Association between the number of SNS contacts and gender*

Gender	1-50 SNS contacts % (n)	51-150 SNS contacts % (n)	151-250 SNS contacts % (n)	251-400 SNS contacts % (n)	400+ SNS contacts % (n)
Male	26.0 (25)	20.8 (20)	21.9 (21)	8.3 (8)	22.9 (22)
Female	9.6 (8)	33.7 (28)	21.7 (18)	8.4 (7)	26.5 (22)

A chi-square test revealed that there were no statistical differences in the association between gender and how many SNS contact adolescents have online, $\chi 2(4, N=180) = 9.494$, $p = 0.051$, $V=0.230$. The most commonly reported number of online friends by males (26%) is between 1 to 50. On the other hand, more females (33.7%) compared to males report having between 51 to 150 SNS contacts. The most number of SNS contacts reported by female participants is 400+ contacts. For participants who ticked 400+ contacts, respondents were ask 'roughly how many contacts' they had. Of the 44 participants who ticked the 400+ category, seven males and six females responded that they had between roughly 457 and 2709 SNS contacts.

4.1.4.1.2 Number of SNSs contacts by individual centrality

Table 17. *Association between number of SNS contacts and individual centrality*

Centrality	1 to 150 SNS contacts % (n)	150 to 300 SNS contacts % (n)	300+ SNS contacts % (n)
Nuclear individuals	34.6 (27)	25.5 (20)	39.7 (31)
Secondary individuals	47.4 (27)	28.1 (16)	24.6 (14)
Peripheral individuals	55.2 (16)	20.7 (6)	24.1 (7)
Isolated individuals	46.7 (7)	33.3 (5)	20.0 (3)

The data did not meet the assumptions for chi-squared. A higher percentage of individuals with lower perceived prominence or perceived as isolated have fewer than 150 contacts compared to participants with a 'nuclear' individual position. The data also shows that participants who have more than 300+ contacts are more likely to be viewed as socially prominent in school.

4.1.4.2 Number of online contacts perceived as 'actual' friends

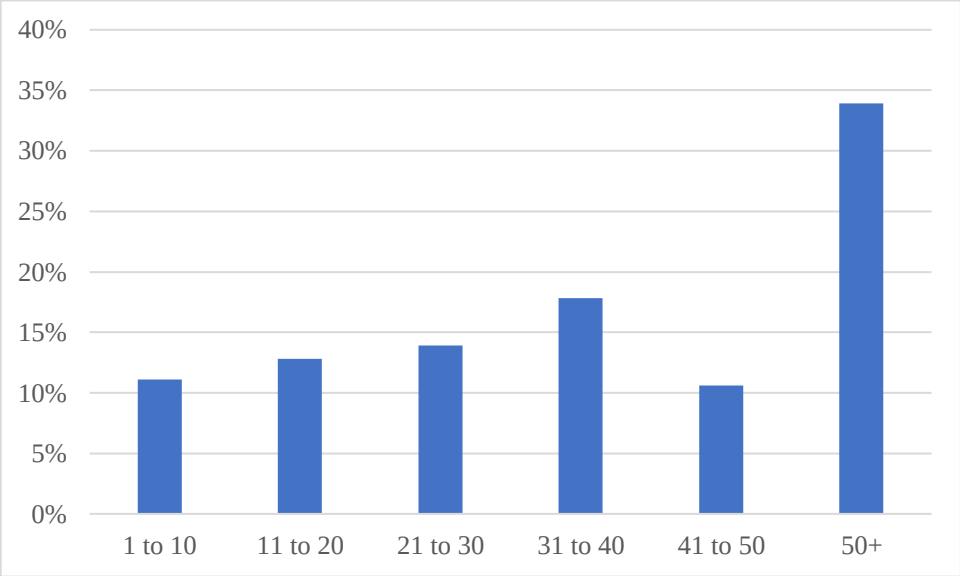

Figure 7. Number of online contacts adolescents consider as actual friends.

Figure 7 shows the percentage of participants who reported how many 'online' friends they considered as actual friends in their lives. As can be seen, there was no visible distribution between participants' responses and number of actual friends. A third of participants report (n=61) that of their total 'online friends' on SNSs, they would consider more than 50+ friends as actual friends. However, another third of participants also report they have between 1 and 30 actual friends (37.8%, n=68)

In response to the open-ended question of 'roughly how many?' for participants who reported that they have 50+ actual friends, further analysis identified a number of main categories with three most prevalent; 10 respondents reported between 100 to 200 actual friends, eight respondents reported between 200 and 500 actual friends; and seven respondents reported between 60 to 100 actual friends.

4.1.4.2.1 Number of actual friends adolescents have by gender

Table 18. *Association between the number of actual friends adolescents have and gender*

Gender	**1 to 10 % (n)**	**11 to 20 % (n)**	**21 to 30 % (n)**	**31 to 40 % (n)**	**41 to 50 % (n)**	**50+ % (n)**
Male	14.4% (14)	14.4% (14)	11.3% (11)	13.4% (13)	10.3% (10)	36.1% (35)
Female	7.2% (6)	10.8% (9)	16.9% (14)	22.9% (19)	10.8% (9)	31.3% (26)

Although the chi-square test did not show an overall association, males more commonly reported having between 1 to 20 actual friends compared to females who reported more actual friends (20 to 40), $\chi 2(5, N=180) = 6.100$, p = 0.297, V=.184.

4.1.4.2.2 Number of actual friends adolescents identify by individual centrality

Table 19. *Association between individual prominence and the number of 'actual' friends*

Centrality	**1 to 20 % (n)**	**21 to 40 % (n)**	**40+ % (n)**
Nuclear individuals	20.5 (16)	34.6 (27)	44.9 (35)
Secondary individuals	19.3 (11)	24.6 (14)	56.1 (32)
Peripheral individuals	36.7 (11)	36.7 (11)	26.7 (8)
Isolated individuals	40.0 (6)	40.0 (6)	20.0 (3)

Participants who were perceived by their peers to be more socially prominent (Nuclear individuals) were more likely to report having more than 40+ actual friends compared to isolated individuals.

4.1.4.3 Number of 'actual' friends adolescents have met in person past 3 weeks

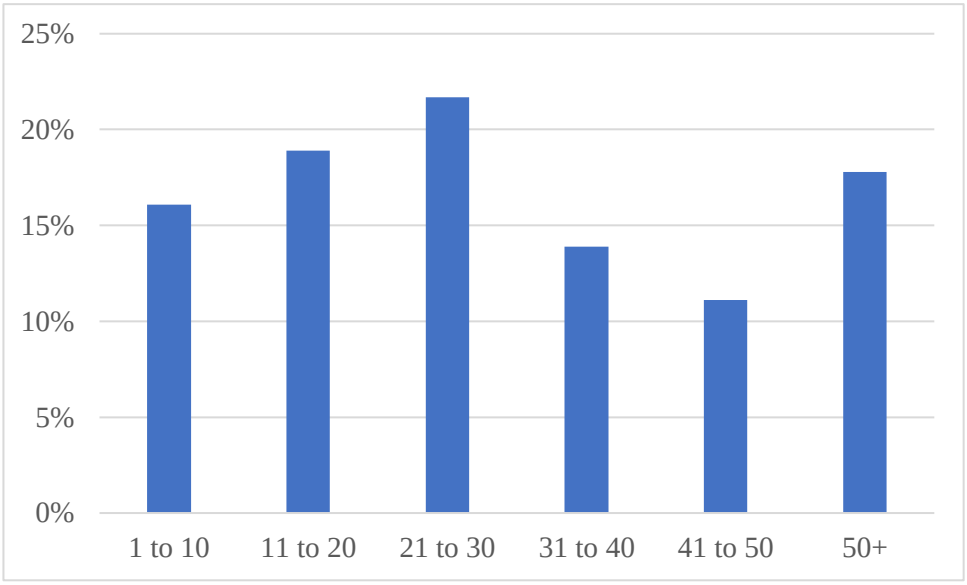

Figure 8. Number of 'actual' friends participants have met in person (in the past three weeks)

Interestingly, there was no pattern of distribution in the number of actual friends that early adolescents reported to have met face-to-face in the last three weeks. While the most common response was between 11 to 20 friends (18.9%, n = 34) or 21 to 30 friends (21.7%, n = 39), the was a skew in participants responses to the higher end at 50+ responses (17.8%, n = 32).

4.1.4.4 The association between online contacts and offline friends by gender

Table 20. *Association between the number of actual friends met face-to-face and SNS contacts as reported by male respondents*

	1-20 actual friends % (n)	**21-40 actual friends % (n)**	**40+ actual friends % (n)**
1 -150 SNS contacts	51.1 (23)	35.6 (16)	13.3 (6)
151-300 SNS contacts	23.1 (6)	46.2 (12)	30.8 (8)
301+ SNS contacts	20.8 (5)	8.3(2)	70.8 (17)

A chi-square test revealed that there was a statistical difference in the association between the number of reported actual friends met face-to-face and number of online contacts is statistically significant amongst male participants, $\chi 2(4, N=180) = 27.604$, $p = 0.000$. The association was moderately strong (Cohen, 1988), Cramer's V=0.381. Closer inspection of the table shows that amongst male participants who report having between 1 to 150 SNS contacts, they were also more likely to report fewer actual friends (1 to 20 category). Conversely, males who report having 301+ online friends were also more likely to report having 40+ actual friends.

Table 21. *Association between actual friends met face-to-face and number of SNS contacts as reported by female respondents*

	1-20 actual friends % (n)	**21-40 actual friends % (n)**	**40+ actual friends % (n)**
1 -150 SNS contacts	47.2 (17)	38.9 (14)	13.9 (5)
151-300 SNS contacts	38.1 (8)	38.1 (8)	23.8 (5)
301+ SNS contacts	15.4 (4)	42.3 (11)	42.3 (11)

A chi-square test showed that there was no statistical differences in the association between the amount of online contacts and actual friends met face-to-face amongst female participants, $\chi 2(4, N=180) = 9.367$, $p = 0.053$, V=0.238.

4.1.4.5 The association between online contacts and offline friends by individual centrality

Table 22. *Association between actual friends met face-to-face and number of SNS contacts reported by 'nuclear' individuals*

	1-20 actual friends % (n)	**21-40 actual friends % (n)**	**40+ actual friends % (n)**
1 -150 SNS contacts	51.6 (16)	35.5 (11)	12.9 (4)
151-300 SNS contacts	50.0 (10)	25.0 (5)	25.0 (5)
301+ SNS contacts	39.7 (31)	29.5 (23)	30.8 (24)

A chi-square test revealed that there was no statistical differences in the association between the number of SNS contacts and actual friends met face-to-face amongst 'nuclear' individuals, $\chi 2(4, N=180) = 14.143$, p = 0.07, V=0.301.

Table 23. *Association between actual friends met face-to-face and number of SNS contacts reported by 'isolated' individuals*

	1-20 actual friends % (n)	**21-40 actual friends % (n)**	**40+ actual friends % (n)**
1 -150 SNS contacts	80.0 (4)	60.0 (3)	-
151-300 SNS contacts	20.0 (1)	40.0 (2)	40.0 (2)
301+ SNS contacts	-	-	60.0 (3)

Chi-square test analysis showed that expected frequencies were less than five for crosstabulation between actual friends and number of online contacts did not meet the test assumptions. The table shows that isolated individuals who report having less than 150 SNS contacts were also more likely to report less actual friends (1 to 20 category, 80%).

4.2 Summary of Quantitative Findings

- Most participants are using more than 2 SNSs, with Snapchat and Instagram the most popular, alongside gaming for boys.
- SNS use starts at 9 years for some and by 12 years an overwhelming majority are SNS users.
- Mobile phones are used most frequently to access SNSs alongside games consoles for boys.

- Girls are likely to spend between 5 to 7 hours daily on SNSs while boys spend less than 2 hours.
- Girls are significantly more likely to (1) talk on SNSs to friends seen daily, (2) chat to their family and friends not seen often and (3) organise groups or events than boys. Boys are more likely to play games on SNSs.
- Around 25% of early adolescents report having more than 400 ‘online’ friends, although a third report having fewer than 100 ‘online’ friends.
- Around 50% of early adolescents perceived fewer than 40 SNS users to be ‘actual’ friends, but still, a third perceive that they have more than 50 ‘actual’ friends from their online contacts.
- The majority of adolescents are most frequently in contact with friends met face-to-face. Substantially more boys (39.1%) than girls (22%) report that they are in contact with people they met on the internet several times a day, daily or at least every week.
- For boys, the number of ‘online’ friends was significantly associated with the number of ‘actual’ friends met face-to-face. There was no such association for girls.
- There was little association between social prominence and number of SNS contact and ‘actual’ friends. However, more ‘nuclear’ individuals appeared to have more than 300 ‘online’ friends while more isolated individuals typically reported fewer than 50 ‘online’ friends.
- Boys were more likely to accept all ‘friend’ requests, while girls only accept requests from those they know well.

4.3 Qualitative Findings

The findings from the analysis of the qualitative data are presented in this section. As described in the Methodology section, the qualitative data were gathered from participants in Phase 1 (through open-ended questions) and in Phase 2 (through semi-structured interviews).

The qualitative aspect of this research aimed to address the following research and questions and sub-questions:

***RQ2*:** What do early adolescents perceive are the positive and negative influences of SNS use on their peer relationships?

> ***Sub-RQ A*:** How do adolescents who are socially prominent in their groups/year compare to adolescents who are socially isolated?
>
> ***Sub-RQ B*:** Are there any gender differences on the perceived use and influences of SNSs?

Following the process of thematic analysis, 10 themes and 40 subthemes were abstracted from the qualitative data. Please see section 3.7.2 for an explanation of the process of data analysis and Appendix M for illustrative examples.

10 of these themes were organised to form two overarching themes: 'Positive influences of SNSs' and 'Negative influences of SNSs' (Figure 1).

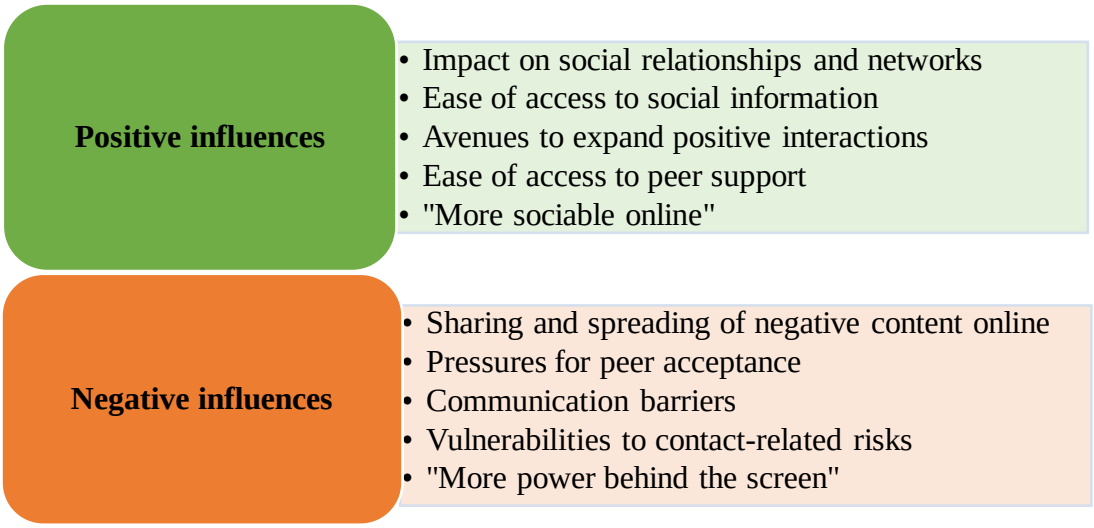

Figure 9. Thematic map of over-arching themes and subthemes.

Visual diagrams of each individual theme and subthemes are presented and discussed in more detail further in the text. The number of participants of each subgroup from Phase 1 who raised each theme is highlighted in frequency tables. Illustrative quotes from participants in Phase 1 are also presented for each subtheme in the table. The subthemes

are further described and commented on in turn through a narrative account where illustrative quotes from participants in Phase 2 are provided.

To ensure anonymity, codes have been used to identify quotes from participants in Phase 2. Note that the code's first letter has been used to signify the respondent's gender, M (male) or F (female). The code's second letter is used to refer to the participant's identified individual social prominence; C (Central) or I (Isolated).

4.4 Over-Arching Theme: Positive Influences of SNS

From the data, five themes and 17 subthemes were abstracted from the data which indicates participants' perceptions of how SNSs mediates their peer relationships in a positive way.

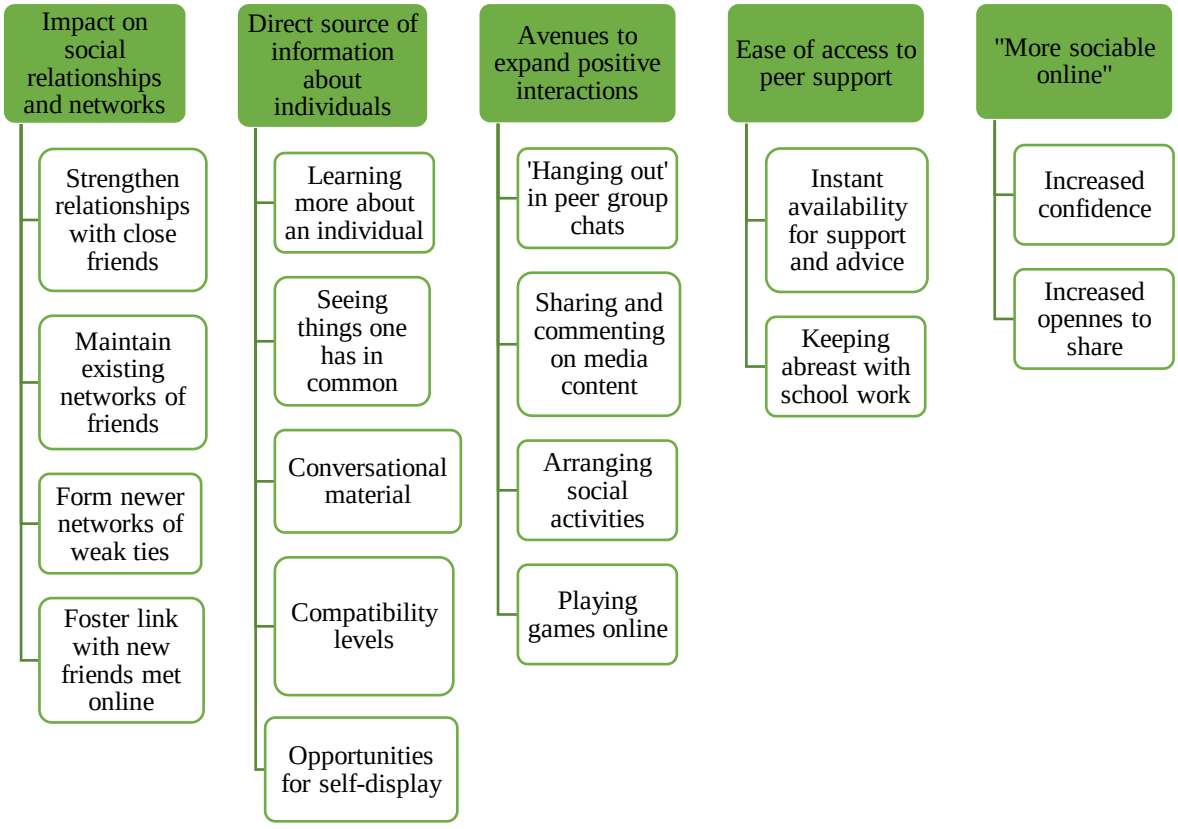

Figure 10. Thematic map for positive influences of SNS.

4.4.1 Theme 1. Impact on social relationships and networks

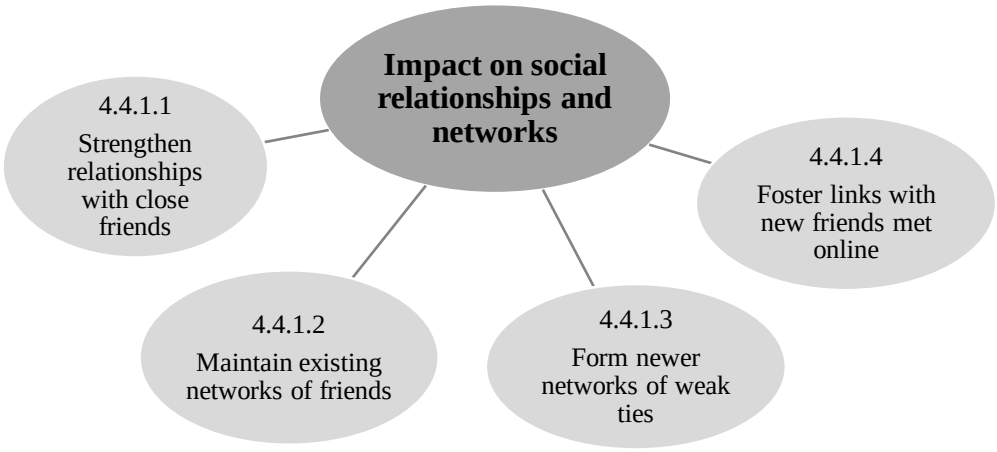

Figure 11. Theme 1: Impact on social relationships and networks.

