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Exploring adolescents' use of social networking sites and their perceptions of how this can influence their peer relationships.

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This thesis is dedicated to you all.

Abstract

Social networking site (SNS) use has gathered a truly global momentum. As a cohort whose development has coincided with these changes, adolescents tend to be heavy users of this technology. Yet this 'virtual context' of their social lives is relatively new and occurs between peers (away from the supervision of adults), making it a poorly understand area.

Existing research is unable to clarify how adolescents are engaging with SNSs and the impact this is having on their social lives. This study adopted a two-phased, mixed method approach, in order to explore adolescents' use of SNSs and their perceptions of how this can influence their peer relations.

During Phase 1, a total of two-hundred and forty three adolescents completed questionnaires. During Phase 2, a further twenty-one adolescents completed in-depth semi-structured interviews. Each phase included both SNS users and non-users. The quantitative data were mainly analysed using descriptive statistics and Chi-Square Analyses. The qualitative data were analysed using a thematic analysis.

The quantitative results showed that adolescents tend to be experienced, mobile and frequent users of SNSs. SNS used was linked to their perceived prominence within a social setting and the number of contacts online they had. However, the number of their real-life friends was more resistant to patterns of SNS use. The qualitative results showed that the influence of SNSs was mixed and multi-faceted. SNSs were perceived to be responsible for both subtle and, in some cases, dramatic ways. SNSs are exacerbating existing dynamics amongst adolescents and introducing new dynamics altogether.

The results have important implications for existing policies and regulations, challenging stakeholders to find pragmatic and creative approaches which can help young people utilise the benefits of SNSs, while also reducing the risks. Stake holders need to work together in order to make this possible. There are opportunities for Educational Psychologists at a child/school/service level to make a unique contribution towards achieving this.

Contents

Chapter 1: Introduction

There has been a social networking site (SNS) revolution in the past decade. Although there appears to be no reliable data regarding how many people use SNSs, various news agencies recently reported that Facebook (one of the most popular SNSs) is currently second only to 'Google' as the most visited internet destination and in October 2012, it surpassed 1 billion active users. Since its launch in 2004, it has been reported that users of Facebook have 'befriended' each other 140.3 billion times and uploaded 219 billion photographs (Lee, 2012; Kiss, 2012).

The magnitude of these figures suggests that something new and profound is taking place. Moreover, today's generation of adolescents, are unique, as their development has coincided with this explosion in SNS usage and they tend to be particularly heavy users of this technology (Livingstone, Olafsson, Staksrud, 2013). Adolescents now have a virtual dimension to their social lives. Yet adolescent SNSs use seems to occur largely away from the supervision of adults and it is presently difficult to determine how they are using SNSs and more crucially, what influence this is having on their social lives.

While the influence of SNSs is likely to be mixed and multi-faceted, the current academic literature base is limited in shedding further understanding on these issues. Research which has examined the nature of face-to-face peer relations *and* research which has examined the influence of Computer-Mediated-Communication (CMC) can inform our understanding of this area. However, in both cases, a review of this literature, leads to some speculative understanding and a host of unanswered questions.

Research conducted on emerging adults' (age 19-25) use of SNSs tends to be positive. Citing the increased 'social capital' associated with using SNSs. Social capital broadly refers to the benefits we derive from our relationships (Lin, 2001). For individuals, this means drawing on the resources (e.g. useful information, personal relationships or the capacity to organize groups) from other members of networks to which he or she belongs. In stark contrast, research conducted on adolescents' (age 13-18) use of communication technologies (including SNSs) tends to be negative. Focusing on the

possibility it affords for bullying by electronic means, collectively referred to as cyber-bullying (Vandebosch & van Cleemput, 2008).

These contrasting discourses have created an artificially polarized picture, which is unconvincing in portraying the range of influences that SNSs may bring to adolescents' social lives. Moreover, both social capital research and cyber-bullying research are plagued by various conceptual and methodological issues, which raise questions about their reliability and validity.

There are a handful of very recent small-scale, predominantly qualitative research studies (e.g. Subrahmanyam, Reich, Waechter & Espinoza, 2012; Reich et al, 2012; Tokunaga, 2011) which have shown that SNSs can be responsible for a number of mixed influences which has not been detected by either social capital research or cyber-bullying research. Yet these studies share common methodological weaknesses, which diminish the credibility of their findings and limit their wider applicability.

This study will explore adolescents' use of SNSs and their perceptions of how SNSs can influence their peer relationships. Specifically, it will explore the following research questions:

RQ1). How are adolescents using SNSs and how is this use linked to their face-to-face relations with peers?
While research has shown that adolescents are using SNSs, there is currently a paucity of information relating to a myriad of further related questions, including (among other things), questions related to which SNSs adolescents are using, how often adolescents are using SNSs, how they are accessing SNSs and how many people they are linking up with on SNSs. In addition to this, no previous research has explicitly explored the link between adolescents' use of SNSs and its association with aspects of their face-to-face peer relations.

The information used to answer these questions will also provide a platform from which to consider the findings of the further research questions posed within this study.

RQ2). What advantages do adolescents perceive that SNSs bring to their peer relationships?

In contrast to the predominantly negative discourse of adolescents' use of SNS, which is commonly reported in the media (Livingstone & Hadden, 2009), this question will explore how SNSs are enriching adolescents' social lives and what they are bringing to adolescents' social lives (above and beyond the usual opportunities for face-to-face interaction).

RQ3). What disadvantages do adolescents perceive that SNSs bring to their peer relationships?

This question will explore the tensions and/or strains which adolescents perceive that SNSs bring to their social lives. While there has already been some research into the association between communication technologies and cyber-bullying, this has tended to shift the focus onto the more extreme end of the spectrum of influence. Potentially skewing our understanding and detracting attention away from the full range of tensions or strains associated with using SNSs.

RQ4). How do adolescents who *do not* use social networking sites perceive that this has influenced their peer relationships?