Number of times theme raised in Phase 1				**Phase 1 participant quotes**	
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**		
19	1	18	2	4.4.1.1	*We are able to stay in touch even when we aren't together face to face and we can also talk to each other when we are at home* (FC) *Yes because it is a better way to keep in touch with friends you see every day in real life* (MS).
				4.4.1.2	*The people I grew up with in Nepal makes me feel closer and closer to them* (FS) *Sometimes I can build a relationship with someone who I haven't seen for a long time.* (MS)
				4.4.1.3	*Allows us to talk to people from outside, just not being like in the small circle you have. Like with friends from different schools who are the same age as you* (FC)
				4.4.1.4	*You can meet and have friends from all around the world by connecting with someone doing what we both like.* (MC)

This theme was mentioned by many of the participants from Phase 1, particularly those who are socially prominent. A total of 40 participants from Phase 1 felt that the use of SNSs offered them an extended context for developing their social relationships and various social networks, so enhancing their social connections.

10 of 14 participants from Phase 2 from all participant groups, including four male and two female participants identified as isolates mentioned that SNSs offered them the opportunity to extend their interactions with friends whom they already knew well and saw face-to-face frequently. Most of the participants also highlighted that the affordances of SNSs allowed them to strengthen their offline relationships through online communication, therefore increasing their sense of closeness as articulated by MC1:

> *SNSs like Snapchat extends the communication between millennials and allows us to make our relationships with friends of our age that we know well more intimate and closer through the various means of spending more time together online.*

Half of the participants also talked about the positives of SNSs which allowed them to maintain their pre-existing networks, particularly in reconnecting or staying in touch with old friends and primary school friends whom they rarely see in person. It appears that for participants who migrated to the UK, SNSs has enabled adolescents to maintain significant relationships with friends in other parts of the world whom they grew up with as described by MC3:

> *I mostly hang out online with my good friends that I have known from like day, like we've been hanging around since before primary school when I used to live in France when I was little. They've been there for me as I came to England very troubled because I didn't know how to speak English.*

From the responses of eight out of 14 participants with an equal number of participants in each subgroup, it was evident that SNS is an impetus for early adolescents to widen their social ties, offering new ways of connecting with peers living locally, whom they would not normally communicate with. All participants shared experiences of how they built friendships by pursuing online interactions or 'friending' friends of friends or peers from different schools within the local area first, which eventually led to face-to-face interactions. This also included the opportunity to get to know acquaintances from school better through online channels as described by FC2:

> *Erm I realise that other people would like become friends…especially in school, with people who are acquaintances, they gave me like their erm username, then we would add each other and start talking because you can talk to them over SNSs and then in school you become more friendly with them cos you're talking to them online.*

Interestingly, four participants who were identified as isolates, and who did not belong to any friendship groups mentioned SNSs gave them the opportunity to make new friends from different schools, outside of the school context as FI2 mentions:

> *Like usually, sometimes I just talk to myself; I don't even know why, but if it wasn't invented then I wouldn't be able to meet other friends. Um after I started using, after I downloaded snapchat, I started to get to know more people from outside of school, like different schools and yeah I just started talking to more people online.*

In addition, the subtheme fostering links with new people online was also mentioned by more participants from the isolated group than participants from the central group in Phase 2. It is important to note however that these participants are cautious about who they met online, but are then open to meeting new people met online based on reciprocity, selecting friends who are usually the same age. Of noticeable difference however was that male participants were more likely to meet new people online through shared interests, developing their social interactions and relationship namely through gaming. MI1 describes this:

> *Sometimes you can meet people from America…anywhere that speaks your language really. You can be talking in the game chat and you can say where are you from and they'll say America…and then you'll just start playing and talking like its normal…Yeah, there's some people that I've met from like Scotland from playing PlayStation…When I'm gaming it's not really a problem cos I don't really give out any of my details, just talk to each other, play the game and that's it really and sometimes it has led me to actually meeting with the people in real life and becoming good friends with them.*

4.4.2 Theme 2: Direct source of information about individuals

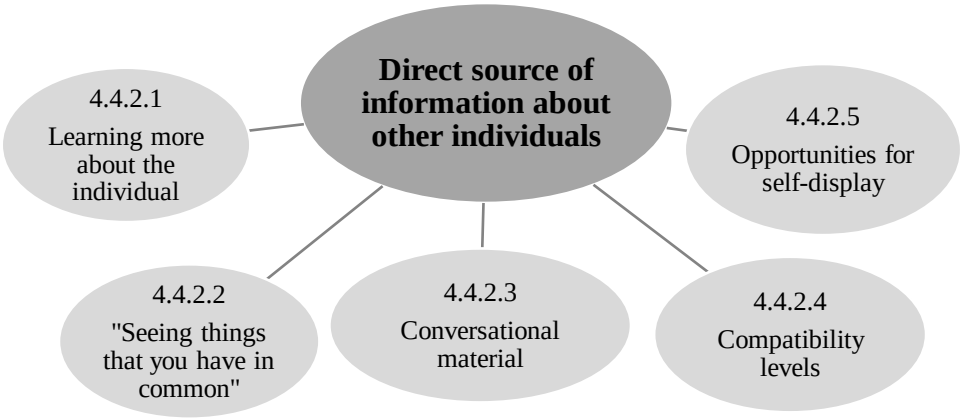

Figure 12. Theme 2: Direct source of information about others.

Number of times theme raised in Phase 1				**Phase 1 participant quotes**
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**	
10	3	13	2	4.4.2.1 *It does because you are meeting new people online whom you might not have met face to face and getting to know what they like etc* (FC) 4.4.2.2 *That way you get to know about the people better online as like for friends, we only see them in school which is quite limited.* (MC) 4.4.2.3 *On the internet, you see them doing different things and you get to see what they do regularly* (MI) 4.4.2.4 *See what things you have in common and things to talk about* (FC) 4.4.2.5 *Because I know more about them than I did before. So I met with a couple of friends face to face and it was fun and made our relationship better* (MS)

A second theme that emerged through thematic analysis is SNSs as a direct source of information about other individuals. In Phase 1, 28 participants commented about the benefits and convenience of SNSs in being able to find out and learn more about other SNS friends and equally having the opportunity to share information about themselves.

Learning more about an individual was a common subtheme across all participants from Phase 2, who explained that they enjoyed viewing other people's profiles, daily posts, videos, photos or 'stories' (a feature on Snapchat) to "see what they are doing" (FI1) which allowed them to "get to know them better" (MI1). Participants felt that the ease of this was particularly valuable as it helped them learn about their current or prospective friend's social world "quickly". This included learning more about the SNS users' social connections, styles, tastes. Comments made by four male participants (one Central, three Isolates) seem to suggest that getting to know more information about online friends not within their intimate circle of friends fuelled their desire to build friendships or socially bond with these prospective friends, influenced by their interests. MC2 explained this:

> *Sometimes there are very inspiritive-like* (inspirational) *friends online. They just post and tell you what they're doing and it inspires you to want to know them better, make you want to hang out with them and to do just what they do.*

Seeing things that you have in common was also a subtheme which was raised by a further eight participants across all groups. For these participants who mostly related their experiences on Snapchat and Instagram, they talked about delving into the details of other's daily posts, including videos/photos or status updates which enabled them to gain

insight into what they perceived as shared interests or commonalities such as background or values.

> *Well yeah I can find out if they are the same age group, or when's their birthday or things like that so then get to know them better and stuff like that…Most of the people that I am friends online with like the same things as me like football or stuff like playing play station"* (MI1)

In addition, gaining information about other individuals firstly through SNSs was perceived by the majority of female participants as extremely useful helping them to think about things to converse about or consider if they were compatible enough to pursue a friendship further.

> *Um I, if you were to talk to someone that you are kind of shy to talk to them face-to-face then seeing them and what they do online kind of helps the situation…Then they kind of understand about you more and you understand them better. So, it won't just be a surprised conversation when you see them in real life and you can actually have something to talk now.* (FI1)
>
> *I choose my friends wisely so if I talk to you and I feel like you're the kind of person who I can click with based on your posts and Snap-stories then I would like be friends with you but if I see that you're just very nosey or you don't act yourself, you act fake when I'm not around. Then um I can decide not to be friends with you.* (FI2)

The ability to find out information about others also meant that SNSs provided adolescents the opportunities to post, express and display information about themselves. This subtheme was raised by the majority of both male and female participants who are identified as socially prominent (central group):

> *But something good can come out of it as well cos like one of my friends, she actually goes to athletics and all of that and she's trying to build on that. Yeah. So, I feel like that means other friends can see her and actually see she has talent and use that as… like a platform to show who she is?" Yeah* (FC4)

4.4.3 Theme 3: Avenues to expand positive interactions

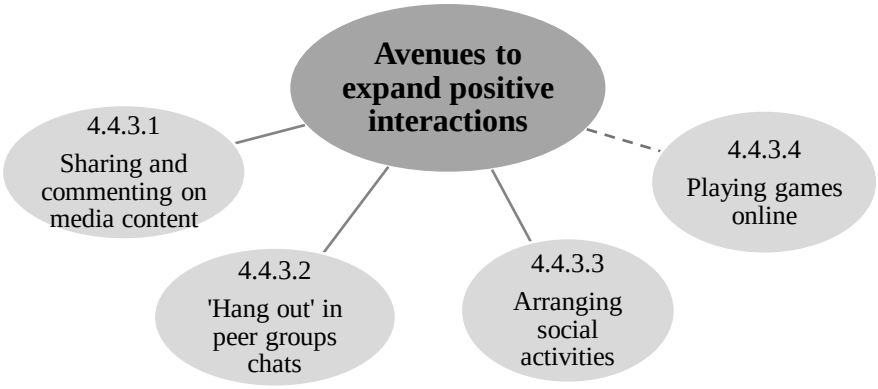

Figure 13. Diagram showing Theme 3: Avenues to expand positive interactions. Dashed lines denote male participants.

Number of times theme raised in Phase 1				**Phase 1 participant quotes**
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**	
6	4	8	0	4.4.3.1 *You can share pictures of what you like and play games that you might enjoy* (MC) 4.4.3.2 *I guess I have gotten a lot of my views from videos shared by friends from like Vox and stuff* (FC) *An internet topic can be discussed in a group thus creating an opiniated conversation which can bond people together*. (MS) 4.4.3.3 *It helps us plan things, like going to the library on where we should meet up or what time we would get home* (FI)

This theme was assigned ‘Avenues to expand positive interactions’ as it emerged through analysis that the majority of the participants’ responses in Phase 2, including 28 participants from Phase 1, indicated that SNSs played a positive role in providing a social context online for which the participants gathered to socialise with one another after school through a variety of means on SNSs.

All 14 participants from Phase 2 talked about the features of SNSs, particularly about Snapchat and Instagram which are visual-based apps. They said that it gave them the opportunity to share media content such as videos, photos or music with other SNS friends, but spoke at greater length about sharing these experiences with their closer friends. They felt that SNSs gave them the opportunity to share and document their social experiences, perform social exchanges by commenting on each other’s posts, but equally learn from each other’s social worlds.

> *Like if we’re playing music and…everyone’s having fun we record it and then you share it on snapchat? Videos of us having fun, just to make memories*. (FC2)

> *From Instagram you can screen record and post or snap if it's like a dance video or something. And music, if there was a song that I was listening to, I could send it to them or a photo, like from primary school, like you want to see that photo, I can send it to you…. it helps us in a way cos people think that it's a waste of time but you can actually learn from each other like on Instagram…so instead of literally going on TV to watch it you can just scroll through Instagram and actually see what's going on. (*FI1)

'Hang out' in peer group chats was a subtheme that emerged during the thematic analysis of data in Phase 2. As significant as it is for participants to strengthen their friendships with their close friends on an individual basis, the majority of the male and female participants identified as socially prominent highlighted the advantages SNSs offered by engaging in 'peer group' social activities online. This is described by MC3 and FC3 respectively:

> *It used to be this thing where you could video chat with four people. But then they started to overdo and there was this thing called Houseparty, and it was the same thing but you could talk to eight people at the same time. So that was a bit better. And you could see everyone on the screen and get a party-like feel.*
>
> *Cos you can make group chats now on Snap. You can have up to 32 people but there is a group of the seven of us girls who just 'hang out' and we just talk about what happens in your daily life.*

It is worth noting that the word 'talk' is used interchangeably to represent the various tools on SNSs which participants could use to interact with their same-sexed cliques online. Analysis of the data also showed that only one isolated male participant often engaged in peer group interactions online.

Seven male and three female participants also mentioned that SNSs had made it easier for them to arrange social activities with more friends all at once such as going on trips, football matches, finding out important dates or planning for social events as mentioned by MC2: "*Um, we've been planning this thing and we are talking everyday about it and how it is going to happen and everything. So we've been talking about this party"*. Their comments also seem to suggest that SNSs have allowed them to better organise the social aspects of their lives through their interactions online with friends: *"I am in a way more organised because I have friends to remind me about things"* (MI4).

As noted earlier, male participants highlighted meeting new people online through online gaming. The subtheme of 'playing games online' therefore emerged from comments shared by all male respondents in Phase 2 in pursuing this activity-focused

interest. They spoke positively about the social aspects of gaming-related SNSs, particularly highlighting that they enjoyed engaging with others through multiplayer games and seem to perceive that these gaming-related SNSs improved their prosocial skills and encouraged cooperative play when completing a challenge or quest, creating stronger peer relations with others. MI4 and MC2 describe their perspectives on this:

> *I like the fact that you can talk to people when you're playing PlayStation. You can put some earphones in…it's not like a face call or video call, it's just like your speaking, it's different to giving out your phone number to someone and letting them call you cos they can find out stuff, but with that you can just talk over the mic, laugh, and make new friends.*
>
> *Well Play Station, the social part of it that's talking…I like that because we'll connect using the headsets and talk verbally but also, say if you want to play games like football or fighting like Fortnite, it's fun because you get to play as a team, but also share tips and tricks.*

4.4.4 Theme 4: Ease of access to peer support

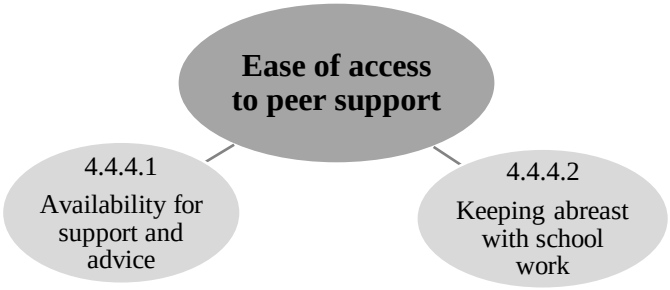

Figure 14. Theme 4: Ease of access to peer support.

Number of times theme raised in Phase 1				**Phase 1 participant quotes**	
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**		
4	0	4	0	4.4.4.1	*Your friends can support you and you are able to talk about a lot of difficult stuff for as long as you want.* (MC) *Your friends are able to be there for your even when they are far away and not in reach.* (MC) *If you want to ask your friends for advice, like if there not next to you, you just like text them quickly and they'll help you.* (FC)
				4.4.4.2	*SNS is useful at times when you need help with homework or someone to talk to as we can easily message and talk to each other when we are at home without having to pay when you do when you send messages or pictures through your phone. And some people might not have a phone.* (FC)

This theme emerged from the thematic analysis following comments made by participants which suggest the ease of access to and power of peer support from friends through SNSs. Eight participants from Phase 1 commented on the convenience of accessing peer support from a practical point such as the ease to connect with others without the constraints of distance, money and time.

It was only during Phase 2 that participants further elaborated on how they have found SNSs particularly helpful through the different kinds of positive peer support they received from different interactions in a virtual environment. One male participant (MI5) who was identified as not belonging to any friendship groups in school talked about using Snapchat to get feedback and advice from peers through broader social networks which he found helpful and supportive:

> *Yeah, it's help me choose things that I want so I can post something and say which ones should I get, or which ones do you like better, then people will come back and say… ok …I like this one and it will help me get what I want cos if I'm not sure then…I think it just helped me make up my mind and ok I just picked what I wanted and I think like it's nice that people will help me choose…Not say oh that's disgusting…them shoes are ugly.*

Two other participants stated that the immediacy with which they were able to receive support from their close circle of friends was a bonding experience, as stated by FC3: "*They make your relationships closer because if you have a problem or are going through a tough time, you can always ask your friends for help and they'll be there for you immediately".* This seems to suggest that SNSs have been able to provide participants a parallel social medium for friends who want to talk about their difficulties and vulnerabilities.

A comment made by one male participant also demonstrated the importance of peer support from wider social networks during times of difficulty. MC3 illustrated how he and other peers were able to show empathy and provide support.

> *Three days ago, one of my friend's moms died. Basically, the girl was at her family friends' house and they were having fun, and her mom was at hospital, so already she was sick but we didn't know that she was going to die like suddenly. So, they were having fun, blasting music, I was on call with her so I could hear what was going on, and then she said she's having a phone call from her dad. So I said ok call me back…I checked Snapchat and I see that the same girl that I was talking to posted, and the caption says "I loved her so much, rest up mom. I immediately*

snapped her to see how I could help…I started to see people on Snapchat, mostly her enemies talking to her, they even apologised and said sorry for your loss. And they even got inspired like 'what's the point in holding grudges against people'…I was there for her.

Eight participants (six central and two isolates) also noted the opportunity provided by SNSs to help them keep abreast with school work, which is particularly useful if they were absent or needed reminders or company for studying, as illustrated by FC1 and MI4.

I ask people for homework, like I will send a snap to my whole class oh is there English homework or something? And then whoever's in my English class will pop up and just be like no or yeah. I use it for like finding out homework.

When we study some people like to study with other people online and I often forget about my homework. My friends will remind me about it and help me with it like finding out about things, um asking for help on certain questions on like my maths or things like that.

4.4.5 Theme 5. "More sociable online"

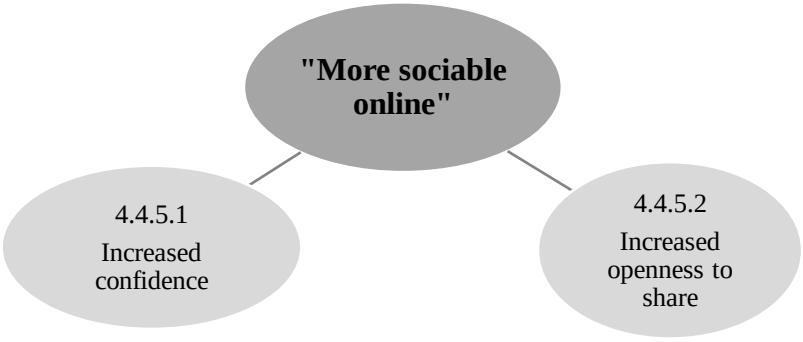

Figure 15. Theme 5: "More sociable online".

Number of times theme raised in Phase 1				**Phase 1 participant quotes**	
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**	4.4.5.1	*Some people are very shy so they don' like to talk in person but over social network sites, they are more confident talking, and this can eventually develop the people-skills for the shy person* (FC) *Because you are able to talk to each other about things you wouldn't about face to face and it makes your relationship as a friend more comfortable knowing that you can speak to each other"* (MS)
9	2	11	3	4.4.5.2	*You can be yourself, feel open, move free. You can't say something because they could be hard to say, however on SNSs, it can be easier to share therefore strengthening a relationship.* (FC)

This theme was raised 25 times by participants from across groups in Phase 1, which suggested that some adolescents have felt able to take advantage of the opportunities to be "more sociable online" in the digital context. Participants in Phase 1 referred to the positive influences of SNSs in enabling them to feel a better sense of control in communicating with others where they have felt "too shy or scared to talk to people face-to-face" (FC).

This was similarly echoed by eight participants in Phase 2 from all groups except for male respondents from the central group. Interestingly, all socially prominent female participants raised the subtheme of 'increased confidence' online when referring to peers who lack the confidence to interact with others in person. Both isolated female participants however, talked about this subtheme by referring to their own experiences. This was shared by FI2 who seemed to suggest that SNSs have been a more helpful way of communicating and pursuing relationships with peers for those who may not come across as sociable in the physical world:

> W*hen it comes to real life, you do get people like me who feel too shy to talk when you're looking at me but when you're behind the screen…no one can really physically touch you and you're not face-to-face. I wouldn't say um, that I'm social around other people in real life. So when you're messaging me online, it kind of helps the situation as I'm more confident. Like I'm able to talk to people…when I was in primary I used to be very shy; so I am able to meet and talk to more people.*

Two isolated male participants also shared their personal experiences, but within the context of gaming online.

> *Like right now, when I'm walking outside, I'm really like quiet and shy but on my Xbox I talk very loudly and am very chatty. In some ways, you have more of a better conversation, because people are more confident online. (M12)*

The subtheme 'increased openness to share' emerged as some male and female participants, perceived SNSs as more effective than communicating face-to-face by allowing them to feel a sense of openness and greater ease. Their comments seem to suggest that SNSs gave them a sense of privacy away from the physical realm which enabled them to engage in more self-disclosure: *"I usually talk face-to-face but I think privately we talk about things on SNSs that we wouldn't necessarily talk around outside so I think it has further built our relationship"* (MC2). This subtheme was encapsulated by FC1 who stated:

SNSs offers kind of an escape from having to be something. People find it easier to be themselves online…you can just talk to your friends away from school and public and put your feelings out and then you're kind of forgetting about the stress that you're going through.

4.5 Over-Arching Theme: Negative Influences of SNS

Figure 16 presents the over-arching theme identified as the negative influences of SNSs. The data in Phase 1 and 2 generated five themes and 22 subthemes which indicated participants' perceptions of the challenges and risks faced by adolescents in their peer relationships linked to their pervasive use of SNSs.

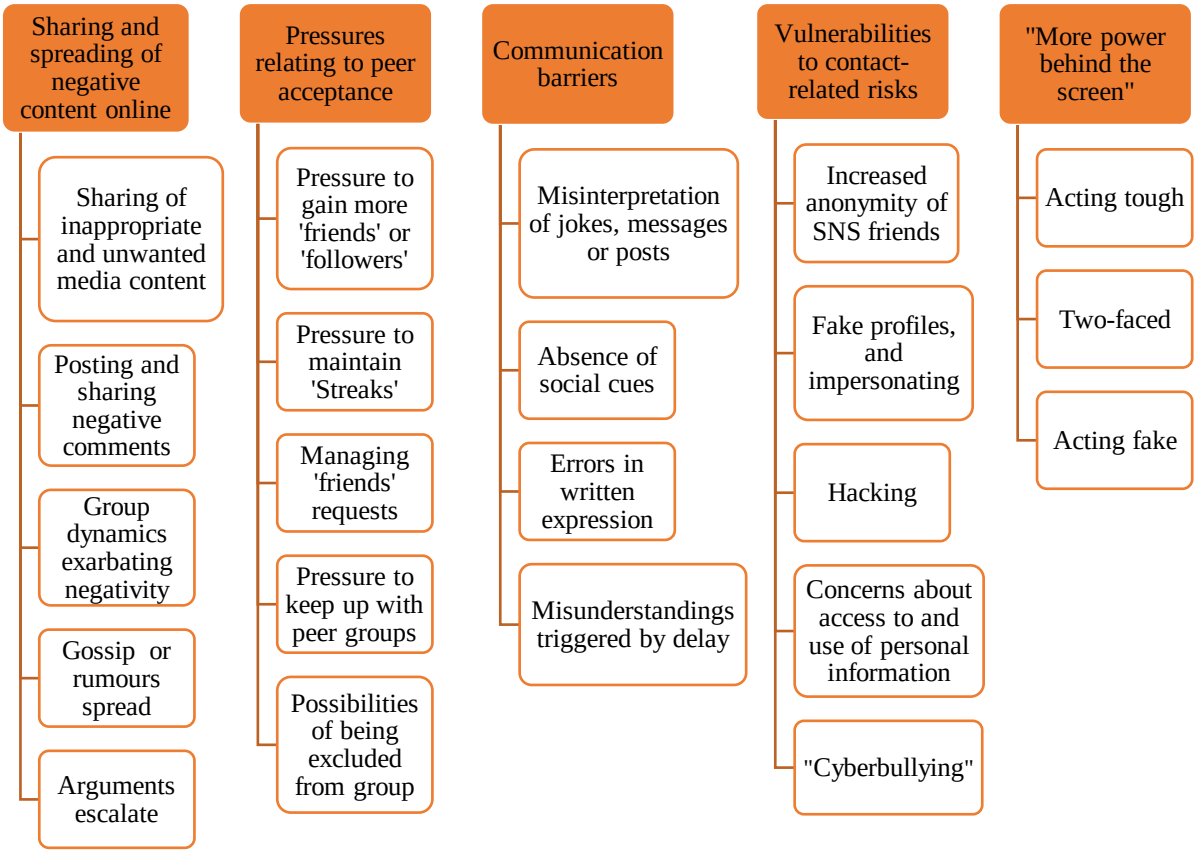

Figure 16. Thematic map for negative influences of SNS

4.5.1 Theme 1. Sharing and spreading of negative content online

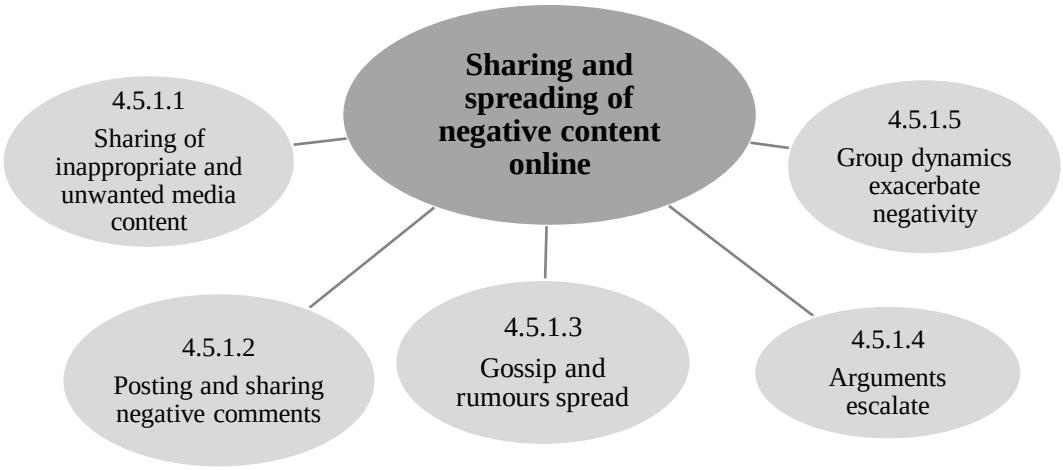

Figure 17. Theme 1: Sharing and spreading of negative content online.

Number of times theme raised in Phase 1				**Phase 1 participant quotes**	
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**		
25	2	25	4	4.5.1.1	*Not really my friends but people in my year group send me inappropriate things through social media* (FC)
				4.5.1.2	*Yeah sometimes they say bad things about others then someone in the group chat makes screen shots and sends it to the person the first person was talking about.* (FC)
				4.5.1.3	*People just make up a tiny rumour and it will just get into something so big and everybody will get involved.* (MC)
				4.5.1.4	*Lots of people get involved and twist words* (MI)
				4.5.1.5	*Yes there was an argument online which got worse which made them fight in real life* (FC)

This theme was raised by 56 participants in Phase 1, where evidently more participants identified as socially prominent commented on the sharing and spreading of negative content online, particularly image-based apps. Some participants highlighted the distribution of negative content such as inappropriate images but they also referenced knowing about or experiencing unwanted posts (videos, photos, nasty comments on pictures, offensive messages, rumours) of themselves or someone they knew being uploaded and shared which had potential consequences.

11 of 14 participants in Phase 2, including isolated participants also related personal experiences of photos of them which were taken and posted. Male participants tended to refer to altered photos of themselves which were seemingly uploaded as a prank or joke while female participants' comments seem to convey their disdain at having

unflattering photos of them posted onto SNSs. These occurrences happen so frequently that participants perceived these actions to be a norm and not an isolated incident in regards to their SNS experience.

> *Oh they always make weird mugshot of me…when I am walking around or walking home…somebody takes a picture of my face so it's just a bit odd. It's just a bit of an annoying thing that pops up on Snapchat ever so often. I started telling people to stop but it kind of kept on going. They deleted it but before that could even happen, other people screen shot it and start spreading it around again so it got to everybody. People probably still have it today on their camera roll but don't show it any more so. As long as it's not shown then I don't mind.* (MC3)
>
> *Like if it's your birthday and they just post pictures and sometimes you think that picture's ugly. But if that's me I'd just tell them oh please take that one down but sometimes people do share posts, videos or pictures of like every day, to like expose pictures* (FC3)

Despite the growing norm of such practice, female participants felt that this often caused upset and potentially, led to conflicts. FC4 also commented on the rise of recording of conflicts occurring in the physical realm being shared on SNSs: "*Like if there was to be a fight after school today, then lots of people will go and record it and then post it".*

One male participant also cited the consequence of being exposed to media content shared by friends that they may have not wanted to see: "*You could find a lot of traumatic things online especially on SNSs. You could be shared things you don't really like that could just lead to a falling out altogether"* (MC1).

The majority of the participants in Phase 2 also frequently referred to the subtheme 'posting and sharing of negative comments'. Their comments seem to suggest that they perceived SNSs offers users opportunities to offend. Through further discussion, some participants felt that negative comments were sometimes posted at the expense of others, seemingly as a joke, but others felt that it was a way for some to seek attention following a misunderstanding offline. This issue was experienced by both participants who are socially prominent and isolated as FI2 shared:

> *Well, I think the girl didn't really like me so she just uploaded a random picture and just said something about me… I'm not that petty to do the same thing and to do and upload it cos that's just childish. So I actually spoke to her and asked her why she I did it, like it's not right.*

What was apparent was that these negative comments were often made public through various ways such as leaving a comment on a photo or video, taking a screenshot and

sharing these negative exchanges or 'indirecting', a term which was referenced by a few participants in Phase 1 and explained further by four participants in Phase 2: "*Indirecting is like when you are dissing a person but you are not really implying to them. Yeah, so they started doing that online which eventually led to an argument"* (MI3).

With the ease of posting and sharing negative comments, 12 participants in Phase 2 also perceived that SNSs therefore made it easier for gossip or rumours to circulate quickly and potentially 'go viral'. While this was experienced by both sexes, more female participants were quick to share how gossips and rumours spread on SNSs: "*Other people ask oh can you send me this, then they send it and it's just going through the whole internet"* (FC2).

> *So, for example if someone says something about someone else at school, they'll take it straight to social media and start telling people, 'oh do you know what this person's done to me?'. And then they go on to show other people and it just gets out of hand.* (FC3)

The quotes above demonstrate that adolescents can easily be intrigued by gossip generated through SNSs, which magnifies the problem situation, leading to misunderstandings. MI2 believed that this issue often resulted in the break-up of peer relationships: *I think that's the one that causes a lot of relationships to end…the friendship either ends or the other says sorry and say that they lied but it's mostly likely to end.*

The fourth subtheme 'arguments escalate' was raised 16 times by socially prominent participants in Phase 1 and eight out of 14 participants in Phase 2. Participants mentioned that arguments could either initially happen offline in school or online over SNSs. However, SNSs often became the catalyst for arguments to escalate at speed with half of the participants stating that it eventually led to physical fights. When they were asked about how SNSs may have influenced this, many perceived that group dynamics often exacerbated the 'drama' online. Eight participants felt that peers online often encouraged the escalation of arguments as described by FI1: "*When people post, there are others who encourage it like ohh yeah she said this, she said that…. People just want to see a reaction from someone and it happens really quickly online".*

MC1 articulated what he felt reinforced anti-social attitudes for an individual who joined groups in encouraging negativity and intensifying arguments.

> *Like I said there is not really that barrier…they don't really think and as if online, you group around…it's like in a riot…there is that sense of anonymity because it's not just you. You can join in a group and attack one thing or one person.*

4.5.2 Theme 2. Pressures relating to peer acceptance

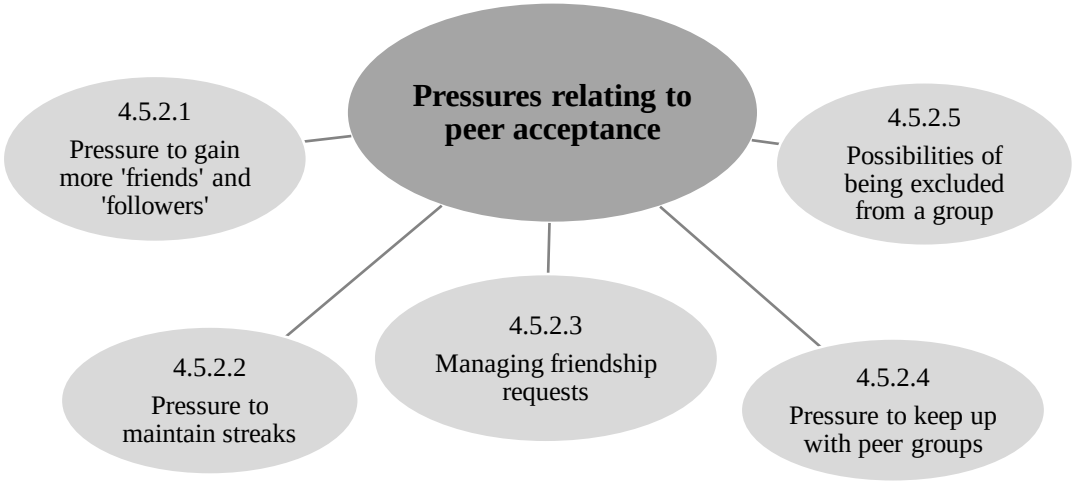

Figure 18. Theme 2. Pressures relating to peer acceptance.

Number of times theme raised in Phase 1				**Phase 1 participant quotes**
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**	4.5.2.1 *Maybe sometimes they might be competition like who has more followers on instagram or who has most views on snapchat* (FS) 4.5.2.2 *I also don't have a lot of followers on Instagram because I recently joined but they have a lot but some people that I don't know have requested to follow me but I decline because I need to be safe first but I would like more followers.* (FS) 4.5.2.3 *Yes my friends (not friend no more) was in a group chat with me and other friends and she asked if I could stop adding her and m others friends said she can add who she wants the and the first friends started being rude so we had to block her and never spoke since.* (FP) 4.5.2.4 *Keeping up with snap gang can be stressful* (FS) 4.5.2.5 *Some people say if you don't have that many friends on social media they tend to judge you.* (FC)
0	0	12	2	

The theme ‘Pressures relating to peer acceptance’ was raised by 14 female participants and no male participants in Phase 1. Reference to this theme was also made by two central and three isolated male participants during the semi-structured interviews. All female participants in Phase 1 commented on the dilemmas or pressures to maintain a level of social status or popularity they experienced as a result of the level of visibility on SNSs.

The first subtheme was raised by almost all female participants and three males from the isolated group in Phase 2. The accumulation of lots of ‘friends’ or ‘followers’ was mentioned by four of these participants, not as a way to develop valued peer relationships but rather for the sake of popularity. MI4 stated: “*Um I, well I definitely*

don't know the whole 600 but this was in Year 7 when how many followers you had mattered". Female participants' comments seem to suggest that this pressure made them reluctant at times to present information about themselves: "*I don't really like posting just in case I don't get a lot of 'likes'* (a measure of how many of your friends or followers respond positively to your SNS post) *and…If it doesn't get liked its embarrassing"* (FC4).

Through the development of current features afforded by SNSs, subtheme two 'pressure to maintain 'streaks' was raised by ten out of 14 participants in Phase 2. At the time when semi-structured interviews were being carried out, 'streaks', a feature developed by Snapchat was a current trend. 'Streaks' was a feature which allowed adolescents to publicly display their connectedness as explained by MI3:

> *It's like when you have to snap* (post a picture or text to) *someone back and forth everyday within 24 hours and then the number of days goes up. So…you have to do it for three days to get it going… then you can get like 100 days of fire symbols or up to 365 days.*

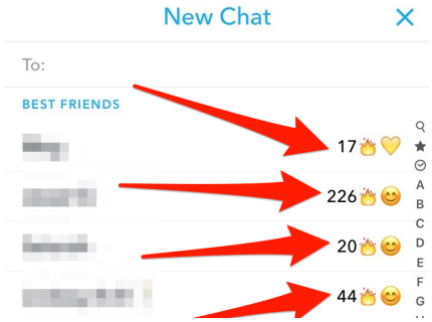

Figure 19. Diagram showing the number of 'streaks' points declared with each friend.

A key difference between male and female participants was how they perceived what 'Streaks' points represented. Comments made by four female participants seem to suggested that they felt encouraged to display the seriousness of and commitment to their friendships. Their quotes also however demonstrate that the need for peer acceptance meant that they felt pressure to maintain it as illustrated by FC1:

> *If someone doesn't have their phone, like if someone's parent took their phone or their phone's broken they'd give their friend their password. And erm, to look after the streak so the streak keeps on going so like…yeah so that you don't lose your number or your date of your whole streaks.*

Male participants on the other hand highlighted the importance of status or social standing: "*You can get more points or streaks on Snapchat when you talk to your friends and Snapchat gives you rewards for doing this. If you say you snapped for a year straight, you get some street cred"*(MC3).

Another subtheme which was identified and alluded to pressures relating to peer acceptance was identified as 'managing 'friends' requests', which was raised by five of the participants across the groups. The nature of 'friendship requests' differs according to different SNSs; however all are based on the premise of accepting or declining contacts. Two participants from the isolated group considered that to be accepted was important, which suggested that being accepted by another SNS user constitutes a step of friendship processing as described by MI2:

> *Um yeah, I had a lot of that because I remember trying to follow these random people and they didn't really follow me back. I used get really upset that they wouldn't want to be friends but then I realised that they don't really know me so...*

Four Central participants who were on the receiving end of 'friendship requests' however, talked about the pressures to accept requests, to avoid being viewed unfavourably or avoid offence as FC4 illustrates:

> *It does cause problems because people think that either you don't want to be their friend or you're trying to be rude in a certain type of way, even if you don't necessarily know them completely but you've heard of them. Yeah. Then people think that that's rude cos you're not accepting their request.*

One central female participant however stated that she tended to avoid dealing with the requests, only to feel pressured eventually to reciprocate. FC1 related this:

> *Oh, god, I have so many follower requests, like I just kind of leave them…And then like my friend and I were just on my phone and we were just scrolling through and then I'm just naming out everyone who I knew but I hadn't check it in so long I just didn't see, so I was just like oh, damn and I just like accepted them really quickly*.

As adolescents are able to 'hang out' in peer groups on SNSs, four female participants felt pressure to continuously post: "*I sometimes I feel like I need to post something in the group or they would get bored of me. I see their posts sometimes and they look really good but sometimes I feel like mine isn't good enough"* (FC3). One female participant from the isolated group also talked about tension arising when she was excluded publicly from a group on SNSs. This seems to suggest that SNS can easily affect the speed and scale of relations quickly.

> *Yeah…my friend's birthday. She said to me that the people who were going to her outing, they didn't want me to be there but I asked them and they said that they never said that but that she just does not want me there. So I was like ok then, she's not a real friend. And I found this out on SNSs* (FI2)

4.5.3 Theme 3. Communication barriers

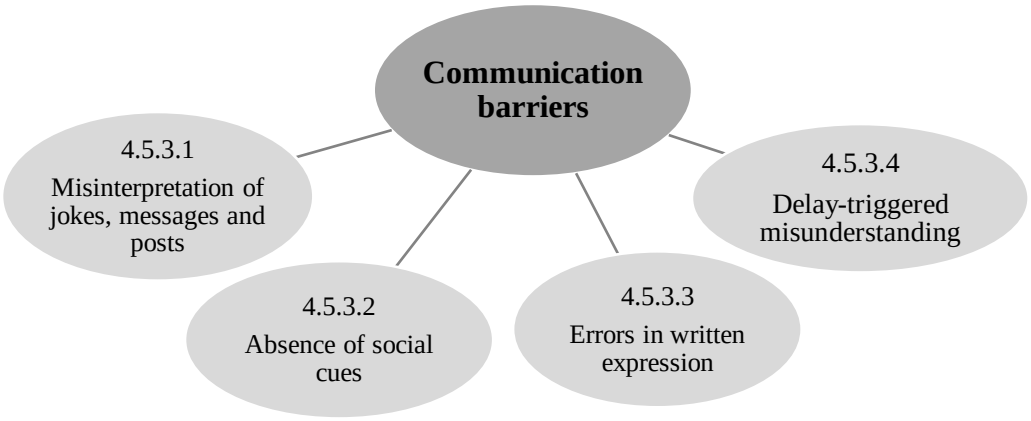

Figure 20. Theme 3: Communication barriers.