While there has been a paucity of research exploring the views of adolescent SNSs, there has been only one solitary study (Baker & White, 2012) exploring the minority of adolescents who (for various reasons) do not use SNSs. Baker and White (2012) highlighted some of the reasons adolescents gave for not engaging with SNSs. This study will explore the more central issue of how not using SNSs during adolescence may be influence peer relationships.

Wider Importance: The results of this study tap into the wider debate about the impact of ICT. The findings could be used to assist children and young people themselves to utilise the benefits of SNSs, while minimising the risks. It will also help inform debates about the role of SNSs in children and young people's lives and could be used to guide future policies related to children and young people's safe use of the internet.

Chapter 2: Literature Review

2.1. Overview.

This chapter starts with a brief outline of some of the broader social trends, which appear to be relevant when considering adolescents' use of SNSs. This will be followed by a definition of SNSs, an outline of some of their central features and reports of the available data on adolescence SNS use.

The main part of this chapter will convey some of the consistent themes which have emerged out of existing research into face-to-face adolescent peer relationships. It will also cover research concerned with Computer Mediated Communication (CMC). This chapter will also critically examine the discourses surrounding (1) research conducted with 'emerging adults' (looking into 'social capital') and (2) research conducted on adolescents (looking into 'cyber-bullying'). The final part of this chapter will review the handful of recent qualitative studies which have explored some of the more subtle social influences of SNSs. For details of the literature search strategy employed, please see Appendix 6.2.1.

The chapter will culminate in a specification and justification of the research questions of the present study.

2.2. Adolescent SNS use in context and the changing nature of children and young people's social lives.

Researchers studying peer relationships during childhood increasingly recognise the importance of adopting an approach which is sensitive to the various practical and contextual factors which shape peer relationships (Way & Hamm 2005). Existing research has tended to study children and young people's peer relationships within the *physical* context of school (Blatchford & Baines, 2010; Pelligrini & Blatchford, 2000), or specific *physical* contexts such as the classroom or playground (Blatchford, 1998; Howe & Mercer, 2007). With respect to these physical contexts, it has been argued that various social trends, including (among other things), a reduction in the length of break-times (Blatchford & Baines 2006) and a reduction in the number of youth centers and the amount of open space available for children (Make Space Youth Review, 2007), have ultimately led to an erosion in children's freedom, reducing opportunities for them

to engage in unsupervised, face-to-face, free-play and interaction (for a detailed summary of this issue please see Baines & Blatchford, 2011).

On the other hand, these trends have also coincided with an explosion in availability and access to communication technologies (such as mobile phones and the internet), which has added a new *virtual* dimension to children's peer relations. Generating a kind of 'virtual playground', where children are free to play, communicate and socialise, away from the supervision of adults. The internet, in particular, is becoming increasingly used for social purposes and the popularity of SNSs has gathered a truly global momentum. As a cohort whose development has coincided with these changes, today's adolescents, appear to be particularly adept at keeping pace with these developments (Livingstone et al., 2013).

2.3. A definition and outline of SNSs.

Social networking sites have been defined as, 'Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, (3) view and traverse their list of connections and those made by others within the system.' (Boyd & Ellison, 2007, p 211). Essentially allowing people to a) present themselves b) articulate their social networks c) establish and maintain connections with others.

While the 'connections' with others constitute the 'network' part of SNSs, 'social' is the operative word in SNSs. SNSs centre on social relationships and connections with people, rather than simply a shared interest. While it is true that SNSs have become more sophisticated since their inception, the primary feature of forming and maintaining relationships still remain at their core (Boyd & Ellison, 2007; Ellison, Steinfeld, Lampe 2007; Joinson 2008). It is this primary focus which sets SNSs apart from earlier forms of internet communication (such as chat-rooms). SNSs are predominantly designed to supplement ties that already exist in real-life, rather than creating new, purely online-based ties (Valkenburg, Peter & Schouten, 2006). This distinction is important because it challenges the spectre of people using communication technologies as a way of compensating for their lack of 'real-life' relationships and instead gives communication technologies a richer, more supplementary role, where they are used, in the most part, to assist in people's already established relationships (Reich et al., 2012).

The first social network site was launched in 1997 and currently there are hundreds of SNSs, supporting a spectrum of practices, interests and users (Boyd & Ellison, 2007). Each SNS usually targets a niche market, like an orientation towards work-related contexts (e.g. LinkedIn.com), romantic relationship initiation (the original goal of Friendster.com), self-promotion (e.g. MySpace.com) or reuniting lost friendships (e.g. Friends Reunited).

A central part of any users account, is the 'profile'; a virtual space comprised of personal information, which users of SNSs create from a blank template. In addition to basic information (such as name, age, birthday etc), it is possible to display an array of other information, including friends, networks and groups to which one belongs. A key part of the profile is also 'The Wall'; a public space where users can leave messages and utilise a range of technologies (enabling them to upload content such as photos, videos and music).

The profile page of SNSs enables users to construct their own personalised online profile. Each profile is personal and individual to each user. Each user also has autonomy in deciding who is allowed access to their account and how much personal information they choose to share with other users. Boyd (2009) has described the process of setting up and maintaining an online profile page as a creative process where one 'types oneself into being' (p 129), stating biographical details and interests of one's choosing.

The connections that users of SNSs make with other users, can be thought of as acting like an invisible, 'social fabric', transcending geographical and temporal boundaries. In this way, SNSs also enable communication with people that it may not be possible to see regularly. In addition to this, with the advent of SNSs (such as Twitter) users can also easily make completely new connections and potentially link up with virtually limitless number of people who share similar interests or who they have an interest in (for example, sports stars, celebrities and other role models).

SNSs also generate a constant, personalised, social news stream, making people's *personal* details *public* and recording interactions between people. This information is

then recorded, creating a kind of digital social archive of online activities, documenting links between people, messages between people, groups, events and even people's real world whereabouts. As Livingstone (2008), has remarked, this has even changed the language of social relationships. For example, people now talk about their 'profile' being; 'public' or 'private', 'friending', 'unfriending', 'poking', 'tagging' or 'hash-tagging' their 'top friends', 'blocking' or 'adding' people to their 'networks', 'checking in', 'tweeting', 're-tweeting' and so on.