Number of times theme raised in Phase 1				**Phase 1 participant quotes**	
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**		
7	4	17	5	4.5.3.1	*Yes my best friend was joking with me and I usually identify joking with a tone of voice but I misunderstood what she said and I fell out with her* (FC)
				4.5.3.2	*Not really but sometimes messages can send the wrong impression and cannot be taken the way you may want it to.* (FC) *Sometimes people can get offended when you say things to them or other people have and that can cause a miscommunication and end up being something bad* (MP) *I feel like somethings that you may say online could be misunderstood as the person wouldn't know the tone of how you would have said it in.* (FC)
				4.5.3.3	*Autocorrect always changes random words in the text and so I have heard that this has led to a misunderstanding and also not reading a text before sending it.* (FC).

This theme was raised by 33 participants in Phase 1 with significantly more female participants commenting on some of the communication barriers posed by the use of SNSs. This included the perception that friends could often take things the wrong way when trying to infer from messages or posts shared on SNSs which would lead to misunderstandings and potential fallouts.

Responses by four of the participants from Phase 2 suggested that they or their friends could sometimes misinterpret jokes or posts as "*everyone might take things literally*" (MI3) or not understand the intention of the message: "*Over SNSs, people can't tell if you are joking or not, so certain things you say they may take offence*" (MI2).

Three participants (one male, two females) also mentioned that SNSs presented challenges, as their friends could sometimes misinterpret their emotions without access to their facial expression due to the absence of social cues such as body language, gaze and gestures, as described by FC2: *"Because they can't see your facial expressions they may think like, oh they're angry or they're upset, but then that's why I use the emojis to make it subtle, so they know that I'm joking around".*

Another subtheme which emerged was 'errors in written expression' based on the comments made by five participants in Phase 1 and two participants in Phase 2, who talked about incomplete phrases, grammar or typing errors in texts leading to possible misunderstandings as the meaning gets lost. This was described by FC3: *"I feel like when people are texting me, they don't actually read what they say, type and they actually just send it and then someone else reads that and it changes a bit and it can become a problem".* Another female participant discussed misunderstandings that arose when posts were not responded to within an expected time within SNSs: "*My friend sent something to her 'recents' on snap and said for her best friends to come and talk to her and I didn't because I was busy; then next day she said she had no friends"* (FC4).

4.5.4 Theme 4. Vulnerabilities to contact-related risks.

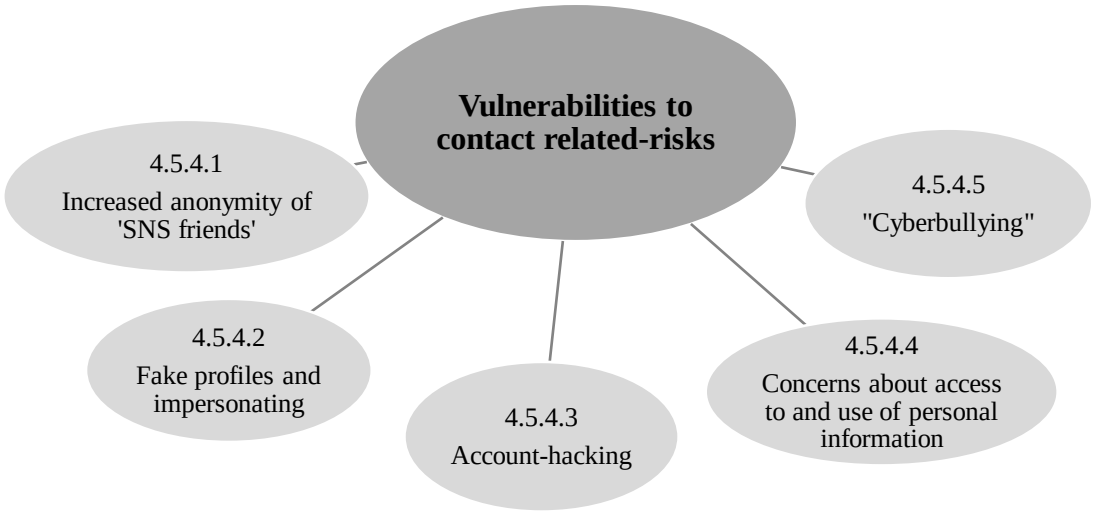

Figure 21. Theme 4: Vulnerabilities to contact-related risks.

Number of times theme raised in Phase 1				**Phase 1 participant quotes**
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**	4.5.4.1 *You just have to be careful really, cos like you don't know who they are* (MC) 4.5.4.2 *because you might meet someone on the internet and they say they are the same age but really they are not.* (MS) 4.5.4.3 *Yeah but there have been, has been a case where someone made an account just to talk rubbish about someone* (FC) 4.5.4.4 *Some people would think it is good to put their details on when it is not because you don't want everyone to know your business* (FI) 4.5.4.5 *Yes people have been using SNSs to cyberbully* (FC)
27	18	26	5	

The theme 'Vulnerabilities to contact-related risks' was raised 76 times by all participant groups in Phase One where within the subgroup of peripheral and isolated participants, more males than females commented on this theme as can be seen in the table above. While the affordances of SNSs have allowed opportunities for adolescents to widen the number of people they can connect with, participants' comments also suggest a sense of caution about not really knowing with whom they are digitally interacting which could include "bad-intentioned people", such as "strangers". Participants were also concerned about not having control over their personal information, which could potentially be seen or used by other SNS friends.

In Phase Two, all male participants from the central and isolated groups and one female participant from the isolated group talked about the challenges and risks of communicating with or being contacted by new friends or "random people" online due to the increased anonymity of SNS users, as described by two male participants:

> *Um I mean I have just some people that I don't really know that I talk to, but on SNSs, there's not really that barrier, there's more anonymity I guess…there is that kind of sense of danger about it.* (MC1)
>
> *If you made friends with people that you don't know, you don't know what they are capable of or don't know what they can do. They might be dangerous…they can say that they are your friends even though they're just using you to get to something.* (MI3)

Three participants also felt a sense of distrust or suspicion about online SNS users who contacted them. One female participant from the isolated group illustrates this:

> *Random people from outside will be adding me and they would be talking to me…but I don't know you. So it happens sometimes. Somebody would add me and*

> *would say who's this? But you added me so why am I going to tell you who is this?...they could be lying about who they are.* (FI1)

Another subtheme which was identified was based on the responses of more than half of participants across all groups in Phase Two, revealed that a disadvantage of SNSs is that fake accounts could be set up either by someone unknown or other pupils from school which could create social problems amongst peers. Two male participants mentioned that they knew of someone who experienced having a fake profile of her/himself set up by a peer, intended as a joke amongst friends. Four other participants however related less favourable personal experiences where other SNS users made fake profiles and impersonated them to create offence by "talking rubbish about someone" (FC3) or causing conflict amongst friends. MC3 explained:

> *So there was this group chat…my reputation was kind of going up, so was just sticking around with the good people, popular people in the school and then this person, created a fake account and started talking to all my friends, and the next day I got into school, EVERYBODY, I mean everybody, started making fun of me and everything.* (MC3)

FC1 however felt that setting up fake profiles was harmless as it was sometimes necessary to maintain the number of SNS friends she has gained.

> *Like say if someone blocks me, obviously as a joke yeah, I'll just pop back up to them like hey you know me. Obviously like, I won't make it seem like I'm some sort of creep, but I'll make it obvious it's me and then I'll be like, unblock me. And then everything will be back in there and I'll just delete that account and go back to normal.*

Account hacking, which is when a user's account has been compromised, was another subtheme which was referenced by four participants in Phase 2. That one's account may be hacked or "hijacked" was perceived as a norm amongst adolescents. They explained that their accounts could be hacked by someone known or unknown to them. They mostly shared their experience from a sense of frustration in not being able to access their SNS account or connect with their friends online as described by MI3:

> *This has happened to me before, but this was on a game and it made me upset because I lost all my contacts of friends online. Like someone can log into your account and you can't go back in because they might have changed the password and might change things in your account.*

For the fourth subtheme, all 14 participants commented that while SNSs offers the opportunity to find out information about others, all unanimously raised concerns that

their personal information could be used again by other SNS friends without their consent which they perceived could only lead to further negative consequences for them: "*I think it would cause problems cos you know when they say whatever you post now stays on line so people screen shot it and then they'll use it some other time and yeah"* (FC4). Participants felt uneasy at the thought of their information being publicly known by others: *There is also that sense of if you don't really know someone and you post something about you and they could find out quite a lot of information just from that little snippet of information.* (MC2).

Male participants described a sense of insecurity and feeling "creepy" about how some of the newer features of Snap made them feel: being "stalked" by other SNS friends who were not close friends as described by MC3 and MC1 respectively:

> *Snapchat made an update where recently, you can zoom into the screen and see which road people are on. This can actually cause a little bit of drama because say I was here right now and my location was on…So if one of my mates online wanted to find out where I was, you zoom into the app, they look at my bitmoji* (cartoonish avatar/version of yourself online) *and they can just tell where I am, which is kind of bad.* (MC3)
>
> *Oh I just set everything to private….Well I guess there is that sense of danger about it. That's why I usually don't post anything with my face on because I do have that paranoia of someone coming and tracking me down.* (MC1)

Female participants on the other hand talked about the complications that could arise from sharing their passwords in order to ask their friends to manage and help maintain their online profiles.

> *I asked someone to look after my streaks and then I just couldn't be bothered to change my password cos I trusted that person, but something was sent from my account and then I got in trouble because it was from my account. I don't really mind that that person did that to be honest but obviously getting in trouble it's not, it's bad yeah but it was like, it was a misunderstanding and then um, that person who was on my account sent it because they got sent it from someone else thinking that that person, that person thought it was me.*

4.5.4.5 Cyberbullying.

The final subtheme "cyberbullying" or "bullying online" was a term that was specifically mentioned by seven participants in Phase 1 (five central males, one isolated male and one female participant). While one participant provided some context: "*some people are involved in an argument which then turns into cyberbullying*" (MC), others did not

provide any more detail about the type and extent of the incidents. None of the participants reported it as a personal experience but related this to someone else they knew who experienced it: "*Yes, my friend has been bullied online and has put a big hole in his life"* (MC).

In Phase Two, only four participants discussed cyberbullying by offering different perspectives on this, while the other 10 participants stated that they had not experienced it and did not know of anyone else who may have been affected by it. One male participant from the central group perceived that SNSs played a role in incidences of bullying in a number of ways, which puts a strain on peer relations:

> *SNSs leads to at times, bullying and this is because it allows people to discuss views and hurtful things and allows them to discuss ways to bully people and people also post pictures…I mean to a certain extent, a lot of problems are stemmed from cyber bullying. Um in this school, there have been some cases of cyberbullying.* (MC1)

In addition, only one other participant (MI1) talked about cyberbullying from a victim perspective:

> *Err, it's happened to me once; people saying things about me and then I'll text them and ask them if they said this and then they'll say yeah and I'll say why and they'll say this and that, like oh cos you're small whatever, then I'll say something back and it will just keep going back and forth and then it will never come to real life but it just tends to happen online.*

While this participant related a previous experience of being bullied online, his description of the event seemed to indicate a sense of acceptance that deliberate negative comments constitute a normal occurrence amongst groups of peers on SNSs. While two more participants talked about events relating to cyberbullying, their comments also suggested that it was difficult for them to delineate what was perceived as bullying online when engaging with other peers, as described by MC3 and FC4 respectively:

> *They started indirecting…Yeah so they started doing that online and I involved myself because, I didn't really know why she was doing and then it turns onto me, and then all my friends then started going onto her and they started saying, ah cyberbullying and everything. What happened was…there was this girl who was doing stuff, like really inappropriate stuff and it kind of spread so…then she went on to talk about other people and it just got out of hand and people started throwing stuff at her, not like physically but they started like posting a lot of stuff on snapchat and yeah, lots of people including me got involved.*

It was like with the fight situation cos something happened in school and then me and my friends we recorded it, but then we didn't post it, but the fact that we still recorded it got us in trouble, and the teacher said that it's a form of bullying so…

It is important to note that several participants also mentioned that the school operated a strict social media policy. This may have affected the number of participants willing to mention or discuss events related to what they perceived as cyberbullying.

4.5.5 Theme 5. "More power behind the screen"

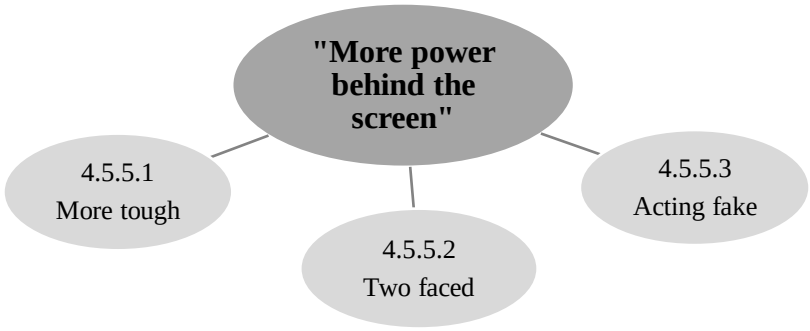

Figure 22. Theme 5: "More power behind the screen".

Number of times theme raised in Phase 1				**Phase 1 participant quotes**
Male **Central and Secondary**	Male **Peripheral and Isolated**	Female **Central and Secondary**	Female **Peripheral and Isolated**	4.5.5.1 *Like the might try to act like they are tough but when they are in your face they are like I am sorry I didn't mean to do that.* (MC) 4.5.1.2 *One of my friends, well they say one thing online but another face to face* (FP) 4.5.1.3 *Most people just act so fake when they are on Snapchat but when you see them in real life, they are SO different and now that just annoys me so much* (FI)
6	2	9	2	

The theme "More power behind the screen" was raised by 19 participants in Phase 1 and two-thirds of participants in Phase 2 across all groups. This theme encapsulated their perception that SNSs allowed users the opportunity to behave differently behind a screen; and in a more negative way by either acting more tough, two-faced or pretending to be someone else.

Participants in Phase 2 felt that some friends online acted more tough by being rude, exaggerating or showing more aggression but acted completely differently when it came to face-to-face interactions, as illustrated by MI5:

So, someone will say something on the internet about, maybe even your parents or something like, oh your stupid, you're this, you're that, but then when it comes

to real life, they won't say it or they won't even speak, but they feel like they have more power because they're behind the screen.

Through further discussion, one participant perceived that the increased anonymity on SNSs made it possible for friends whom he did not know very well to behave differently.

I think friends online are a lot more harsh than in real life. I think everyone acts differently because online you don't really have to. There's that shroud so you don't really think that anyone is going to judge you.

Six participants in Phase 2 also shared ,their personal experiences of what they perceived as friends being two-faced which created confusion and frustration about the status of their friendships, as explained by MI3: "*Because you'll be telling me online that you're my friend, you're my best friend, but when in real life, when you walk past me, you never even say hi";* and FC1: *"Like I said earlier, verbalists, like they'll act ruder than they actually are and they'll act like they're tougher and stuff, but in real life they're like really nice people, so it's just confusing".*

In Phase 2, five participants mentioned feeling "annoyed" with SNS friends who they knew from in or outside of school whom they believed acted fake online by pretending to be someone they are not, which created a sense of mistrust. FI1 described her frustration at meeting a peer from a different school online who initially provided a fake impression of himself.

A guy once sent a picture of himself to me and said that it's him but then that picture was on google images…then I found out who that person was and he looked nothing like him. But when I asked him, he said to me that he thinks he is ugly so that was why he sent that picture. But I told him that you don't have to act fake and feel like that about yourself.

4.6 Summary of Qualitative Findings

Early adolescents' perceptions of how SNS mediates their peer relations in positive ways:

- *Impact on social relationships and networks:* Opportunities to develop existing and new connections with peers, also broadening their social networks. Isolated individuals are able to form new friendships online.
- *Direct source of information about individuals:* Early adolescents can share information about themselves or learn more about others, which can help them with future face-to-face conversations or consider compatibility.
- *Avenues to expand positive interactions:* Through SNSs, early adolescents can socialise through various activities. Hanging out in 'peer groups' were highlighted by

socially prominent individuals. Online gaming offers boys opportunities to meet new friends online.

- *Ease of access to peer support:* The availability of peer support from close friends and wider network when face-to-face is not possibly.
- *"More sociable online"*: Early adolescents, particularly isolated individuals feel more confident and open to interact with others.

Negative influences of SNSs on peer relations, as perceived by early adolescents:

- *Sharing and spreading of negative content online*: Problems arising from the ease of distributing negative media, including larger audiences.
- *Pressures relating to peer* acceptance: Pressures, particularly for girls, to gain "friends", "followers", "streaks", manage 'friend' requests or keep up with peer groups.
- *Communication barriers*: Peers could take things the wrong way when inferring from messages or posts, particularly with the lack of social cues.
- *Vulnerabilities to contact-related risks*: Concerns over the increased anonymity of SNS friends, fake profiles and impersonation, hacking or potential cyberbullying.
- *"More power behind the screen"*: Opportunities to behave differently, in a more negative way by either acting more tough, two-faced or pretending to be someone else they are not.

5. DISCUSSION

5.1 Chapter Summary

This chapter will begin by discussing the findings related to each of the research questions within the context of existing literature. This will be followed by considering the strengths of this study, limitations and directions for future research. The chapter will conclude with consideration of the implications of the research for EP practice and policy.

5.2 Research Question 1: How do early adolescents use SNSs and how is this associated with their 'offline' peer relations?

5.2.1 Prevalence of SNS use amongst early adolescents

This research contributes to our current understanding of young people's SNS use by detailing the SNS use of early adolescents, a group of users which has been understudied. Findings suggest that SNS use has diversified as the majority of early adolescents use two, three or more sites. Contrary to previous studies whereby older adolescents reported the widespread use of Facebook (Isbister, 2013; Lenhart et al., 2015), Snapchat and Instagram, are by far the most popular and widely used amongst early adolescents in this study, although gaming-related SNSs such as Xbox live and Playstation Plus have also risen in prominence. The findings of this study also indicate that the age of first time use is getting significantly younger even though SNSs require users to be at least 13 years (Ofcom, 2017). The increasing proportion of adolescents who first report using SNSs from age 9, to an overwhelming majority by age 12 suggest that SNS use is widespread by early adolescence and possibly plays a crucial role for transition into secondary school (Isbister, 2013).

In this study, mobile devices facilitated access to SNSs, comprising a primary source for a large number of early adolescents who login online frequently each day. It is therefore likely that adolescents are engaging with SNSs at home and school, reiterating how thoroughly the use of SNSs are integral to in their lives (Livingstone et al., 2014). By comparison, a smaller number of adolescents also access SNSs through other devices and boys were significantly more likely to access SNSs through their games console. Differences in gender were also found in other aspects of SNS use. Interestingly, a higher proportion of males spend between 1 to 2 hours on SNSs each day but females were more likely to spend over five hours. This is a higher estimate than the SNS use of 21 hours a week for 12-15 year olds reported by Ofcom (2017). While this suggests that early adolescents are avid and heavy users of SNSs, data suggest that SNSs are more central to the social lives of early adolescent girls, within the current Year 8 sample.

5.2.2 Motivations for SNS use

The findings from this research also highlight the social opportunities offered through SNSs (Ellison, et al., 2007; Ellison & Boyd, 2013). Early adolescents in this sample reported most frequently using SNSs to interact with friends seen every day. Girls tended to engage in almost all SNS activities more frequently than boys, but were significantly more likely to use SNS to communicate with friends seen or not seen daily and to organise events or groups, whilst early adolescent boys were more likely to play games with other people. While gaming was once seen as a solitary activity, these results show how the affordances of SNSs have offered individuals the opportunity to collectively play and socially interact through a virtual medium (Livingstone et al., 2014). In addition, gender differential social motivations on SNSs could be linked to research on friendships in early adolescent development which suggest that girls favour closer and intimacy-enhancing relationships compared to boys who favour companionship, shared activity, competition and control (Berndt, 1982; Brown & Larson, 2009). These findings align with previous research showing that adolescents' engagement with SNSs allows them to "stay in touch, make plans and get to know people better" (Shapiro & Margolin, 2014, p.8).

5.2.3 'Online' versus 'offline' (face-to-face) friends

Interestingly, there was a wide variation of responses in the number of online contacts early adolescents reportedly have. One in four reported to have more than 400 online contacts, higher than Livingstone et al.'s (2011) where 16% young people in the UK had more than 300 contacts. However, a third of early adolescents in this study reported having fewer than 100 SNS contacts. Boys reported having a lower number of contacts on SNSs than girls. The findings that some early adolescents have a large network of online SNS contacts may support the presumption that "the notion of 'friend' has become meaningless" (Livingstone et al., 2014, p.2). However, findings from this study also showed that more than half of early adolescents perceive fewer than 40 contacts online to be their actual friends suggesting that they can distinguish amongst online connections, although a small percentage reported having 50 or more actual friends. The range in numbers of reported 'actual friends' reflect to the different perceptions of the word 'friends' on SNSs. It could be suggested that the changing nature of the conception of 'friends' amongst early adolescents has been made more tricky by the features of SNSs. The findings also provide some evidence for Isbister's (2013) suggestion that SNSs potentially create "some degree of shift" in the understanding and interpretation of friendships for some adolescents (p.110).

Moreover, findings show that an overwhelming majority of early adolescents maintain frequent contact with SNS contacts who were first known face-to-face, whilst only around a fifth are in touch with those only met online. From the latter, boys more typically than girls are in contact with individuals whom they met on SNSs with no prior contact face-to-face. Given the findings that boys are significantly more likely to use SNSs for gaming, it could be hypothesised that the multiplayer features afforded by SNSs promote connections between SNS users. The findings are consistent with Livingstone et al.'s (2014) study and suggest that most early adolescents complement their offline relationships with the use of SNSs.

5.2.3.1 The association between 'online' and 'offline' peer relations

Previous research on adolescents has considered the extent to which online 'friends' and offline friends overlap (Reich et al., 2012). This study examined the association between the number of online contacts and 'offline' friends met face-to-face. The findings showed that for early adolescent boys, the number of online contacts was significantly linked to the number of offline friends. For example, Boys who had fewer SNS contacts online were also likely to have a lower number of friends known face-to-face. Interestingly, this association was not found for girls i.e. there was no statistical association between the number of SNS contacts and the number of 'offline' friends for girls. The findings for adolescent girls support Isbister's (2013) suggestion that there is "some degree of incongruence" between the number of SNS 'friends' online and friends known face-to-face (p.104).

One possible explanation for this gender difference is that boys may be complementing their face-to-face communications with their SNS use. Boys were typically found to use SNSs between 1 to 2 hours a day and prioritise gaming online, suggesting that they may be using SNSs as another way to interact with their offline friends (e.g. through multiplayer online games). Findings also showed that girls engaged in a wider variety of SNS activities than boys (ranging from chatting with friends from offline circles, to looking for old friends they lost touch with, to organising groups or events). Therefore, it could be hypothesized that there is less of a pattern between their offline and online contacts due to the nature of SNS activity they engaged in. In addition, while girls were less likely to communicate online with people whom they only met online, girls were also more likely to report on perceived social pressures to accept 'friend requests' or accumulate more 'likes' or 'friends'. Whether this partly explains the variation in the number of online contacts that early adolescents reportedly have, is a question for further research. It should also be noted that the way that the questionnaire

data was grouped in the current study (i.e. less than 10, 10-50… 301-400, 400 +) meant that it was not possible to explore outliers and their influence on the relationship between offline and online contacts. Future research would need to consider this design aspect when seeking to explore variations and possible outliers or exceptions to these relationships between online and offline friendships.

With regards to comparisons between individuals who were identified as 'nuclear', (perceived as socially prominent) and 'isolated' (perceived as not be belonging), overall, findings showed that there was no association between individual centrality and reported frequency of SNS use on all devices. Individual centrality also did not seem to be associated with the number of reported online contacts or actual friends. This finding was in contrast to Isbister's (2013) research that individual prominence was linked to the frequency of SNS use amongst mid-adolescents. However, in his study, isolated and peripheral individuals were grouped together, which may, in part explain differences in findings. There were no significant findings on SNS use based on individual prominence, perhaps an artefact of the small sample size of isolated individuals. To redress risks that quantitative findings reflected a structural anomaly, some of the qualitative dimensions to this study allowed the researcher to elicit richer, descriptions of isolated individual's experiences of peer relations online and offline.

5.3 Research Question 2: What do early adolescents perceive are the positive and negative influences of SNS use on their peer relationships?

5.3.1 Positive influence of SNS use on early adolescent peer relations

5.3.1.1 Strengthening existing peer relations

In exploring what has been distinctive for young people's peer relations, at a time when these are increasingly mediated by SNSs, this study showed that SNS use has had an impact on developing and enhancing early adolescents' social connections and networks (Ellison et al., 2007; Isbister, 2013; Reich et al., 2012). Although there might be hundreds of online contacts listed on one's profile, most early adolescents are intensely using SNSs as an extended context to reinforce their existing friendships from offline circles, in line with previous research (Isbister, 2013; Livingstone et al., 2011; Reich et al.,2012; Shapiro & Margolin, 2014). Findings suggest that SNSs perform a crucial role in supplementing and strengthening young adolescents' already-established friendships at times when it is not possible to meet face-to-face (Reich et al., 2012; Shapiro & Margolin, 2014). Previous research has also indicated that SNSs are advantageous for overcoming geographical barriers making it more convenient for adolescents to connect to others (Isbister, 2013).

Similarly, this study found that SNSs afford early adolescents the ability to maintain existing networks of friends in ways not previously possible, for example, by keeping in contact with old friends from primary school or those who have moved to other parts of the world.

5.3.1.2 Opportunities to widen social ties

The findings also support those of previous research which suggested that SNSs provide an ideal structure for building a wider network of contacts and online friends (Ellison et al., 2007; Isbister, 2013; Reich et al., 2012). This was corroborated by quantitative data which showed that through SNSs, the quantity of online contacts was augmented. Brown (2004) stated that one of the most important aspects of early adolescent development is the emergence of social networks, as young people pursue group membership while learning to negotiate relationships with peers across multiple groups. In some ways, it could be hypothesised that the use of SNSs supports this task, an impetus to widen their social ties online. The qualitative data from the present study however builds upon research by highlighting that more early adolescents were keen to pursue online network connections mostly through links with offline associations in their community, for example, friends of friends and family or acquaintances from school. Through the affordances of SNSs, the custom of 'friending' casual acquaintances and mutual friends might lead to interactions in person (Chamber, 2014). For the adolescents, these contacts which have been accepted online may be seen as potential friendships offline.

The quantitative data in this study also indicated that a small percentage of early adolescents report communicating with SNS contacts only met online. This is further supported by qualitative data which found that SNSs create opportunities for early adolescents to foster new links with individuals met online. A novel finding from this study however, has been the views of isolated individuals who made significant references to this feature in SNSs, which have made a difference in their lives. Margalit (2010) suggested that individuals with low status were considered at risk of loneliness as they struggle to build satisfactory relations with peers. While schools are prominent as a space for the formation of friendships, this study found that the use of SNSs has served as a new peer context for isolated young adolescents to seek and form friendships; one not confined to school where they may not experience a sense of belonging. Moreover, contrary to public concerns about meeting strangers, these early adolescents are selective about who they are meeting online, emphasizing that they are meeting same-aged peers from other schools within the local area, supporting the argument that as early adolescents

gain autonomy away from parents, the need to identify with peers takes precedence over identification with adults (Brown, 1990).

5.3.1.3 Direct source of information about others

Results from this study also support the limited research highlighting that SNSs are beneficial to peer relations as they form an important source of information about others (Isbister, 2013). With the specific affordances of SNSs that facilitate the speed and ease of accessing content including profiles, daily posts, status updates, videos or photos; early adolescents reported that they are able to learn about their current or prospective friend's social world very quickly. Findings from this study show that early adolescents are keen to gain insights into what they have in common with peers or establish compatibility. This seems to be in tandem with previous research suggesting that adolescents tend to choose and associate with peers based on shared interest or similarities (e.g. Brown & Larsen, 2009; Kandel, 1978). The findings also indicate that SNSs provide an opportunity for some early adolescents, as reported mainly by girls in this study, to learn about other peers prior to face-to-face interactions. This knowledge may potentially offer early adolescents the advantage when initiating new friendships in person by giving more to converse about, as highlighted in previous research (Isbister, 2013). While it can be suggested that early adolescents' eagerness to understand the social world of their peers comes from their desire to affiliate with peers, the findings indicate that SNSs can be empowering as they offer early adolescents a medium through which the diversity and choice of information about others can be explored, affecting the types of relationships they can choose to form with peers.

5.3.1.4 Increased confidence and openness online

In addition, some early adolescents report that SNS use supports their interactions with peers by enabling them to be more sociable online, consistent with previous research (Isbister, 2013; Shapiro & Margolin, 2014). The study however further contributes to the evidence base by providing insight into the views of isolated early adolescents, both boys and girls, who particularly emphasised the opportunities it afforded them. They cited a preference for using SNSs-mediated interactions as it helped them to behave in a less shy manner and feel more comfortable and confident. This facilitated their peer interactions online and for some, helped them build friendships where it may not have been possible in person. In a similar way, the findings in this study also show that for some early adolescents, communicating through a virtual dimension over SNSs, away from the traditions of interacting face-to-face was more effective for them as it enabled an increased openness to share their personal thoughts and feelings that would not be easily

disclosed in an offline setting, thereby further strengthening their relationship. This finding provides some evidence to support the theoretical assumptions by stimulation hypothesis which suggest that the affordances of engaging online through SNS interface makes it easier for some early adolescents to self-disclose online and facilitates emotional closeness and intimacy in their relationships with peers (McKenna & Bargh, 2000). It is less clear however if sharing more online through SNSs significantly enhances overall quality of relationships between peers or if this simply mirrors the strength of their existing offline relationships.

5.3.1.5 Avenues to expand positive interactions

Beyond the technical affordances of SNSs which has allowed young people to be more connected (Ellison & Boyd, 2013), many early adolescents in this study perceive that SNSs have afforded them avenues to socialise and engage in interaction with their 'friends' in an informal way. This viewpoint was also supported by quantitative data which highlighted how frequently early adolescents were engaging in different SNS activities. Furman and Buhrmester (1992) highlighted that during this developmental phase, the social interactions amongst young people intensifies as adolescents become increasingly dependent on friendships and peer groups. The findings of this study support this argument and demonstrate that early adolescents are still clamouring for social interaction, however this has been through a variety of means and tools on SNSs – ways that might seem unfamiliar to adults. In line with previous research (Isbister, 2013), this study shows that SNSs have allowed early adolescents to organise events, and perform social exchanges through opportunities to update others, post pictures and videos, share and comment on others' media content. This study also shows that the majority of socially prominent individuals in particular have learnt to utilize the features of SNSs to be able to 'hang-out' or engage in peer group activities online. However, the present study also builds upon research by showing that for early adolescent boys, both isolated and socially prominent, the multi-player gaming features afforded by SNSs, a common shared interest amongst males, provides them with a platform to play and socialise in each other's online presence, which they report at times encouraged cooperative play and better relations with known peers. Overall, these findings suggest that early adolescents' motivation for sociality has not changed and they are still 'conversing'. However, SNSs have introduced novel approaches, shaping the way adolescents might sometimes 'get together' with peers and hang out.

5.3.1.6 Immediate peer support

Finally, the current study provides evidence to suggest that for some early adolescents, SNS plays a positive role in their relationships with peers through the ease of access to peer support online which is not rooted to only in close friendship, but also includes the wider social network of friends. This study showed that a number of adolescents were able to easily seek help relating to school activities, where classmates were able to offer information or guidance. For other early adolescents, the use of SNSs has been important in receiving immediate peer support or reassurance online when practical advice was needed or in times of difficulty. The findings of this study highlight features of friendship that are valued by early adolescents, including help, closeness, empathetic understanding, emotional security and reliable alliance (Bukowski, Hoiza and Boivin, 1994). However, the findings also indicate the power of SNSs in allowing young adolescents to easily derive social support or advice through their social network or connections when face-to-face support is not available.

5.3.2 Negative influence of SNS use on early adolescent peer relations

5.3.2.1 Implications from the spreading of negative content online

Despite the wealth of positive accounts of early adolescents of their use of SNSs which have brought benefits to their peer relations, this study also found that their online engagement with SNSs can sometimes mediate peer experiences and friendships in less favourable ways. In-line with previous research on mid-adolescents (Isbister, 2013), early adolescents reported that the posting and sharing of negative and unwanted content including videos, images, interactions or comments about an individual or others without permission is one of the main factors leading to relational difficulties. The findings extend the work by Isbister (2013) by highlighting that more early adolescents overwhelmingly acknowledged these occurrences which are partly shaped by SNS affordances, as a growing peer norm. While motivation to post or share content may not have been the intention to cause harm (e.g. jokes or pranks as reported by boys), findings from this study support Boyd's (2010b) viewpoint that the ease and speed at which content can be distributed and broadcast through SNSs to other individuals, small or larger peer groups can sometimes result in problematic consequences; which in this study, led to conflicts and misunderstandings. Many of the early adolescents also identified that SNSs made it easier for relational aggressive motivations, such as gossip or rumours or everyday social struggles such as arguments to be exposed and amplified, potentially intensifying interpersonal conflict or antagonistic relations between peers. The findings correspond

with previous research which suggest that existing tensions in peer relations can become heightened from the use of SNSs (Isbister, 2013). This study however extends previous research by highlighting the role of peer group on SNSs, in some cases, as an additional factor in exacerbating social problems between peers. It is important to note that SNS mediated acts usually correspond with existing offline circles, with social interactions extending into the online context and back, as described by early adolescents in this study and acknowledged in previous research (Vandebosch & Cleemput, 2008). It follows that most early adolescents recognise that certain social problems escalate within their peer group. Findings show that young adolescents perceived that their peers often joined in larger groups online to encourage negativity. It is hypothesised that these behaviours may reflect conformity to norms reinforced by larger groups (Chu, 2005; Eder, et al., 1995), as well as the anonymity of online interaction.

5.3.2.2 Social pressures arising from the need for peer acceptance

Like Isbister (2013), this study also highlighted the social pressures some early adolescents face as a result of SNS use, such as the pressure to amass a greater number of online 'followers', 'likes' or 'friends'. The findings could partly explain why a proportion of early adolescents reported high numbers of online contacts from the quantitative data. As peers spend more time together in groups or crowds, Brown and Larsen (2009) stated that a young person's understanding of status differentiations take on greater importance during this developmental stage. The early adolescents' accounts in this study imply that this may be the case as the appeal of higher numbers of 'friends' or 'likes' augments the kinds of social standing or popularity ratings that happen in the offline context. The present study however builds upon research by showing that with the increased sophistication of SNS features, early adolescents, particularly girls, also reported other social pressures pertaining to SNS use, including the pressure to keep up posts with peer groups or to keep up with the quantity of 'streaks'; a feature that allows adolescents to publicly display their connectedness with a peer by continuously reciprocating posts. This finding may be informed by previous research (e.g. Bigelow & La Gaipa, 1975; Crockett, et al., 1984; Mendelson & Aboud, 1999) which emphasised the significance of friendships in early adolescence. Moreover, closeness and intimacy marked by trust and loyalty are regarded as important for female friendships (Berndt, 1982; Brown & Larson, 2009). The findings suggest the pressure to display their commitment to their relationships to avoid friendship breakups are unintended concerns of SNS use. Managing friendship requests was also recognised by early adolescents as additional factors triggering possible tensions in peer relations, in line with previous

research (Isbister, 2013; Tokunaga, 2011). An unexpected insight however was that, unlike older samples, early adolescents did not grapple with difficulties encountered upon rejecting or accepting requests, rather their accounts implied the pressure to accept all requests to avoid causing problems or being viewed unfavourably by peers in the negotiation of friendships online. Brown (1990) stated that the need for social acceptance is a critical time particularly in early adolescence as they look their peers for a sense of social identification (Halliman, 1995; Kroger, 2000). The findings support this notion, however it highlights that the development of certain social practices unique to the features of SNSs can create certain dilemmas and social difficulties for early adolescents as they attempt to navigate their relationships and strive for social validation.

5.3.2.3 Communication barriers online: catalyst for social tensions

Although SNSs provide a social context for peers to interact, early adolescents in this study also identified some of the complexities and barriers to communicating through SNSs versus face-to-face interactions which potentially creates problems between peers, in line with previous research (Isbister, 2013). These difficulties were referenced by twice as many girls as boys and they showed awareness of the unintended effects of socially interacting over an interface on SNSs. Previous research has acknowledged that the use of SNSs caused tensions based on the lack of social cues evident in face-to-face interactions (Isbister, 2013). Similarly, the early adolescents' accounts implied that this becomes a catalyst for conflicts or misunderstandings when the meaning of posts are misinterpreted. This study however builds upon research by showing that the ability to communicate asynchronously (not occurring at the same time) sometimes creates opportunities for miscommunication, particularly if a response from a peer is delayed. The findings provide an indication of the complex interplay between how early adolescents' use SNSs and how affordances of SNSs may potentially contribute to arising difficulties in peer relations due to the ambiguities highlighted above. Furthermore, where negative experiences were reported in relation to the use of SNSs, consistent with previous research (Isbister, 2013), a proportion of early adolescents across gender and social prominence perceived that communicating over SNSs sometimes allowed their peers to behave and interact differently by either acting 'fake', more tough or using more aggressive language than they would in person. Moreover, the study found that the dissimilarity in behaviour, for example, socialising as 'friends' through SNSs but ignoring the peer within offline spaces can cause confusion and frustration; escalating interpersonal problems. These findings correspond with previous research which has highlighted that SNS characteristics have the potential to affect the dynamics involved in

the adolescents' online social practices and the way they interact online with peers (Boyd, 2010b; Boyd, 2014; Isbister, 2013; Reich et al., 2012). The current findings arguably evidence that this can at times present additional challenges to their online and face-to-face peer interactions.

5.3.2.4 Uncertainty, mistrust and caution online complicates peer relations

While young people are now able to engage with a wider social network through SNSs, a large proportion of early adolescents' accounts suggest they are vulnerable to a number of contact-related risks which have the potential to foster strains in their peer relations, a predominant theme in this study. These risks include the increased anonymity of other SNS users or strangers, the creation of fake profiles or impersonation by a peer or "hacking", as reflected in previous research (Isbister, 2013). However, this study builds upon previous research by showing that the risks were acknowledged by more boys overall (including both socially prominent and isolated individuals) and more socially prominent girls. A possible explanation for this is that males engage in more risk-taking behaviours compared to females. Quantitative findings from this study showing substantially more males are likely to accept all friend requests or form online 'friends' support this idea. The findings could also arguably suggest that early adolescents who engage in more opportunities online are also likely to encounter more risks online. Some early adolescents also raised concerns about the permanence of personal content that could be misconstrued if taken out of context and used against them by other peers. While this does not undermine their desire for autonomy and social connections, their SNS interactions and relations with peers are mediated by a sense of uncertainty, mistrust and caution online, aware that the affordances of SNSs can further complicate social situations or social relations with the potential for impersonations, fakery or personal information being used against them.

5.3.2.4.1 Differing perceptions of bullying in the digital era

In addition, while literature on adolescents' online experiences have often highlighted the high prevalence of cyberbullying on SNSs, the findings from this study are not consistent with those of previous research (e.g. Lasher & Baker, 2015; Lilley, Ball & Vernon, 2014). While it should be stressed that this study has sought to gain a balanced view on how SNSs impact on peer relations, the topic of cyberbullying, was only raised by a small minority of early adolescents, who discussed cyberbullying of others rather than their own experiences, compared to the range of other negative implications of SNSs. A complicating factor of this finding is that the incidents reported by pupils do not fully fit into the definition of cyberbullying from previous literature, for example, pupils in this

study reported one-off incidents or reciprocated acts of harm (e.g. Smith, 2012), and supports the viewpoint by Modecki et al. (2014) and Boyd (2013) that the characteristics of bullying can be imprecise due to its subjective nature. Furthermore, findings from this study suggests that the majority of early adolescents do not match their negative experiences with the term 'cyberbullying', despite being aware of this term through school. While it is clear that SNSs have contributed novel ways to create offence or acts of harm, the early adolescents' accounts imply the complexity of most relational problems or conflicts when context is considered (Vandebosch & Cleemput, 2008).