SNSs also enable a new form of mass communication, making it easier to create groups and coordinate events for larger groups. The ease with which SNSs are able to facilitate mass communication has been recognised as a significant factor in the evolution of collective social actions. For example, it is interesting to note that SNSs and the ability they afford for mass communication have been cited as a significant factor influencing the recent Arab Spring movement (Benioff, 2012; Beaumont, 2011; McCann, 2011). With regards to adolescents, one of the emerging themes, which arose out of the news coverage of the recent London riots, was the way in which SNSs could be used quickly and easily to mobilize large groups of like-minded people to come together (Mackenzie, 2011; Sabbagh, 2011; Williams, 2011).

Ultimately, SNSs have created a new and exciting 'virtual context'; which, for the majority of adolescents, appear to have become an increasingly embedded and ubiquitous part of their social lives. Yet this 'virtual context' is relatively new and seemingly occurs between peers (away from the supervision of adults), making it a poorly understood aspect of adolescents social lives. It has even been suggested that adolescents' enthusiasm for embracing this technology, has created a 'digital divide' where their mastery of these technologies outstrips those of their parents (OFCOM, 2009).

Collectively, when one reflects on the nature of SNSs (as well as other common communication technologies), it is apparent that people today are actually more 'connected' (at least in a 'digital' sense) with each other than at any other time in human history. While the world at large is still adjusting to this new social, cultural and political landscape; the social and cultural landscape for adolescents has also simultaneously shifted. One can only wonder: What must it be like for children and young people to

grow up in this 'connected' world? What is it like for adolescents to grow up in a world where SNSs (and their abundance of features) form an accepted and integral role in their social lives?

One would imagine that, in keeping with most forms of new technology, their social impact carries with it a host of advantages and disadvantages. Yet these advantages and disadvantages have not been explored from the perspective of adolescents themselves. While there is great media interest in reporting (and sensationalising) some of the more extreme social consequences of using SNSs (particularly with regard to negative influences), the research community appears to have been slower in applying a more neutral and rigorous scientific method, in order gain a more balanced perspective.

Previous research, conducted in Europe and the United States, confirms that adolescents are very much online and using SNSs. For example, Livingstone et al. (2013) reported data from 25,142 nine-to-sixteen year olds (across 25 European countries), which showed that 77% of this sample have their own SNS profile. The most recent data, from the United States, conducted in association with the Pew American Internet and American Life Project (which has conducted periodic surveys of American citizen's internet use since the year 2000), found that of the 799 teenagers (age 12-17) interviewed, 95% go online and 80% of those use social media sites (Lenhart, Madden, Smith, Purcell, Zickuhr & Rainie, 2011).

Yet under the surface of these figures, there is a paucity of information relating to further basic questions, for example; which SNSs are adolescents using?, what age are adolescents first accessing SNSs?, how are adolescents accessing SNSs?, how often do adolescents log in to SNSs?, how many people do adolescents link up with on SNSs?, how does this compare with their 'real-world' friendships?. Moreover, there has been very little exploration of how adolescents' use of SNSs is linked to their real-life peer relations. This seems surprising given that SNSs have become so universally adopted by adolescents and potentially could be having important social implications.

2.4. SNS use in context and the nature of peer relationships during adolescence.

Adolescence (derived from the Latin word 'adoloscere', meaning 'to grow up') has undergone changes regarding way it is conceptualised over the last century. In 1904, Stanley Hall (one of the most influential early psychologists) characterized adolescence as a time of storm and stress. Although researchers nowadays freely acknowledge that adolescence may not necessarily be so dramatic, the notion of adolescence being linked to turmoil and turbulence continues to shape some of the popular discourse surrounding perceptions of adolescence (Subrahmanyam & Smahel, 2010)

It is also customary to regard adolescence as a transitional developmental stage, positioned between childhood and adulthood (see Muuss, 1996), characterised by rapid physical and psychological change and growth (see Coleman, 2011). From a biological perspective, adolescence is defined by puberty, where hormonal changes lead to rapid bodily changes, including an increase in body size (height and weight) and new sexual reproductive capabilities (Tanner, 1978). From a psychological perspective, adolescence is marked by further cognitive advances enabling more advanced and sophisticated thinking, particularly increased abstract thinking capabilities (Inhelder & Piaget, 1999).

Research which has focused on social changes during this period highlight the changing nature of adolescent peer relationships, both with respect to adolescents' changing conceptualisations of existing friendships (Sullivan, 1953; Giordano, 2003; Youniss and Smollar, 1985; Selman, 1980) and the trend for adolescents to expand their peer relationships into wider friendship cliques becoming integrated into larger social networks (Cotterell, 2007; Wentzel, Baker & Russell, 2009).

With regards to friendships, research suggests that they play a particularly valuable role during adolescence. Qualitative studies which have explored the nature of established close adolescent friendships have highlighted the different functions that these friendships fulfil. For example, Mendelson and Aboud (1999) identified six distinct functions, which they believe are served by close adolescent friendships. These are highlighted below:

- o Reliable alliance (remaining available and loyal)
- o Help (providing guidance, assistance, and other forms of aid)

- o Self-validation (reassuring, encouraging, and otherwise helping the other maintain a positive self-image)
- o Intimacy (being sensitive to the other's needs and states and being open to honest expressions of thoughts, feelings, and personal information)
- o Stimulating companionship (doing enjoyable, amusing, or exciting things together).

One helpful way of understanding these functions is to view them in the context of changing family dynamics. As adolescents strive for greater independence and autonomy, they rely less on adults and more on their peers as a source of support and guidance (Giordano, 2003). Youniss and Smollar (1985) examined the contrast between adolescent friendships and parent-child relations. They found that, in contrast to the common hierarchical nature of a parent-child bond, adolescent friendships tended to be more egalitarian and characterized by an elevated level of acceptance and focus on the present, which is conducive to high levels of self-disclosure, loyalty and mutual trust.

Selman's Theory of the Five Stages of Perspective Taking (Selman, 1980) argues that the key to understanding the changes that occur in friendships during childhood (including adolescence) lie in the advancement of cognitive skills, which enable more advanced perspective taking abilities. Selman (1980) argued that as children grow older, they become more able to take on the viewpoints of others, moving from ego-centric thinking, through to a more skilled perspective taking position (where children become more able to assume another's perspective and therefore better understand other people's thoughts and feelings). In particular, Selman (1980) argued that during adolescence, individuals develop a third, reflective perspective-taking ability (making it possible to step outside a two-person situation and imagine how the self and other are viewed from the point of a third, impartial party). Crucially, Selman (1980) argued that as children get older, it is these advances, which ultimately result in deeper, new conceptions and interpretations of relationship experiences.

During this time, adolescents also tend to expand their social circles, branching out to form connections with a range of inter-connected friendship groups, mixing with larger peer crowds, forming cliques and becoming integrated into wider social networks

(Cotterell, 2007). Cliques are regarded as 'natural groupings of peers. Members are of a similar age, have similar interests, communicate easily with one another and spend a great deal of their time together simply enjoying one another's company' (Cotterell, 2007, p55).Social networks as a term used here adheres to Cotterell's (2007) conceptualization as a collective noun which references the complex structures and sets of relations found in an individual's social landscape. As pointed out by Cotterell (2007) adopting the term 'social networks' acknowledges that adolescents interact in groups that overlap and whose boundaries change.

Within the United Kingdom (UK), this process is facilitated, by adolescents typically moving from a smaller primary school setting into a larger secondary school setting. Sociological studies on adolescent friendships have been heavily influenced by the Proximity-Similarity Theory (Kandal, 1978; Shrum, Neil, Hunter, 1998) which provides two of the, proposed, most influential factors influencing friendship formation during this time. Firstly, 'Proximity'; or the degree to which individuals have opportunities for frequent contact, with higher contact being associated with a higher chance of relationship formation. Secondly, 'Similarity'; the degree to which individuals perceive some commonality between each other, with a higher degree of perceived similarity leading to an increased chance of attraction between individuals.

As adolescents gain more autonomy over their social lives, this also generates collective understandings about social status (Allen, Porter, McFarland, Marsh and McElhaney, 2005). At this time, the peer group can become a powerful socialising agent, often becoming the primary source affecting the dress code, presentation, language, attitudes and behaviours which an adolescent may adopt (Harris, 1995). As explained by Cotterell (2007), this influence can occur either directly or indirectly. Direct influence can occur via peers either encouraging norms by urging or teasing, or discouraging norms by criticising or shaming. Indirect influence can occur via understandings of unspoken norms and values.

Researchers have also emphasized the central role that adolescent peer relationships can play in facilitating some of the developmental tasks of adolescence, particularly, adolescents' changing perceptions of themselves. Wentzel et al. (2009) have suggested that, in widening their social circles, as membership of different social groups can

provide prototypical examples of various identities from which to 'try out' different lifestyles and, in doing so, adolescents can affirm their sense of self.

During adolescence, curiosity and involvement in cross-sex friendships also becomes more common and accepted, leading, in some cases, to the development of romantic and sexual relationships (Sullivan, 1953; Buhrmester & Furman, 1987; Azmitia, Ittel & Radmacher, 2005). As Collins, Welsh and Furman (2009) point out, while popular culture and media are suffused with a notion of adolescence being a time of discovery and romance, scientific interest in adolescent cross-sex relationships has tended to shy away from this area, making it a relatively under-researched research field. United Kingdom figures relating to the prevalence of cross-sex relationships during adolescence are difficult to obtain. However, studies in the United States, such as Carver, Joyner and Udry (2003), which have utilized data from the National Longitudinal Study of Adolescent Health [1], suggests that there is a steady increase in the development of romantic relationships during adolescence, with about 25% of 12-year olds (within the sample) reporting having had a romantic relationship in the previous eighteen months, rising to 50% of 15 year olds and 70% of 18 year-olds.

Given these social trends, perhaps it comes as no surprise that SNSs have gained such widespread popularity among young people. SNSs are probably very empowering for adolescents, playing a central role in helping them to fulfil their social goals. Their interactions probably facilitate and reflect the fulfilment of many of the central functions of adolescent friendships (as described by Mendelson & Aboud, 1999). Adolescents also probably use SNSs as one way of expanding and maintaining a wider range of connections within their own personal social network (as recognised by Cotterell, 2007). In turn, engaging with SNSs probably plays some partial influence in helping them shape and form a social identity (as recognised by Wentzel et al., 2009).

Research has also highlighted the variety of the tensions and strains, including bullying, with can be associated with adolescents' peer relations. While there is no universally accepted definition for bullying, one of the most influential ones comes from Olweus (2003). His definition of bullying refers to behaviour that rests on three criteria: 1). There

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[1] The National Longitudinal Study of Adolescent Health (Add Health) is a longitudinal study based on a nationally representative sample of adolescents in the United States. The Add Health cohort began being studied in 1994-5 and have been followed into young adulthood.

is a 'negative action' conducted by one or more individuals, with intent to harm, which is usually unprovoked by the target, 2). It occurs repeatedly over time, 3). There is an imbalance of power between those involved.

While Olweus' definition is helpful in providing some common understanding regarding people's experiences of bullying, the subjective nature of the identified criteria also highlights how adolescents' experiences of bullying can also be ambiguous. For example, determining somebody's 'intention to harm' can be problematic, just as it is difficult to determine whether incidents are actually provoked or unprovoked. Similarly, the perception of an imbalance of power will vary, depending upon what the 'power' refers to (e.g. physical strength or social influence), making it possible to vary from context to context. Events can be judged very differently by those involved. This can lead to incidents which are *not* intended to be bullying, being interpreted that way and presumably, incidents which *are* intended as bullying, which are not actually recognised that way by the 'victims' themselves.

A helpful development within bullying research has been to recognise that bullying occurs along a continuum. Conceptualising bullying in this way takes into consideration the dynamic social processes and contextual factors involved in bullying and also implicitly acknowledges the inherent ambiguity associated with perceptions of bullying, including some of the subtle tensions and strains that can be a feature of peer relationships (for an in-depth discussion of this, see Sanders, 2004).