5.4 Conclusion

This study contributes to the understanding of how early adolescents are using SNSs and how their use mediates their peer relationships both positively and negatively. The research gives context to and affirms the extensive use of SNS in early adolescence at a critical time in their social development, indicating differences for gender and social prominence. Findings suggest positive influences of SNS use on peer relations with adolescents enhancing their offline relationships by widening their social networks, utilising online tools for gaining social information, interaction and social support. While boys use SNSs as an avenue for socialisation through gaming, girls are using SNSs more intensely to communicate with friends seen daily. Importantly, for those isolated individuals, SNSs has allowed them to form local connections beyond school and increased their confidence when interacting online. Negative influences were also identified through this research; complicating and amplifying social situations, relational problems or strains in relationships. The online social practices of early adolescents seem to mirror offline peer relationships but the developmental tasks are experienced more acutely through the use of SNSs. This research has important implications for EP practice in raising awareness and providing a balanced view of the role of SNS use on early adolescent peer relations.

5.5 Strengths

This study provides a valuable contribution to contemporary understanding of young people's engagement with digital media. The findings inform current social concerns, controversies and debates by offering a balanced view of both the positive and negatives aspects of SNS use on peer relationships, broadening societal perceptions of the risks of SNS use. In addition, this study contributes and adds to existing research by focusing on early adolescents.

The use of a mixed-methods approach was another key strength of this research. This enabled the 'triangulation' of quantitative and qualitative findings to provide a broad and deep understanding of the phenomenon of SNS use amongst young adolescents. The use of a questionnaire gave important contextual information about the ways in which early adolescents are currently using SNSs. The interviews enabled the participants to share their insights which allowed the researcher to better understand the complexities and nuances of their experiences of the virtual context.

The use of the Socio Cognitive Map, previously only used in one other study on SNSs, enabled the identification of a small percentage of 'isolated' individuals. Interestingly, not all isolated individuals were identified as such by school. This observation has useful implications for EPs; staff may not always be able to recognise isolated individuals. Raising the awareness of this potentially vulnerable group may be valuable, given the growing importance of peer relationships amongst early adolescents. Moreover, no SNS research has previously focused on social media use of isolated individuals therefore this study gives invaluable insight into the impact of SNS use for a group whose views are under-represented.

5.6 Limitations and Future Research

The research findings were limited by sample size, inherent within to the constraints of a small-scale time-limited study. The researcher hoped to recruit a larger sample for interviews, as this would allow greater representation of a wider range of individuals of the focus categories (e.g. gender and social prominence). Only 15 'isolated' individuals were identified from one large secondary school. This meant that the sample size was too small to provide quantifiable and statistically significant results for comparison of social prominence with the 'nuclear' group, or meaningful conclusions about the similarities and differences in SNS use of the two groups. Given the challenges of identifying 'isolated' individuals who may be vulnerable, as well as the potential heterogeneity of this group, future research might consider exploring their views further using detailed case studies. Future research could also explore the SNS use and impact on other vulnerable groups, such as those with Autism Spectrum Disorder (ASD) and other Special Educational Needs, who might have varied SNS experiences from their peers.

In addition, this research focussed on a sample of early adolescents from a single secondary school with a majority black sample (40%), which may limit the generalisability of the findings to other groups and contexts. It is likely that the predominantly Black African inner-London sample may have had broader cultural and

social differences in SNS use. For example, some interviewees indicated that parents held cultural views about social practices and prominence of family relationships over peer relationships, which would have been likely to have implications for SNS use. Nevertheless, previous research into SNS use by minority groups has been sparse, and therefore these findings enhance understanding of the impact of SNS use among an under-represented population. Future research should seek to explore this area for young people of a wider range of groups and contexts.

It is acknowledged that the use of cross-sectional data means it was not possible to establish any casual relationships. The researcher hypothesised that other variables, such as social functioning, might mediate the relationship between SNS use and peer relationships. However, further research using a longitudinal methodology would be required to explore the direction of the relationship between SNS use and peer relations, and the role of other mediating variables.

Furthermore, this study was reliant on self-report data, making it susceptible to social desirability and recollection error bias. For example, participants might under or over-estimate the level of their SNS use and its impact on their daily activities and peer relationships, or under report their negative experiences. Future research might incorporate observational data or analysis of actual SNS exchanges, to generate additional data to inform understanding of this area of adolescent social experience.

Finally, future research is required to explore the role of other forms of digital media use for early adolescent peer relationships. In the current world of multi-media, alternative forms of digital communication (e.g. Whatsapp and instant messaging) might provide an additional dimension to adolescent social practices. The current study did not have the scope to capture the complexities of all digital communication use for early adolescents. Nevertheless, the findings provide a starting point for prospective research into different forms of digital media and communication choices among adolescents, and their impact on peer relations.

5.7 Implications for EP Practice and Policy

5.7.1 Implications for policy makers

The UK Council for Child Internet Safety (UKCCIS) was established in 2008 to address the rapid pace of technological change and consequent shifts in young people's use of SNSs, and act on issues pertaining to their online practices. The resulting knowledge has been much valued by UK policy makers aiming to create and implement actions to protect CYP online. Yet most of the reviews have focused on the risks of harm online (UKCCIS,

2017). On-going initiatives by government, regulators and industries often promote e-safety campaigns, highlighting the dangers of SNSs to try to manage young people's (YP's) online interactions. However, the findings of this study show that early adolescents, for the most part, believe that SNSs mediate their online experiences and peer relations in positive ways. Clearly, negative experiences should be acknowledged and there is a responsibility to protect CYP in relation to their social networking online. However, the important developmental tasks played out during early adolescence are enhanced through SNS communication, particularly as their peer relationships and support in the offline world are extended into their online world. This thesis highlighted the early adolescents' motivations for SNS use (e.g. make new friends, build relationships and widen their circle of contacts) and anticipated benefits (e.g. 'hanging-out' online, immediate peer support, overcoming shyness), but also especially how instrumental SNSs use is for early adolescents as they transition to secondary, given the lack of opportunities to meet peers face-to-face. Given this context, policies should recognise all aspects of YP's SNS use and promote awareness of the benefits CYP could gain, as well as explaining what is technologically possible through the features of SNSs so that stakeholders, including parents and teachers, can assist YP in managing their experiences.

At the time of this study, the UKCCIS published a framework 'Education for a Connected World'(UKCCIS, 2018) – which describes the opportunities every CYP, at each age and stage of development should learn and develop in relation to the specific skills, knowledge and understanding required to safely navigate the current online world and make a positive contribution online. In addition to age being a major factor influencing CYP's online experiences, it is also important for stakeholders to develop an understanding of the dimensions of gender and level of social functioning as factors in the relationship between SNS use and peer relations. There is evidence from this thesis to suggest that there are some differences in experiences of SNS use, with regards to gender and social prominence. For example, there were gender differences in the (1) range of SNS activities and (2) number of hours spent communicating on SNSs, while socially prominent early adolescents were more likely to utilise the features of SNSs to 'hang-out' online in peer groups compared to isolated individuals. The study also showed variation in the number of online friends that the early adolescents reported. It could be argued that, to some extent, the influences of SNSs are shaped by how each early adolescent engages and interacts with the features of SNSs. These factors indicate the importance of developing resources, awareness programmes and guidance for

stakeholders, including children that explore their online experiences in the context of other factors (i.e. developmental stage, gender, social functioning).

This study highlighted that as CYP forge their way into the online world, early adolescents are becoming more aware and cautious about the risks online. However, it is also apparent that their negative experiences were at times intensified by their lack of digital literacy skills (e.g. not controlling privacy settings not knowing how to navigate the affordances of SNSs). Given how deeply embedded SNSs are in early adolescents lives and increasingly for younger children, this therefore has implications for policy development. While schools are promoting safer internet use, there should be efforts by stakeholders to call for digital media education to be included in the curriculum, as digital literacy will not only enable CYP to benefit from opportunities but also safeguard themselves from any potential online risks.

5.7.2 Implications for EPs

This research highlights the significance of SNS use for early adolescent social development, which has important implications for EP practice. While EPs may have a broad range of psychological theories to bring to this area, there is still a question of how confident EPs are in giving advice to children, young people, their families and school staff on this most topical issue.

Practitioners with limited experience of SNS use need to develop their knowledge of its role, as part of their professional development. SNSs comprise an important social variable and represent a new environment through which to examine adolescent relations. Therefore, EPs should consider both online and offline interactions, when supporting social development in the current context (including the consideration of gender and social prominence).

As EPs work systemically with young people, families and schools, they are well placed to disseminate the findings of this research. This should include raising awareness of the prevalence of SNS use amongst adolescents, and its role in peer relations (i.e. through consultation and training). EPs can use their consultation skills to promote critical understanding, instead of focusing on restrictive approaches to SNS use. As research findings highlight both positive and negative influences on peer relations, EPs can challenge some of the societal misconceptions, and share a balanced view of SNSs including their potential benefits. Furthermore, with this knowledge, EPs can offer guidance on having transparent conversations with young people to promote safe and positive online experiences.

This study highlights the importance of gaining pupil voice for understanding online and offline peer relations in the ever-changing social world. Through individual work with pupils, EPs should explore their online social practices and relationships, potential vulnerabilities and views about the impact of SNS use on their social lives. The findings regarding the different experiences of isolated individuals' have relevance for EP work with vulnerable pupils. They suggest a need to consider individual differences (such as whether online and offline experiences are different or parallel) without making assumptions.

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APPENDICES

Appendix A: Ethics Approval Form

Dear Veronica,

I am pleased to inform you that your research project **"Exploring adolescents' perceptions of how their use of Social Network Sites is impacting on their peer relationships"**, for the year 2 research project on the Doctorate in Professional Educational, Child and Adolescent Psychology, has been given ethical approval. If you have any further queries in this regard, please contact your supervisor.

Please note that if your proposed study and methodology changes markedly from what you have outlined in your ethics review application, you may need to complete and submit a new or revised application. Should this possibility arise, please discuss with your supervisor in the first instance before you proceed with a new/revised application.

Your ethical approval form has been logged and will be uploaded to the UCL IOE database.

Good luck with your data collection.

Kind regards,
Lee

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Appendix B: Search Strategy for Literature Review

Between November 2016 and January 2018, a comprehensive literature search was carried out to identify and review available research papers relevant to this topic. To gain a general overview of the literature, a range of electronic databases and search engines were used. This included PsychINFO, ERIC (Education Resources Information Centre), British Education Index, Web of Science, Google Scholar and UCL Explore.

Once key concepts were identified, various combinations of keywords including synonyms, associated descriptors and terms in truncated forms were generated as outlined below:

- "peer relations" OR "peer relationships" OR friend* OR peers OR "peer groups" OR "social networks" OR "peer networks" OR isolate* OR popular*
- adolescen* OR "early adolescence" OR "young adolescence" OR teen* OR "young people" OR "young person"
- "social network site" OR social networking site OR online social networks
- "computer-mediated communication"
- "gender differences" OR male OR female OR boys OR girls

Books, reports, government related publications, references suggested by research supervisors and a few journal articles referenced in studies identified through the literature search were also considered and reviewed. With literature growing rapidly from the continued focus and attention by the public over the use of social media and adolescent development, additional follow-up searches were conducted over the time of this research.

Guidelines presented by Ryan, Coughlan, & Cronin (2007) and Coughlan, Cronin & Ryan (2007) formed the basis of the review process to ensure the relevance and quality of articles selected. The search also included other countries apart from the UK as research in the UK is still limited, while relevant studies have also been conducted globally, for example, the EU Kids Online Project which was carried out across 25 European countries (Livingstone & Haddon, 2007) or in the USA (Lenhart et al., 2007; Lenhart et al., 2011). Where these articles were considered however, research limitation with regards to the generalisability to young people in the UK were discussed. Articles other than the ones published in the English language were also excluded.

Appendix C: Information sheet for Head Teachers and Consent Form

Institute of Education

UCL

Title Project: Early Adolescent Views on the Mediating Role of Social Network Site Use on Peer Relations

My name is Veronica D'Rozario and I am a Trainee Educational Psychologist and doctorate student at UCL Institute of Education, a leading university with expertise in education and social science research. As part of my course, I am carrying out a study designed to learn more about how and why young people are using Social Network Sites (SNSs) and how they perceive these online social network activities to impact on their peer relationships. This research is being overseen by Professor Peter Blatchford and Dr Karen Majors at UCL Institute of Education and forms part of my professional qualification.

I am writing to enquire whether you would give me permission to recruit Year 8 students currently enrolled at your school. Before you decide whether you want to take part, this information sheet will try and answer any questions you might have about the project. Please take time to read the following information and feel free to ask me if there is anything that is not clear or if you would like to know more information.

What is the purpose of this study?
Over the past decade, the use of social Network sites (SNSs) as a technological platform has grown exponentially. Adolescents are among the most prolific users of SNSs which is deeply embedded in the social context of their adolescent lives. The use of SNSs have inadvertently added on a new 'virtual context' to their socialisation and is therefore having a profound impact on the social lives of children and young people.

While 'peer relations' is recognised as one of the most important features of psychosocial development in adolescence, current knowledge about the role and impact of SNSs on peer relationships is still relatively new, little understood and still a matter of intense debate. This study intends to provide a better understanding of how young people are using Social Network Sites and of the link between their SNS experiences and virtual and face-to-face peer relationships. As the generation of children and young people are beginning to use digital network sites at a much younger age, this study hopes to gather the views of young people and gain further insight into how they perceive this 'virtual context' is influencing their quality of friendships and peer groups. Added knowledge from this study would not only provide us with a better understanding of their experiences online and how this may impact on their psychosocial development but it would also help raise awareness amongst professionals, parents and young people themselves about the risks as well as potential social benefits associated with using SNSs.

What does the study involve?
This study will involve two parts:

During Phase 1, all Year 8 students at your school will be asked to answer a series of questions through a SNS questionnaire. This will take about 30 minutes to complete.

Following this, for Phase 2, a semi-structured interview would be carried out. For this interview, a select number of Year 8 students (between 10-12 pupils) who previously completed the questionnaire would be invited to participate. This interview will further explore their views about SNSs and peer relationships in more detail and will take about 45 minutes.

Do I have to take part?
Participation is voluntary and you may choose not to take part in this study. We hope that if you do choose to be involved then you will find it a valuable experience. Should you choose to take part, and then change your mind, you have the right to withdraw at any time.

If you decide to take part, you will be asked to sign a consent form. Information sheets would then be distributed to parents. Once permission from parents has been gained for student participation, the students themselves would be informed about this study and will be given the opportunity to ask me any questions they might have. If they do consent to participate, they are entitled to withdraw from participation at any time should they feel like opting out.

Will our taking part be kept confidential?
The study has been approved by the UCL Institute of Education Research Ethics Committee. All information collected from the young people will remain strictly confidential and anonymous. No individuals or schools will be identifiable when the findings are reported. The only time someone will be identified is where there are questions or issues raised regarding the safety of the participant or others. Contact will then be made with the school designated safe guarding officer. The UK Data Protection Act 1998 will apply to all information gathered and held on password-locked computer files. No data will be accessed by anyone other than the researcher.

What will happen to the results of this study?
I will produce a final report summarising the main findings and implications of my study which will only be shared with colleagues within the Department of Psychology and Human Development at the UCL IOE. A summary of the main findings and implications of this study would also be shared with school staff, parents and adolescents.

Who should I contact for further information?
If you have any questions or would like to request more information please do not hesitate to contact me by email at [redacted]

Yours sincerely,
Veronica D'Rozario

Trainee Educational Psychologist
UCL Institute of Education

Thank you for reading this information sheet and for your consideration in taking part in this research study.

Institute of Education

UCL

Consent Form for Head Teachers

Please read the attached Information Sheet before completing this form.

- I have read and understand the Information Sheet giving details of the project.
- My decision to consent is entirely voluntary and I understand that I am free to withdraw my permission at any time without giving a reason.
- I understand that data gathered in this project may form the basis of a report or other form of publication or presentation.
- I understand that the School's name will not be used in any report, publication or presentation, and that every effort will be made to protect the School's confidentiality.
- I give my permission for the UCL IoE doctorate student to undertake this research in my school

School's name (in CAPITALS): _____

Head Teacher's name (in CAPITALS): _____

Head Teacher's signature: _____

Date: _____

Appendix D: Phase 1: Information Letter for Parents and Consent Form (Opt-out)

Institute of Education

UCL

Early Adolescent Views on the Mediating Role of Social Network Site Use on Peer Relations

Invitation to take part

My name is Veronica D'Rozario and I am currently a second year Trainee on a three year Doctoral Course of Child and Adolescent Educational Psychology at the UCL Institute of Education. This research is being overseen by Professor Peter Blatchford and Dr Karen Majors at UCL Institute of Education and forms part of my professional qualification. This letter explains about the study I will be conducting and asks for your permission and consent for your child to participate in this research project.

What is this study about?

This study aims to gain an insight into how young people are using Social Network Sites (SNSs). It also aims to understand the experiences encountered by younger adolescents online in relation to their friendships and social relationships. The findings can help us be clearer about the social benefits Social Network Sites are having on young people's social lives but also raise awareness about the potential risks related to their use of this digital tool. This understanding will contribute towards providing guidance for parents and professionals, so they can learn ways to help and support their children when using Social Network Sites.

What will happen if I allow my child to take part?

There are two parts to this study. (1) For the first phase, your child will be given a questionnaire asking about their use of SNSs which would take about 20 minutes in total. (2) In the second phase, a group of students which may include your child, will take part in an interview, approximately 30-45 minutes, at school during the school day. Your child will be asked to share about their experiences using SNSs and how they perceive this impacts on their peer relationships.

Taking part in this study however is entirely voluntary. You can change your mind at any time and choose to opt out of this study if you wish to do so.

Will information be kept confidential?

Your child's answers will be strictly confidential and will not be shared with anyone other than me and my supervisors. Findings from the research may be presented but all data will be anonymised.

This study has been approved by the UCL Institute of Education Research Ethics Committee.

Please feel free to contact me, Veronica D'Rozario at [redacted] should you have any further questions about the study or concerns about your child's participation.

Next Steps
If you agree, you will not have to do anything further.

Thank you for your time and consideration

Opt-Out Form

Only fill out this form if you DO NOT give permission for your child to take part and return to the school office before _____.

I DO NOT give permission for my child (name)_____ to participate in this study

Your Name: _____

Relationship to Child: _____

Signature: _____

Appendix E - Phase 2: Information Letter for Parents and Consent Form (Opt-In)

Institute of Education

UCL

Early Adolescent Views on the Mediating Role of Social Network Site Use on Peer Relations

Dear parent/carer,

I previously wrote to you asking for permission for your child to participate in my study. As a reminder, I am Veronica D'Rozario, a second year Trainee on a three year Doctoral Course of Child and Adolescent Educational Psychology at the UCL Institute of Education. This study is overseen by Professor Peter Blatchford and Dr Karen Majors at UCL Institute of Education and forms part of my professional qualification.

What is this study about?

This study aims to gain an insight into how young people are using Social Network Sites (SNSs). It also aims to understand the experiences encountered by younger adolescents online in relation to their friendships and social relationships. The findings can help us be clearer about the social benefits SNSs are having on young people's social lives but also raise awareness about the potential risks related to their use of this digital tool. This understanding will contribute towards providing guidance for parents and professionals, so they can learn ways to help and support their children when using SNSs.

Your child has already completed a questionnaire in school exploring how adolescents are using SNSs

Invitation to take part in Part 2 of this study

As part of the second part of this study, I would now like to further interview your child about his/her social experiences using SNSs. This is to gain their views on some of the positive and negative aspects associated with their use of SNSs and how they feel this impacts on their friendships and social relationships.

What will happen if my child takes part?

Your son/daughter will be interviewed by me (Veronica D'Rozario). The interview will be audio recorded and will last around 30-45 minutes. These recordings will be anonymised and treated as strictly confidential. The data will be stored securely, then destroyed when this study is finished. No information identifying your child's name or school will be reported or published

If you agree for your child to take part in this second phase, I will then meet with the group of selected students to inform them about the interview and ask if them if they would like to take part.

You and your child may choose to withdraw from this study at any time without giving any reason.

What will you do with the results of this study?

Information and findings from this research will be written up as part of my thesis and may be made available for other researchers or practitioners. A summary of the main findings and implications of this study may also be shared with school staff, parents and adolescents upon request.

Next Steps

Please sign this letter at the bottom in the space provided below and return to the school office before _____ if you are willing for your child to take part..

Please feel free to contact me, Veronica D'Rozario at [redacted] should you have any further questions about the interview or concerns about your child's participation.

This study has been approved by the UCL Institute of Education Research Ethics Committee.

Once again, thank you for your time and consideration

**Please complete this section and place it in the envelop. Your child can return the envelope to their Form Tutor or Ms X.*

I DO give permission for my child to participate in this research.

Your name: _____

Your child's name: _____

Your child's form tutor: _____

Appendix F - Phase 1: Information Sheet and Consent for Participants

Social Networking Site Questionnaire

Before completing the following questionnaire, please read the following information...

What is this questionnaire about?

I would like to know how teenagers (like you) are using social networking sites/apps and how you think this impacts on your friendships or relationships with other people of your age.

What will we do?

- I hope to find out the information by asking you to answer some questions on paper through this questionnaire.
- There are no right or wrong answers. I am interested in what you think and feel.
- There are about 35 questions. It should take you about 20 minutes to complete.
- Please try to answer all the questions, although it for any reason there is a question that you would rather not answer, you can leave it blank.
- If for any reason, you change your mind and decide you do not want to continue, you can stop and withdraw at any point.

What will you do with the information?

- I will be asking you to write your name.
  However, your answers will remain anonymous.

- I will talk about your answers in my report but I will not use your name of your school's name.
- The only time any information may be shared with anybody else, is if it is clear that your safety (or the safety of anyone else) is at risk.

What happens after I finish this questionnaire?

- Once the questionnaire has been completed, there will be opportunities to discuss questions, should you have any.
- Following on from this questionnaire, you may be asked to participate in an individual interview, although this is optional and you are free to opt out of being interviewed if you would prefer.

Consent Form

How do you use social network sites?
How do you think this impacts on your relationships with peers your age?

If you agree with each statement, please complete the form by:

- ☑ ticking the boxes
- ☑ writing your name
- ☑ signing at the bottom

1. I have read the information sheet, understand the purpose of this study and know what I have to do next. ☐
2. I agree to take part in this study . ☐
3. I know that I can ask questions later if I have them. ☐
4. I know that all the things I say are strictly confidential and may only be shared if my safety (or the safety of anyone else) is at risk. ☐
5. I know that I can change my mind and that I may withdraw from the study at any time if I choose to. ☐

Full Name: _____

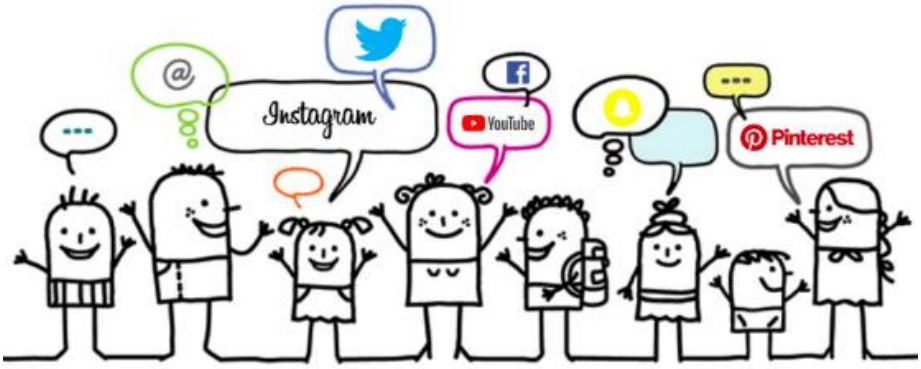
Signature:_____

Appendix G - Phase 1: Questionnaire on the Use of Social Network Sites

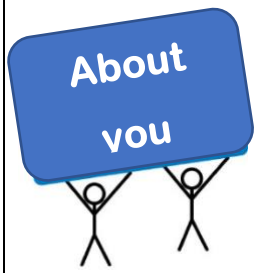
Social Network Site Questionnaire[1]

Children and young people use social network sites in lots of different ways. Here are some questions about

1) How you use social network sites to connect with your peers.
2) How you think social network sites may influence your relationships with other people your age.



Just a little note:
In the questionnaire, when I talk about 'face to face' I mean talking to someone in person at the same place rather than on the internet, phone or webcam.



Before we begin, it would be helpful for me to know a bit about yourself.	
Are you male or female?	
Which year group are you from?	
What is your ethnicity? e.g. White British/European, Black British/African, Pakistani, Black Caribbean etc.	

Please turn over to start…

1 Items in the questionnaire were adapted from Isbister (2013). Several items were also derived from (Livingstone, et.al., 2011b).

Which social network site(s) do you use? Tick to all that apply

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

I also use different social network sites.
Please list others you use: _____

1) If you use more than one, please name the one you use most often.

_____

2) How old were you when you first started using social network sites? Tick one

Age 7 (or below)	Age 8	Age 9	Age 10	Age 11	Age 12	Age 13	Age 14
☐	☐	☐	☐	☐	☐	☐	☐

3) How many profiles do you tend to set up when you use a social network site? Tick one

1	2	3	4+
☐	☐	☐	☐

If you have *more* than one account, can you explain the reason for this?

---

4) Is your profile set to…? Tick one.

Public, so that everyone can see it;	☐
Partially private, so that friends of friends or your networks can see	☐
Private so that only your friends can see;	☐
Don't know;	☐

5) How do you generally respond to requests from people to become your 'friends' on a social network site? Tick one

I generally accept all requests	☐
Accept only if we have friends in common	☐
Accept only if I know them	☐
Accept only if I know them very well	☐

6) Roughly how often do you use the following devices to log on to online social network sites? Please tick one box on every line.

	Several times each day	Daily or almost daily	At least every week	Less often	Never
On my phone	☐	☐	☐	☐	☐
A laptop/computer at school	☐	☐	☐	☐	☐
A laptop/computer at home	☐	☐	☐	☐	☐
A tablet	☐	☐	☐	☐	☐
A games console	☐	☐	☐	☐	☐

7) Roughly how long do you spend a day on social network sites? Tick one.

Little or nothing	About half an hour	About 1 hour	About 2 hours	About 3 hours	About 4 hours	About 5 hours	About 6 hours	About 7 hours or more
☐	☐	☐	☐	☐	☐	☐	☐	☐

8) Roughly how many 'Friends' do you have 'online' on social network sites? Tick one

10 or less	11-50	51-100	101-150	151-200	201-250	251-300	301-400	400+ Roughly how many?
☐	☐	☐	☐	☐	☐	☐	☐	☐

9) Roughly how many people are you in contact with when using a social network profile? Tick one

Up to 10	11-50	51-100	101-300	More than 300	Don't know/can't remember
☐	☐	☐	☐	☐	☐

10) Of your total 'Friends' on social network sites, roughly how many would you consider as **actual friends**? Tick one

1-5	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	50+ Roughly how many?
☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

11) In the last 3 weeks, how many of your **actual friends** have you met with 'face-to-face'? Tick one

1-10	11-20	21-30	31-40	41-50	50+ Roughly how many?
☐	☐	☐	☐	☐	☐

12) How often are you in contact with the following people on a social network site?

	Several times each day	Daily or almost daily	At least every week	Less often	Never
People whom I first met face to face	☐	☐	☐	☐	☐
People I first met on the internet, but who are friends or family of other people I know in person.	☐	☐	☐	☐	☐
People that I got to know through the internet but didn't know before	☐	☐	☐	☐	☐

13) Have you done any of the following things in the **past 12 months**; if yes how often have you done each of these things? Please tick one box on every line.

	YES				NO
	Everyday or almost every day	Once or twice a week	Once or twice a month	Less often	Never/ not in the past year
Looked for new friends on the internet…	☐	☐	☐	☐	☐
Added people to my *friends list or address book* that I have never met face to face	☐	☐	☐	☐	☐

14) How true are these of you? Please tick one box on every line.

	Not true	A bit true	Very true
I find it easier to be myself on the internet than when I am with people face to face	☐	☐	☐
I talk about different things on the internet than I do when speaking to people face to face	☐	☐	☐
On the internet I talk about private things which I do not share with people face to face	☐	☐	☐

15) What do you tend to use SNSs for? Please tick one box on every line.

	Always	Sometimes	Often	Rarely	Never
To chat with friends that I see everyday	☐	☐	☐	☐	☐
To chat to friends and family that I do not see everyday	☐	☐	☐	☐	☐
To look for old friends I have lost touch with	☐	☐	☐	☐	☐
To check up on the latest news among my friends	☐	☐	☐	☐	☐
To talk to new people that I do not know yet.	☐	☐	☐	☐	☐
To manage my profile (such as updating my status, posting photos & videos)	☐	☐	☐	☐	☐
To upload photos, music and/or videos to share with others	☐	☐	☐	☐	☐
To organise group or events	☐	☐	☐	☐	☐
To play games with other people	☐	☐	☐	☐	☐
Other reason(s) : *(please list)*	☐	☐	☐	☐	☐

16) Are there any ways that you think social network sites make your relationships with other people your age better? If so… in what way?

17) Are there any ways that you think social network sites put a strain on your relationships with other people your age? If so… in what way?

18) Are you aware of any occasions when you (or your friends) have felt that using social network sites have led to difficulties or misunderstandings with other people your age? If so…could you briefly describe what happened?

19) What advice would you give to people younger than you (such as younger brother or sister) if their friendship/peer group had just started using social network sites?

The next couple of questions are about friendship groups that hang around together within your Year group in your school…

20) Do you hang out with any group(s)?
Please list people by name below (including the first letter of their surname if possible)

For example: Group 1: James T, Eva S, Sam B, Katie L.

Group 1 - I hang around with:

What about other people? Are there people in your year group that you think tend to hang around together a lot? Who are they? You can list up to 6 groups…

Group 2:
Group 3:
Group 4:
Group 5:
Group 6:
Group 7:

Thank you very much for your help…

One last thing… I will be interviewing people later in the year to get more information about your experiences of using Social Network Sites in relation to friendships. If you are happy to talk more about your experiences and be considered for this, please circle 'yes' in the box. If you would prefer not to take part, please circle 'no'.

YES	NO
I am happy to be contacted again so that I can be considered for an interview at a later time.	I would prefer not to be contacted again and would not like to be interviewed.

Appendix H - Phase 2: Information Sheet for Participants and Assent Form

(Pupil Assent Form - *to complete just before the interview*)

- **How do you use social network sites?**
- **How do you think this impacts on your relationships with peers your age?**

Thank you for agreeing to do this interview today. Before we begin, please read through this form carefully and sign at the bottom.

How will we do this interview?

- I will ask you a set of questions about what you think about using social network sites.
- There are no right or wrong answers. I am interested in what you think and feel and your experiences.
- This interview will be tape recorded and should last about 30 minutes.

What will you do with the tape?

- I will listen to the tape from all the interviews and then write a report about the experiences of teenagers using Social Network Sites. The tapes will be deleted when I have finished using it.

What if I change my mind?

- You can change your mind about taking part anytime.
- If you do not want to answer a question, we can skip it.
- If you want a break, just tell me or use the break card.
- It you feel uncomfortable, it is okay if you want to stop the interview.

Will my name be used?

- No, I will give you a different name in the report, so what you think and share will be described without anyone knowing it's you or your school.

Is it confidential?

- Yes. You can tell anyone you like about the research, but I will treat what your responses as confidential. That means I won't tell anybody else unless I think your (or someone else) may be unsafe.

What if I have questions?

- After the interview, feel free to ask any questions you might have about this study or our discussion.

I have read and understood the information above. **I agree to take part in this interview**.

My name: _____ Date: _____

Please sign here: _____

Appendix I - Phase 1 and 2: Debriefing sheet

How do teens use social network sites?
How do teens think this impacts on their relationships with peers their age?

Thank you for taking part in my study. Your willingness to offer your time is greatly appreciated.

Why are you doing this study?

- Adults have a lot of hopes about the internet, particularly social media but also a lot of fears.
- This study listens to views of young people to find out how they are using Social Network Sites and see what they think about how this is influencing the social parts of their lives.
- The results of this study will be shared other adults, including professionals and parents.
  Your opinion will help adults better understand your experiences of using Social Network Sites.
- This will include some of the negative aspects teens like yourselves encounter online (for example, cyberbullying) but also will raise awareness about the benefits or positives of young people's use social network sites on their social lives.

Useful Contacts and Further Information:

If answering any of the questions led you to feel uncomfortable or distressed and you would like to speak to someone about your thoughts, please contact one of the following:

1 It would be best to speak to Ms XX at school, who would be able to offer you support or guidance about your concerns or questions.

2 

- If you prefer speak to someone you do not know: there is a website called **'Thinkuknow'** (https://www.thinkuknow.co.uk/) which you can visit.
- **Thinkuknow** has information on advice, help and support specifically for young people.

3 

- You can also use '**Childline'** (https://www.childline.org.uk/get-support/1-2-1-counsellor-chat/) where you can talk to a counsellor through your computer, phone or tablet.
- All your chats will be kept private. They can give you help and support with whatever is worrying you.

-Thank you again for your participation-

Appendix J: Phase 2 Participant Information

Pupil ID	Gender	Ethnicity	SCM category	Start Age	Type of SNS used	Number of SNS friends
FC1	F	White British	Central	10	Instagram, Snapchat, Google+	301-400
FC2	F	Black British	Central	9	Instagram, Snapchat	51-100
FC3	F	Black British	Central	10	Instagram, Snapchat	600+
FC4	F	Black British	Central	9	Snapchat, Whatsapp	201-250
MC1	M	Asian	Central	10	Snapchat, Twitter, Google+	11-50
MC2	M	Mixed Race	Central	10	Instagram, Google+ whatsapp	11-50
MC3	M	Black British	Isolated	5	Instagram, snapchat, google+, oovoo, houseparty	4
FI1	F	Black British	Isolated	5	Instagram, Snapchat, Twitter	3
FI2	F	Black British	Isolated	4	Instagram, Snapchat,	8
MI1	M	Mixed Race	Isolated	5	Instagram, Snapchat	9
MI2	M	Mixed Race	Isolated	6	FB, Instagram, snapchat, twitter, google+	6
MI3	M	Black British	Isolated	10	Instagram whatsapp	51-100
MI4	M	White British	Isolated	11	Instagram, Snapchat playstation	600
MI5	M	Black British	Isolated	9	Instagram, Snapchat, Twitter	400

Appendix K - Phase 2: Interview Schedule[2]

	Key Questions	Question Prompts
1	**Go through consent form.* **Warm up questions* **When did you join this school? Why did you choose to come to this school?**	Can you tell me three things you like about this school? What is your favourite subject at school? What do you like about that subject? Do you do any clubs at school? What are your interests outside of school?
2	**Do you any peers that you hang around with in school?**	Tell me more... How many people would you say are in your group? How come those particular people hang around together? Have you always hung around in this group? Do you hang around with any people from other groups?
3	**Do you have any other friends outside of school?**	How did you meet your friends outside of school?
4	**I can see that you started using SNSs since you were # old.** **What made you start using them then?**	Did/was there anything else influence this decision?
5	**Did you notice any changes to your social life after you started using SNSs?**	
6	**Okay I can see that you use #SNS and #SNS**	How come you use both of these? Have you used any other SNSs or have you always used those? Do you have a favourite one of those two? How come?
7	**What do you and your friends usually do on SNSs?**	Can you share a few examples of how you (or your friends) have recently used SNSs...say in the past few days? Is there any else you and your friends use SNSs for? And you say you use it to ….could you talk me through that?
8	**Do you and your friends use SNSs for anything else?**	
9	**I can see that you have _ friends on SNSs. What do you think about having _ friends on SNSs?**	What are some of the good things about having so many friends? Are there any bad things about this?
10	**How might you define what a friend is OR what does being a friend mean to you?**	

[2] Interview schedule derived and adapted from Isbister (2013)

11	**In your opinion, are `SNS friends' the same as 'actual friends' or are they different?**	How do you decide who to accept (and who to reject) as a friend? Can you tell me about this? Has this ever caused any difficulties between you and other users? Please explain further...
12	**What do you think about people being able to find out things about you through your SNS?**	Can you think of anything good about this? Can you think of anything bad about this?
13	**When you filled out a questionnaire... you mentioned one time when using SNSs had caused you trouble with other people...** **[*Read questionnaire response to participant*].**	Could you tell me a bit more about this... How do you think SNSs specifically contributed towards this problem?
14	**Do you find that any other social issues / difficulties ever arise as result of you using SNSs?**	
15	**Ok so I am going to read out to you some of the things that some of the other people in your year mentioned when they were asked about SNSs causing them `trouble'.** **For each example... I would like you to say if you have ever had the same thing happen to you (or one of your friends). If it has happened, I would be very interested in hearing about your experience, who was involved and what you thought about it.**	▪ *Friendship requests ignored.* ▪ *Having unwanted pictures uploaded about you* ▪ *Finding gossip/rumours about yourself on another person's profile page* ▪ *Finding yourself excluded from a group or event on a SNS* ▪ *Somebody creating a fake profile about you* ▪ *Somebody hacking into your account.* ▪ *Somebody bullying you online* Do you ever find then that has been a problem in your school?
16	**On the other hand, can you think of a time when using SNSs have helped you**	Could you tell me more... How do you think SNSs specifically helped in this case?
17	**In your experience, do you think that people act the same on SNSs or do people act differently?**	Please explain...Ok how so? Can you think of a time when that has happened and you have thought to yourself…
18	**If SNSs had never been invented, how would your social life be different?**	
19	**Is there anything at all about SNSs that we have not yet talked about that you would like to mention?**	Thank you for being so open and sharing about your experiences and perceptions.

Appendix L – Sample of Transcript with Codes (Central group)

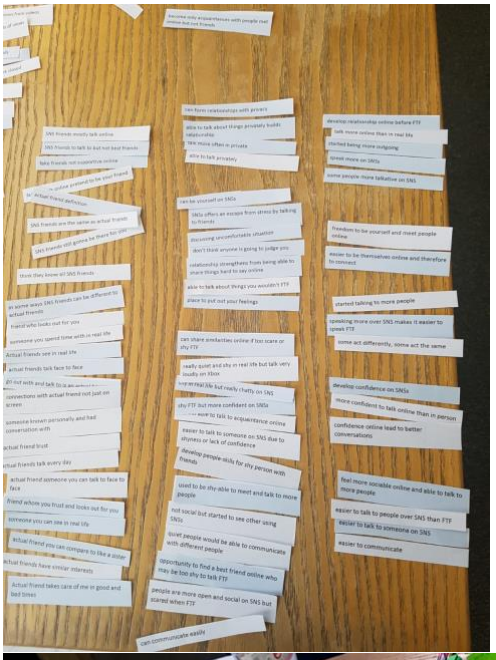
Transcript	Codes
find out quite a lot of information just form that little snippet of information. **Interviewer:** What do you think of meeting people online whom you have never met before but meeting them online? **MC2:** I would never do that. **Interviewer:** Can you maybe think of a time when you thought that SNSs have caused trouble for you or other people you know?	Concerns that personal information posted online easily accessible by all SNS users
MC2: (Immediately) Oh it was um in Year 6 or something, it was Facebook and I was talking to my friend and I think one of them played a prank on me. They said that they were hacked and um then I was hacked the next week and I deleted everything. **Interviewer:** Do you know who hacked your account?	Friend pranked pupil by hacking account Pupil deleted all accounts after being hacked.
MC2: I'm pretty sure it was him. Oh no no, it was this person from Italy or something. **Interviewer:** Interesting. When you filled out a questionnaire, you mentioned one time when using SNSs had caused you trouble with other people, your response was …social media leads to at times, at parts to bullying and this is because it allows people to discuss views and hurtful things and allows them to discuss ways to bully people and people also post pictures. Can you tell me a bit more about this?	Unsure if friend or an unknown source hacked account. SNSs leads to bullying SNSs allow people to discuss views and hurtful things SNSs allow people to discuss ways to bully people SNSs allows posting of unwanted photos
MC2: I think people online are a lot more harsh than in real life because there's um…like I said there is not really that barrier of…they don't really think and as if online, you group around… it's like in a riot…there is that sense of anonymity because it's not just you. You can join in a group and attack one thing or one person. **Interviewer:** Do you find that any other social issues / difficulties ever arise as result of you using SNSs?	Online users more harsh than face-to-face No barrier on SNSs Like a riot when group around Anonymity when part of an antagonistic group Able to join in group to attack person
MC2: I guess I have gotten a lot of my views from videos shared by friends from like Vox and stuff. But it hasn't really given me any difficulties. Maybe I have adopted veganism and dropped it the day after because there was kebab or whatever..but no not really many issues. **Interviewer:** Ok so I am going to read out to you some of the things that some of the other people in your year mentioned when they were asked about SNSs causing them `trouble'. For each example... I would like you to say if you have ever had the same	Developed personal views from videos shared by friends

wouldn't be as convenient. I would not be able to find out about things from others as quickly as I do. **Interviewer:** When you say that it might be different for others, what do you mean by that?	SNS increases the convenience of finding out information from peers online quickly
MC2: Because a lot of my friends, it evolves a lot around creating offence, or making parties or whatever on social network sites. Asking people things and a lot of people spend most of their time on social media.	Many peers create offence online Many peers organise parties online Many peers use SNSs to find out information from others
Interviewer: There is some debate at the moment about whether SNSs are a good or bad thing for teenagers...some people have even suggested that teenagers should be not be allowed to use SNSs at all. What do you think?	
MC2: I do think that …I mean to a certain extent, a lot of problems are stemmed from cyber bullying. Um, in this school, there have been some cases of cyberbullying but if it's monitored, maybe not so much so that their privacy is taken away. But if they are allowed to talk to their friends or things like that or if they are allowed to converse online I think it's fine. **Interviewer:** What about children younger than yourself? **MC2:** I guess if they are using it in a restricted way maybe not any social medias that could harm them but if they know what they are doing and the parent knows then I guess it will be fine. **Interviewer:** How would they help younger children? **MC2:** No they wouldn't help. No. **Interviewer:** And why is that?	A lot of problems stem from cyber-bullying Some cases of cyber-bullying in this school
MC2: Because they don't really have anyone to talk to at a young age. Maybe from Year 5, Year 6? They can have someone to talk to….but there is always school and there's not really anything to talk about after school. You could ask about homework but it's not such a long basic …it's not really…I forgot the word. It doesn't …they don't really get homework very often to the point where they have to talk about it. I mean most people get phones when they are in Year 6 so I guess they can message each other already. **Interviewer:** What do you think about other people your age who deliberately do not use SNSs?	Young adolescents can use SNSs to talk to other friends
MC2: I think It's fine for them. Maybe they don't want to or their phone can't handle the GCBQ usage but maybe their life…because my friend, she's not allowed to use it because her parents just don't let her. I have asked, "ask you parents". And it is a bit…there is a sense of inconvenience to that but she can still use whatsapp or the other things. I think it's fine for them personally. If I personally couldn't use SNSs, I'd use imessage or whatsapp or things like that.	Inconvenience without SNSs Peers can use other communication technologies to connect without SNSs