Indeed, it has been suggested that peer socialisation processes during adolescence are the most fraught with tension, ambiguity and strain, than at any other time in the lifespan (Allen, Porter, McFarland, Marsh & McElhaney, 2005). Previous in-depth qualitative studies have already provided us with insight into the nature of some tensions, ambiguities and strains, which can exist within given social spheres. Three particularly thorough studies which provide good illustrative examples of some of the subtle tensions, strains and ambiguities involved in young people's social worlds comes from the ethnographic work of Adler & Adler (1995), the qualitative observational and interview work of Chu (2005) and Eder (1995).

Adler and Adler (1995) drew upon ethnographic data (gathered over seven years) of students (aged 9-12) of a United States elementary school, in order to highlight the inclusion and exclusion characteristics which can exist within and between clique dynamics before adolescence. Adler and Adler (1995) showed that clique dynamics can be hierarchical in nature, continually shifting and being dominated by leaders who are exclusive, so that not all individuals who desire membership are accepted.

Chu (2005) drew on qualitative observational and interview data from sixty-five adolescent boys' interviews to highlight the negative influence of wider peer group influences in promoting a dominant judgemental and prescriptive masculine norm for behaviour, which adolescents felt ultimately interfered and 'policed' their ability to form close and meaningful peer relationships.

Eder (1995) drew upon qualitative data gathered by in-depth observations of informal and organized peer activities within a school setting. This demonstrated that, within this social setting, female adolescents were acutely concerned with their popularity, with friendships with particular girls becoming an important avenue for peer status, while at the same time, many popular females tended to avoid interactions with females of lower status, leading to strong feelings of resentment and dislike. In this case, popularity was found to be cyclical, with feelings towards popular females eventually moving from positive to negative, eventually making them some of the least liked individuals within school.

The complex, continually evolving, multi-faceted social world of adolescence was also well illustrated by the findings of previous personal research (Isbister, unpublished report, 2011). This study interviewed ten adolescents in detail about the perceptions of their friendships and social networks. Within the sample interviewed, adolescents were able to recognise many important similarities and special qualities in their friends and could readily identify the important functions that their friendships fulfilled (in this case, themed as fun, advice, emotional support, self-validation and protection). However, even amongst close friends, these features were countered against the perception of several less valued dimensions of their relationships (in this case categorized as as bickering, secrets, rivalry and banter).

Similarly, when the participants were asked to describe the social networks that they considered themselves a part of, the adolescents described a social world which required them to conform and adhere to a variety of continually shifting and dynamic social contexts. Within the year group studied, adolescents would be recognised under a number of labels (including 'sporties', 'academics' and 'attention-getters'). Hierarchy and social status also permeated their perceptions, with adolescents at the top of the social ladder classified as 'celebrities' and people perceived to be at the bottom of the social ladder classified as 'Neeks' or 'Geeks'.

While it is recognised that the studies quoted are small-scale studies, carrying with them the usual important cautions related to representativeness and generalizability; they do lend credence to the suggestion that adolescents' perceptions of their peer relations are often juxtaposed between utilising the benefits of their peer relations, whilst also managing the strains. Adolescence can be portrayed as a time of personal discovery, strengthening friendships and widening social horizons. Nevertheless, these changes tend to occur against the backdrop of a turbulent social period. Adolescents can feel strong pressures to conform and maintain high social status. In reality, this can lead to tensions, strains and bullying. Adolescence is both an exciting and a challenging developmental period.

One cannot help but wonder how SNSs may be influencing some of the negative features of adolescent peer relations. It is well documented that communication technologies have enabled bullying to acquire a virtual dimension. However, an interesting question relates to how SNSs may be influencing the everyday tensions, ambiguities and strains of adolescents' social worlds. It may be that SNSs are leading to a greater intensity in adolescents' social lives. For example, the public nature of SNSs may be making the dynamics of popularity and rejection (such as those described by Chu, 2005; Eder, 1995; Isbister, unpublished report, 2011) more salient and explicit. Similarly, it is possible that the public nature of SNSs may be affecting the intensity and power of existing prescriptive norms for behaviour within peer groups (such as those described by Chu, 2005).

2.4.1. Social Cognitive Mapping (SCM)

Researchers studying peer relations have long recognised the value of adopting research techniques which are able to sensitively convey the complex structural patterns of people's relationships (Cotterell, 2007).

In response to this, Social Cognitive Mapping (SCM) has become a fairly common (and empirically validated) research tool used for identifying peer groups amongst children and young people (Neal & Neal, 2012). SCM was first introduced by Cairns, Perrin and Cairns (1985). At its' heart, SCM is a relatively simple and straightforward research tool. The SCM procedure identifies peer groups based on participants' own self-reports. Essentially, the data necessary to build up a SCM is derived from answers to two questions. Firstly, 'Which people do you tend to hang around with?' and secondly, 'Who else tends to hang around together?'. Based on participants' multiple responses to these questions, the SCM is able to generate a map of perceived peer groups within a social setting. As well as identifying distinct peer groups, an individuals' (or groups) centrality (or salience) can also be determined based on the number of nominations received.

Farmer and Xie (2012) have argued that SCM techniques are based on three fundamental conceptual foundations. Firstly, when children are aggregated together in a social setting (e.g. in a school), they tend to synchronise their behaviours in ways that results in distinct peer groups that are typically organized into a hierarchical social structure. Secondly, the social structures formed in school settings tend to be fluid and reflect dynamics and developmental processes as children negotiate relationships with multiple peers. Finally, that peer groups and social structures are public and children tend to have a 'cognitive map' of the social system in which they are embedded.

2.5. A changing picture?

While it would be too extreme to suggest that the introduction of SNSs makes existing adolescent peer relationship research 'out-of-date', the existing evidence base does not incorporate the new virtual dimension of adolescent peer relations. This means there is a myriad of interesting conjectures and speculations regarding how SNSs (with their

abundance of features) may be subtly or, in some cases, dramatically influencing some of the themes and social patterns described.

When one reflects on some of the main features of SNSs (as described earlier), it becomes apparent that, on the surface, there appears to be a close congruence between the known primary features of SNSs and the general social patterns and motivations associated with adolescence. In this way, SNSs are probably very empowering for adolescents, playing a central role in helping them to fulfil their social goals. On the other hand, one wonders how SNSs may be influencing episodes of bullying and some of other the subtle tensions and strains which can be a feature of adolescent peer relations. Yet, while it is interesting to speculate about this, without specific research into this area, it is not credible to generalize the knowledge we have of adolescent peer relationships and extend it (with any degree certainty) into the virtual dimension generated by SNSs.

This note of caution is given extra credibility when one considers that when adolescents engage with SNSs, their interactions occur via a computer interface, a form of computer-mediated communication (CMC). Theories of online communication all highlight the differences in behaviour that are generated through interacting via an interface (with reduced social cues) and how this can, in turn, cause changes in the way that people interact and perceive one another.

2.6. Insights from Computer-Mediated Communication (CMC) research.

A review of the literature on theories of CMC leads to an impression of a field that has suffered from a degree of disjointed thinking and contrasting findings. When summarizing CMC research, Walther (2011) described a field which recognized 13 major and minor theories of CMC, concluding that CMC research 'suffers from a lack of coherence, reflecting a field with more work being done, than consensus on what work should be done.' (p444). A summary of some of the major theories of CMC are presented below (for a more detailed and comprehensive coverage of this field see Walther, 2011).

Initial theories of CMC, were coined 'Cues-Filtered Out' theories (Culnan & Markus, 1987). These early theories were very negative and deterministic in nature, focusing

almost exclusively on how CMC interfaces suffered from either a reduced social presence (Rice & Case, 1983) and/or reduced social context cues (Sproull & Kiesler, 1986). According to 'Cues-Filtered Out' theories, interacting via a computer interface prevents people from engaging in meaningful personal interactions, increasing anonymity and reducing interpersonal impressions; ultimately leading to a deregulation of behaviour and associated negative forms of communication (such as verbal aggression).

Later theories, adopted a more measured viewpoint, that was less deterministic and recognized the role of humans as *active* CMC users, whose behaviour is context dependent. Walther (1996) developed the Hyper-Personal Interaction Model, which argues that the absence of non-verbal cues, identity cues and temporal characteristics can, in some instances, actually lead to enhanced levels of interaction. Creating exchanges that actually heighten attraction between users and can lead to more intimate communication and disclosure than might occur face-to-face. According to this model, CMC can prompt online users to engage in selective self-presentation (where users transmit only information about themselves that they perceive will be deemed desirable and preferential) and partner idealization (tending to fill in any blank information unknown about an individual in a favourable way). The third dimension of the Hyper-personal Model recognizes how individuals can exploit the temporal advantages usually inherent in CMC interactions to take time to contemplate and construct messages in more careful and considered ways. The model further suggests that CMC users may capitalize on the ability to edit, delete and re-write messages before sending them.

The assumptions about the influence of CMC arising from the three features of CMC (non-verbal cues, identity cues and temporal cues) have each been subject to some degree of criticism; broadly summarized, these criticisms re-emphasize the importance of a users past experience and the real-world social processes which are likely to be occurring simultaneously for both users (for a more detailed discussion of this model please see Walther, 2011). In response to these criticisms, recent re-articulations of the Hyper-Personal Interaction Model (Walther, 2006), have tempered the influence of the features of CMC and broadened its' scope to incorporate further human and contextual factors, such as group identification, individual stereotypes or participants' individual

schemas (which may result in the comparison of an online partner to a previously known individual).

There is no consensus on any one, universally accepted, CMC theory. However, if we accept the central premise that all theories of CMC share (i.e. that CMC has some degree of influence on both perceptions and behaviour); the implication is that SNSs (as a form of CMC communication) may be having a very subtle influence on adolescents' interactions. This challenges the assumption that adolescents' SNS use is simply a reflection of offline social trends and behaviour.

There is probably some validity behind the assumptions of the Cues-Filtered Out theories (e.g. Sproull & Kiesler, 1991). It is possible that the lack of social cues associated with SNSs may be inadvertently encouraging some of the less desirable features of adolescent peer relationships. On the other hand, there is probably some validity behind the Hyper-Personal Interaction Model (Walther, 2006). Interacting over SNSs might facilitate the development of more highly valued aspects of adolescent peer relationships. Indeed, it is possible that, depending on the context, these influences are working independently of each other.

These suggestions are plausible, although it is necessary to be cautious about how much to extrapolate from these theories. Especially considering theories of computer-mediated-communication were a) not conducted on adolescent samples, b) were not developed to explain CMC which occurs via SNSs and c). In the most part were developed to explain interactions between CMC users who did not know each other. Put another way, existing theories of CMC do not take into consideration:
- The developmental importance of adolescence and how this may shape interactions between peers.
- The fact that interactions occurring over SNSs between adolescents, are for the most part, entwined with existing real-world social contexts (and frequently occur across multiple forms of different CMC mediums).
- The rich and diverse interface of SNSs as well as the associated unique capabilities and affordances of SNSs (as described earlier); which may potentially generate some completely new and novel influences on users' behaviour.

A review of more recent general literature on communication technologies is equally perplexing and appears to have inadvertently created an oversimplified, artificial and polarized picture, depending on which age demographic is studied. SNS research with 'emerging adults' (age 18-25) tends to cite positive influences, highlighting the various relational benefits (or increased social capital) associated with using SNSs. By contrast, the research, which has been conducted on adolescents' general use of communication technologies, tends to cite negative influences, emphasising the possibility it affords for bullying electronically, collectively known as cyber-bullying.