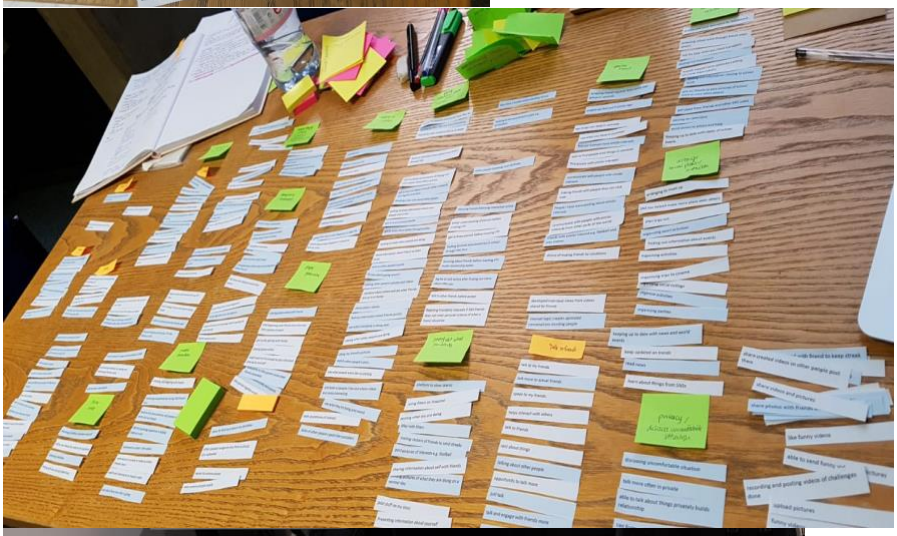
Interviewer: Any advantages	
MC2: I guess she isn't really tainted by all the things that goes on SNSs. I think it would be like me, I don't really have many friends but I think with her as well, her advantage is that, she has a more close group of friends in that it is a lot more closed.	Non users are not really 'tainted' by on-going social activities on SNSs. Non users have more closed peer groups
Interviewer: What do you mean by having a more closed group?	
MC2: I feel like she communicates with her group a lot more through messages. But what I think of SNSs is that it opens you up to a lot more people and that can lead to a lot more falling out.	SNSs connects teens to more people but can lead to more fall outs.
Interviewer: And is that related to what you meant by her not being tainted? Can you explain further?	
MC2: Um, when you're online and you get open to a lot more of points of views and opinions and you get sometimes a lot angrier and I think with her, she does have friends but they are all in school and she's not in the gossip and what it allows her to do is that it allows her to understand them more in real life as opposed to online.	Exposed to a lot more different viewpoints Get a lot angrier when exposed to points of views and opinions Non SNS users are protected from the gossip online. Non SNS users can understand peers better face-to-face.
Interviewer: Is there anything at all about SNSs that we have not yet talked about that you would like to mention?	
MC2: Um, there is a lot of controversy around YouTube..I mean that's not really Social Network Sites but you could find a lot of traumatic things online especially on social network sites. You could be shared things you don't really like that could just lead to a falling out all together.	Exposed to a lot of traumatic things Falling out from sharing of upsetting and unwanted content
Interviewer: Has that ever happened to anyone you know?	
MC2: Well, one of my friends, she just goes onto Facebook a lot. And um she just looks at these weird stories and these weird videos like um picking out spots and things…and they are shared by her friends.	
Interviewer: And what happens? Or what did she do?	
MC2: We just laughed any things.	
Interviewer: Is there anything else you'd like to share?	
MC2: No	
Interviewer: Thanks ever so much.	

Appendix M – Illustrative Examples of Coding Process for Phase 1 and 2

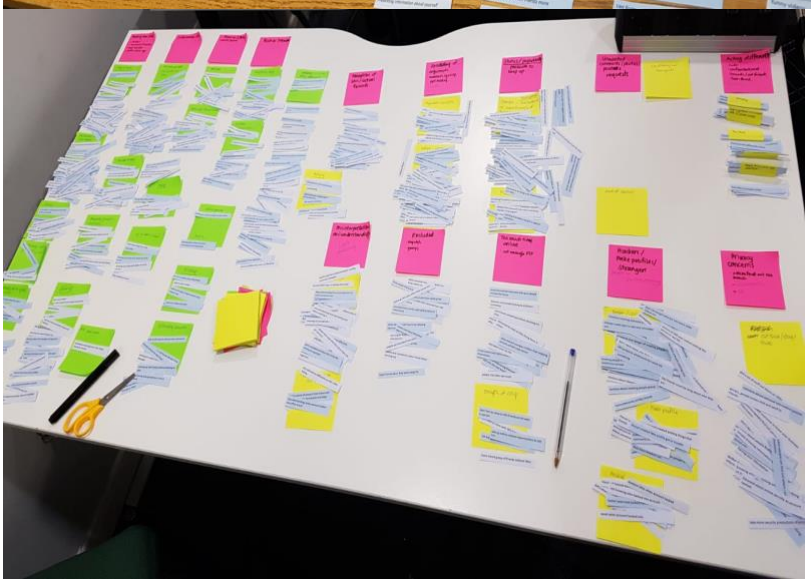
Phase 1 codes



Merging Phase 1 codes into subthemes and themes



Merging and checking Phase 1 and Phase 2 codes



Appendix N – Example of Phase 1 & Phase 2 Coding Table

This table shows how codes from Phase 1 and Phase 2 were combined.

THEME 1: POSITIVE INFLUENCE - Context for developing social networks			**Phase 1**				**Phase 2**			
Subtheme	**Phase 2 Codes**	**Phase 1 Codes**	**MC**	**MI**	**FC**	**FI**	**MC**	**MI**	**FC**	**FI**
Strengthening relationships with close friends		More people to talk to						I		
		A way to contact other people							I	
		Have more friends							I	
		Only accept if known from school or somewhere else								
		Can communicate and make new friends			I		I			
		Meet and talk to new people making more friends						I		
		Bored and want to talk to someone							I	
		SNS allows you to have more friends							I	
		Easier to connect people	I		I			I		
		Opportunities to make good friends						I		
		All of us can connect more on SNS								I
		Wont' have as much friends without SNS						I		
		Wouldn't know as much people						I		
		SNS has helped talk to more people						I		
		Develop relationship online before FTF			I					
Strengthening relationships with close friends	With close friends	BUILD A CLOSER RELATIONSHIP/ MORE INTIMATE	II II I		II		I			I
		Keep in touch with friends/ Stay in contact with friends	II I		I				II	
		Keep in touch with friends don't see FTF often	I							
		Talk to my friends							I	
		Talk more to actual friends					I			
		Speak to my friends						I		
		Helps interact with others	I							
		Talk to friends					I			
		Rant about things					I			
		Opportunity to talk more			I					
		Just talk more					I		I	
		Talk and engage with friends more			I					
		Talked to friends on SNS for awhile					I			
		Talk to your friends more							I	
		Use snapchat a lot to talk to people					I			
		Cause everybody uses it and you can talk to people								I
Maintaining existing networks	keeping contact with	Keeping in touch with primary school friends							I	
		Reuniting with friends from primary school						I		

	primary school friends	Staying in touch with old school friends									I
		Old friends from primary and mutual friends									I
	keeping contact old friends not seen in awhile	In touch with friends haven't seen in a long time						I			I
		Stay in contact with friends not seen anymore			I						
		Talking to friends haven't seen in a long time									I
		Build relationships with friends haven't seen a long time	I								
		Keep in touch with friends not spoken to in a long time			I						
		Reuniting with friends you lost touch with.			I						
		Hang out with old friends					I				
	keeping contact with friends living abroad	Easier to communicate when live far apart	I		I						
		Opportunities to talk to people living far away						I			
		Staying in touch with family from around the UK and world							I		
		Staying in touch with cousins							I		
		Easier to contact friends and family			I				I		
		Keep in touch with friends and family							I		
Forming newer networks of weak ties	Making friends with friends of friends	Way to get to know similar aged people through mutual friends	I								
		Old friends from primary and mutual friends									I
		Discover more friends through friends of friends						I			
		Gaining SNS friends by accepting friends of friends							I		
		SNS helps me make more friends through FOF						I			
		Make friends easily with mutual friends met online						I			
		Allowing communication with people in and out of school				I					
		Lack of seeing FTF and online become online friends			I						
		Less friends without SNS						I			
		SNS friends seen on special occasions					I				
		Have seen all SNS friends FTF at outings or parties							I		
	Getting to know school mates who are acquaintances	SNS friends with school mates who are acquaintances							I		I
		Communicate with people we don't get to know often			I						
		Accepting friend requests from same year group or upwards						I			
		Become friends and friendlier FTF after talking on SNS							I		
	Making friends with people from	Talk to friends from different schools who are the same age									I
		Able to meet other friends									I
		Met some friends outside school online									I

	other schools	Get more friends from different schools							I		
		Communicate with people from different schools			I						
		Talk to different people from other schools							I		
		Most SNS friends outside of school					I				
		Meeting people online who live locally						I			
		Started to know more people outside of school								I	
		Communicate more with people outside of school	I								
Fostering links with new people online	Connecting with new people online	Meet new friends online					I			II	
		Meet FTF after meeting online								I	
		Got to know new people outside of normal circle								I	
		Talk to online friends not met before								I	
		Find new people online to have a friend to meet						I			
		Way to get to know similar aged people met online	I								
		Can meet new people online	I								
		Able to talk to people from different countries			I						
		Add SNS user as friends after they viewed your snap								I	
		Get to know friends that follow you better						I			
		Make friends following subsequent exchanges after they comment on post								I	
		Most people my age communicate on SNS							I		
	Meeting new friends with similar interest	Making friends with people they can click with								I	
		Accepting friend requests from same year group or upwards							I		
		Choice of making friends by conditions								I	
		Communicate with people with similar interests from other parts of the world	I		I						
		Able to find people with things in common		I							
		Find people with similar interests	I								
	Gaming	Meeting new good friends through gaming to meeting FTF						I			
		Talk and make new friends through gaming						I			
		Meeting friends of new friend through online gaming then FTF						I			
		Meeting new friends from other parts of the world on gaming SNS						I			

THEME 1: NEGATIVE INFLUENCE - Sharing and spreading of negative content online			**Phase 1**				**Phase 2**			
Subthemes	**Categories**	**Initial Codes**	**MC**	**MI**	**FC**	**FI**	**MC**	**MI**	**FC**	**FI**
Sharing of inappropriate and unwanted media (photos and videos)		**get in trouble in school for posting anything bad*								
		**strict school sanctions for recording video even though not posted*								
		**school sanctions for recording video even though not posted*								
		**school sanctions pupils who uploaded unwanted photos*								
	Unwanted videos and pictures uploaded	Issue of photo taken and altered-mugshot					I			
		Posting mugshot to with happy birthday								
		Unwanted mugshot posted following argument						II		
		Unwanted mugshot post on birthday						I		
		Unwanted mugshot taken and posted as a joke						I		
		Sad over unwanted uploaded picture								
		Risk of falling out from sharing of upsetting or unwanted information								
		Unwanted videos reposted and spread							I	
		Unwanted videos posted as banter							I	
		Unwanted video recorded and uploaded						I		
		Unwanted uploaded photo posted on anonymous account						I		
		Unwanted picture uploaded and rumour started								I
		Unwanted pictures uploaded as a joke creates upset							I	
		Exposure to upsetting videos or posts					II			
		Unwanted pictures exposed							I	
		Unwanted pictures uploaded can be used and reposted other time							I	
		Unwanted photo uploaded						I		
		Unflattering pictures taken and uploaded							I	
		Unwanted photo taken and uploaded					II			I
	Screenshots shared Inappropriate pictures shared	Others screenshot your snaps when not wanted								
		Posting inappropriate content online								
		Unwanted comments made once person started talking in group						I		

		Inappropriate things sent to user by others in year group								I	
		Uploaded of naked pictures shared								I	
		Send nude images									
		Others posting inappropriate pictures									
Sharing of negative comments of others	**Indirecting*	*Naming and shaming not to your face*					I			I	
		People that don't like you post shady stuff about you									
		People like to indirect									
		Emotions affected by someone posting a sneaky insult			I						
	Posting hurtful comments Video receiving unwanted comments	Weird comments posted on page by other SNS users									
		Posting hurtful comments on picture									
		Best friend posts comment which is offensive			I						
		Negative comment uploaded video								I	
		Posting about jealousy on SNSs causing problems									
		Unwanted video receives unwanted comments for other SNS users						I			
		Posting about fight without considering feelings of other person									
		Annoying because loads of people send me annoying messages						I			
		Squeakers say mean things on Xbox									
Groups dynamics exacerbating negativity	Other SNS user want a reaction Viralise hurtful things – Group taunting person e.g. group chat Groups encouraging negative posts Twist words	Other people get involved and twist words									
		Stuff said on SNS twisted and changed									
		People recording fights and posting unwanted videos on SNS									
		Viralise hurtful things by posting pictures or discussing ways to bully					I				
		Other SNS users want a reaction to unkind posts									
		People gossip on SNSs after school about incidence in school									
		SNS allow people to discuss views and hurtful things									
		Other SNS users get involved when naming and shaming spreads									
		Groups online backing one or the other when fighting									I
		Some people take just take it too far on SNSs									

		Person starts rumours and everyone believes the person									
		Acting more harsh as a group online					I				
		Sense of anonymity when joining a group to attack another person									
		SNS allows users to discuss ways to bully people									
		Group chat making comments about height which carried on						I			
		Lots of people getting involved in online conflict									
		Other SNS users encourage negative posts									
		Everybody gets involved in tiny rumour									I
Spreading of gossip/rumours	Gossip and talking behind someone's back Gossip discovered about you	Unwanted picture uploaded and rumour started									
		People gossip on SNSs after school about incidence in school									
		Finding rumours about yourself on another person's profile page					I				
		Annoyed people saying nonsense about you									I
		People writing posts about another person									
		Issues of people talking behind your back	I		II	I					
		People that don't like you spreading rumours on SNSs									
		Talking about people from another school									
		Posting a lie about someone else									
		Screenshot of gossip sent to person spoken about									
		Telling people on SNS what person done to me									
		Finding stuff about you from boy's group chat								I	
		People that don't like you try to make a fool out of you – start a rumour.									
	Spreading of rumours/gossip	People believe a rumour linked to picture about you									
		Other SNS users believe untrue gossip									
		Sharing of private messages (screenshot) with other people									
		People fight on SNS									
		Got into argument over SNS	I			I		I			
		Inappropriate stuff spreaded far					I				
		Spreading of rumours causes a lot of ending of friendships									
		Spreading of rumour escalating into a fight									

		Spreading of rumours about you									
		Snaps rapidly shared through whole internet									
		Rumours made up									
		Untrue gossip about you spreads								I	
		Gossip started online leading to a serious right	I								
		Screenshotting and sending it everywhere									
		Spreading a lie leading to an argument									
		Making and spreading a lie on group chat									
		Other users snapping video of argument									
		SNS users from other schools get involved in fights, arguments									
		Online gossiping leading to problems.									
Arguments spreading and escalating	From school to online	Argument starts and escalates online to silly and nasty posts			I						
		Argument over a little issue escalates over SNS	I								
	Online to physical fights	Instigating conflict by posting online					I				
		Argument on Snap escalated to a physical fight			I						I
		Verbal argument escalated into physical fight					I				
		Argument FTF escalated over SNS							I		
		Happens really quickly online									I
		Arguments start online	II		I						
		Creating offence					I				
		Arguments in school with continue over SNSs							I		
		Argument online then had a fight						I			
		Online exchange escalating to physical fight	I								
		---------- ----------									
		Annoying people		I							
		Negative things coming out of SNSs; fighting; arguing and making up rumours									
		Bothered by other SNS users when not in the mood to talk		I							
		Added to a group or sent messages without permission asked						I			
		SNS opens you up to a lot more people that can lead to fall outs									
		Picked on for things posted									
		Annoying others on SNSs	I								

THEME 2: NEGATIVE INFLUENCES - Pressures for peer acceptance through display of status and popularity online			**MC**	**MI**	**FC**	**FI**	**MC**	**MI**	**FC**	**FI**
Pressure to gain more 'friends', followers, views, likes		Get views from friends and other SNS users								II
		Competition of who has more followers or views			I					
		Gain more followers							I	
		Conflict between pressure to gain follower and accepting requests from strangers			I					
		Get a lot of likes on posts						I		
		Aware of large number of SNS friends peers have					I			
		Feeling judged when have less SNS friends			I					
		How many follower you had mattered						I		
		Pressure to gain more points and friends								
		Embarrassing if posts don't get likes							I	
		See who get the highest score.								
		Arguments over highest score						I		
Pressure to maintain 'Streaks' - **none of the p1 participants mentioned this.*	Visual symbol to display level of seriousness/ superficiality of friendships	Streaks very popular								
		Gain street cred status through streaks					I			
		Doing streaks to gain days							I	
		Streaks to send pictures everyday								
		Asking someone to look after streaks							I	
		Gaining streaks points by sharing photos					I		I	II
		Do streaks					I			
		Trying to get high rank from streaks								
		Giving password to update streaks								
		Using streaks as a competition for status						I		
		Displaying you've been talking everyday on streaks						I		
		Have loads of streaks							I	
		send snaps to streaks								
Managing friendship requests		getting really upset when friendship request ignored						I		
		people think you and rude when friendship request not accepted								
		dealing with few types of people when rejecting friends on SNS					I			
		awkward when rejecting friend request							I	
		potential argument when friendship request ignored								
		ignore many followers request							I	

		friendship request ignored if I don't know you							I		
		accepting friendship requests quickly after not checking in awhile							I		
		rejecting friendship request to uphold reputation									
		friend requests haven't looked or accepted						I			
		sense of rejection when friendship request denied									
		arguments caused when friendship request rejected						I			
		spreading a rumour online when friendship request ignored									
Pressure to keeping up peer group		stress and pressure of keeping up with snap gang									
		delete my video when negative comment made							I		
		is this the right thing to say back								I	
		pressure to do things your friends present over SNSs									
		social embarrassment if friend points out incorrect information your present about yourself									
		concerns about how posts would be perceived by other SNS users								I	
		pressure post something online or others would get bored									
		peer pressure of wanting to look like other people									
		sometimes 51 to 100 friends is a lot to go through									
		pressure of having many friends online									
		difficulty keeping up with messages when a lot of SNS friends						I			
		pressure to take sides in an online argument									
		social embarrassment									
Possibilities of being excluded from groups		Tension arises FTF when removed from SNS group									
		Friends might get jealous when excluded from group outing						I			
		Removed from SNS group									
		Confusion over being excluded from SNS group						I			
		Tension arises when removed from SNS group									
		Added and excluded from social group						I			
		When excluded from event, people say things about you online					I				

		People get excluded from party get annoyed								
		Excluded from a party might define status of relationship								I
		Reject friends when they were using me								
		Name taken out of friend's list following argument matters								
		Relationship uncertainty when friend kicked out of group								