2.7. SNS research with emerging adults: A positive discourse.

Within SNS research that has been conducted with emerging adults (aged 18-25) the construct of 'social capital' has gained increasing importance. Social capital is an elastic construct with a variety of definitions in multiple fields (Adler & Kwon, 2002). However, in this context, there is some consensus that it refers broadly to the benefits we derive from our relationships with other people (Lin, 2001). For individuals, this means drawing on the resources (e.g. useful information, personal relationships or the capacity to organize groups) from other members of the networks to which he or she belongs. Furthermore, 'social capital' researchers have further subdivided into two broad types: bonding and bridging social capital (Putnam, 2000). Bridging social capital emphasizes the informational benefits of a heterogeneous network of weak ties. Bonding social capital refers to the emotional benefits from strong ties to close friends and family.

An example of research which is fairly typical in this area comes from Ellison et al. (2007) who examined the relationship between use of Facebook and the formation and maintenance of social capital among College students. In addition to assessing both bonding and bridging social capital, they explored another 'dimension' of social capital; 'maintained social capital', defined as one's ability to stay connected with members of a previously inhabited community. Regression analyses conducted on the results suggested a strong association between use of Facebook and the three types of social capital, with the strongest relationship being bridging social capital.

Taken as a whole, social capital research suggests that there are likely to be some relational benefits associated with using SNSs, particularly with regard to bridging social

capital. However, social capital research does not provide convincing evidence on the causal direction of this relationship. For example, it may be that Facebook use contributes to social capital. It is also possible that those with an already high 'social capital' orientation just happen to be heavy Facebook users. Indeed it is most likely a combination of both.

Moreover, despite a large literature growing around the construct of social capital, it still remains poorly defined and problematic to measure. Horvat, Weininger & Laureau (2003) describe social capital literature as being plagued by 'conceptual murkiness' (p231). There is a strong epistemological argument that would suggest that trying to reduce the relational benefits of people's relationships into something that can be defined, quantified and measured, fits uncomfortably with what has been demonstrated to be a highly diverse, varied and subjective experience.

In support of this position Bukowski & Lisboa's (2005) four general criticisms of applying quantitative approaches to diverse experiences (such as friendships) seem particularly pertinent. Firstly, although a quantitative approach is useful and valid for the measurement of some phenomena, it causes problems when it is used to measure other entities that differ from one person to another in non-quantifiable ways, (for example, the benefits people derive from their relationships). Secondly, the close-ended nature of quantitative measures could underestimate the breadth of a phenomenon, essentially forcing observations into a predetermined worldview (for example, assuming everybody's experience of the benefits of their relationships is experienced in the same manner and can therefore be meaningfully be summarized). Thirdly, quantitative methods may overlook important details or atypical observations (such as unusual or unique types of relationships). Finally, by imposing a set of dimensions on a phenomenon, a researcher may fail to give voice to the participants and their experiences (in this case, simplifying the picture by ignoring any potentially negative influences *and* potentially misrepresenting participants' own perceptions of the relational benefits of SNSs).

2.8. Communication technology research with adolescents: A negative discourse.

In stark contrast to SNS research with 'emerging adults', the media and research interest in adolescents' use of communication technologies (including SNSs) tends to

be negative; shifting attention disproportionately on risks. The EU Kids Online Project (Livingstone & Hadden, 2009), illustrated this observation neatly, by conducting a content analysis of press coverage of children and the internet in 14 EU countries. In all countries, by the far the majority of press coverage on children and the internet is concerned with risks, rather than opportunities: nearly two thirds of all stories (64%) referred to risks, whereas less than a fifth (18%) referred to opportunities.

Most research interest on adolescents' use of communication technologies has focused on the ability it affords for 'bullying' through electronic means, collectively referred to as 'cyber-bullying'. Research on cyber-bullying, within the UK, is still in its' early stages which makes it difficult to say with certainty about rates of cyber-bullying. However, a mobile phone bullying survey ('Putting U in the Picture'), conducted in 2005 in association with the children's charity National Children's Home (NCH)[2] and Tesco Mobile, found that amongst the 770 young people (aged 11-19) surveyed; 20% reported ever having been cyber-bullied (14% by text message, 5% through chat-rooms, 4% by e-mail). Similarly, Noret & Rivers (2006) surveyed 11,000 English pupils from 2002-2005, nearly 6% of which said they had received nasty or threatening text messages or e-mails 'once in a while' or more between 2002 and 2003, this rose to 7% in 2004 and 2005.

More recently, Smith, Mahdavi, Carvalho, Fisher, Russell and Tippett (2008) explored rates of cyber-bullying among seven different media associated with cyber-bullying; text messaging, picture/photos or video clips, phone calls, e-mail, chat-rooms, instant messaging and websites with pupils aged 11-16 years. Within each of the 14 London LEA schools, one boy and one girl (selected randomly) from each of the year groups (7-10) completed a questionnaire. A total of 92 questionnaires were completed. The results indicated that the incidence of cyber-bullying were the following; 6.6% of adolescents experiencing cyber-bullying often, 15.6% only once or twice, and 77.8% never. Interestingly, when the results from Smith et al.'s questionnaire (2008) were verified with focus groups (containing 7-8 pupils aged between 11-15 years), most students expected a far higher percentage of students who would have experienced cyber-bullying than those that were reported (the consensus ranging from 67-100%);

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[2] National Children's Home (NCH) is the former name of the British charity Action for Children.

considerably more than the 22% from questionnaires (including the 'once' or 'twice' responses).

Smith et al.'s (2008) study is a good demonstration of how, as communication technologies have diversified and converged, the etymology of cyber-bullying has also changed with it. Due to the pace of change within this area; cyber-bullying research seems to be in a constant state of playing 'catch-up' with real world practices. Correspondingly, one of the big unanswered questions is how SNSs may be influencing both the rate and the nature of cyber-bullying experiences. It would be fascinating to see how the results of Smith et al.'s (2008) study would look if this same study was conducted today. Especially considering this research data were collected in July 2005 and March 2006; just before the explosion in SNS usage. There is no doubt that SNSs have altered the cyber landscape since then. For example, in July 2005 (when Smith et al's data was collected), Facebook had less than 12 million active users worldwide; this compares with over 1 billion active users today (Lee, 2012; Kiss, 2012).

Clearly research reports some degree of variation in perceived rates of cyber-bullying. Some of this variation may be partially explained by the fact that these studies are not methodologically consistent. As Shariff (2008) has noted, in a similar manner to face-to-face bullying, there will be some natural variation in reported rates of cyber-bullying between studies, depending on external factors, such as; the time the research is conducted, where the research is conducted and the method used. The variation in cyber-bullying rates may also be due to its prevalence being studied by means of a questionnaire. Due to its' sensitive nature, we should remain mindful of how much children are likely to reveal about their experiences and how much of their experience they might withhold. This consideration fits with some of the comments that were reported within the focus groups conducted with Smith et al.'s research (2008); including comments such as 'not many people would admit to it, because they would get threatened if they told' (p378).

Some of the variation found between studies could be due to the fact that, as communication technologies (such as SNSs) have become an increasingly accepted part of children's lives; there follows an acknowledgement that incidents are able to move interchangeably between online and offline contexts (and vice versa). This means

that cyber-bullying is probably best understood, not as an entirely new behaviour, but instead as an extension of pre-existing behaviour, which has simply acquired a new dimension (Slonje & Smith, 2008).

Acknowledging this possibility, cyber-bullying definitions usually bare close resemblance to definitions of 'traditional' bullying (Patchin & Hinduja, 2006). One of the most thorough studies conducted into children's definitions of 'cyber-bullying' was Vandebosch and Cleemput's study (2008). They conducted 53 focus groups (consisting of 279 youngsters), organised in 17 classes of 10 different schools. When the children were asked explicitly about what they understood by cyber-bullying, most students equated it to 'bullying via the internet' or they mentioned examples of internet practice that they regarded as incidents of cyber-bullying. When these responses were coded, the following criteria were identified:
- o It is intended to hurt (by the perpetrator) and perceived to be hurtful (by the victim).
- o It is part of a repetitive pattern of negative offline or online actions.
- o It is performed in a relationship characterised by a power imbalance (based on real-life power criteria, such as physical strength, age).

What is immediately apparent is the close resemblance between Vandebosch and Cleemput's (2008) definition and Olweus' (2003) definition of 'traditional bullying' (described earlier). While regarding cyber-bullying as an extension of bullying incidences is a helpful development, it also implicitly means that cyber-bullying research inevitably suffers from some of the shortcomings, which bullying research has had to contend with. In the case of cyber-bullying research, this ambiguity means that it is hard to be confident there will be harmony between how a researcher understands the term cyber-bullying and how a participant does. This problem means that there will always be some disparity between studies in the way that cyber-bullying is operationalised by the researchers and the way that cyber-bullying is recognised by the children and young people themselves.

The problem of defining what exactly cyber-bullying is (and where its parameters lie) has ultimately resulted in a variety of different operationalisations of cyber-bullying within the research literature. Indeed it seems that bullying research has embraced the

idea of the experience of bullying occurring over a continuum (with wide grey areas), cyber-bullying research is yet to explicitly embrace this conceptualisation. The danger associated with this is that any cyber-bullying research, which has adopted a strict criterion-based perspective, runs the risk of glossing over some of the strains and tensions (grey-areas) that may be prevalent and important, but nonetheless may not be being picked up by a strict, criterion-based cyber-bullying definition. This naturally leads one to wonder: What is the experience of adolescent SNS users, who claim not to have had any experience of cyber-bullying? Do they experience any tensions or strains that are not being identified by current cyber-bullying research?

2.9. Recent research: A more subtle picture.

More recent data from the Pew American Internet and American Life Project has highlighted a number of important considerations when reflecting on both the positive and negative influence of SNSs. For example, Lenhart, Madden, Smith, Purcell, Zickuhr & Rainie (2011) used a questionnaire to gather 799 adolescents' (aged 12-17) experiences of both kindness and cruelty on SNSs. This revealed several noteworthy findings including:

- The majority (69%) of adolescents say that, in their experience, peers are mostly kind to one another over SNSs. A further 20% said that peers are mostly 'unkind' to one another and a further 11% reported 'it depends'.
- More adolescents report positive personal outcomes from interaction on SNSs, than negative ones: 78% report at least one good outcome and 41% report at least one negative outcome.
- 19% of adolescents reported that they have been bullied in the past year, in some form, either in person, online, by text or by phone.
- The overwhelming majority of adolescents (88%) have witnessed other people 'be mean' on SNSs, with the most common response being to ignore this behaviour on SNSs.
- The majority of adolescents (81%) have taken steps to manage their privacy settings online, with 55% of adolescents saying that they have decided not to post something online because they were concerned that it might reflect badly on them in the future.

Overall, these results suggest that adolescents have ambivalent views about SNSs. It is interesting to note the high disparity between the relatively low number of adolescents who reported experiencing any form of bullying (19%) and the relatively higher number of adolescents who reported either experiencing either a 'negative outcome' themselves (41%), or being a witness to 'mean' behaviour (88%). This lends weight to the supposition that asking about adolescents' experiences of 'bullying' may result in some 'glossing over' of some of the grey-areas.

While the Lenhart et al. (2011) data provides some interesting points for consideration, given the quantitative nature of the data, they do not portray in any meaningful capacity, the influence of SNSs, ultimately generating further questions and speculations. For example, how are adolescents being 'kind' to each other over SNSs? How are they being unkind over SNSs? What are positive and negative outcomes for adolescents when interacting on SNSs?

There are a handful of recent research studies which have used predominantly qualitative methods to illustrate, some of the more subtle positive and negative consequences of using SNSs (Livingstone, 2008; Tokunaga, 2011; Reich et al., 2012; Baker and White, 2012).

The mixed influence of SNSs has been explored previously by Livingstone (2008), who interviewed 16 adolescents (ranging from 13-16 years old) within the Greater London area. Livingstone (2008) was principally interested in the relationship between SNS use and adolescents' growing sense of identity. In exploring this relationship, Livingstone (2008) conceptualised this influence as a dichotomy between 'online opportunity and risk'. The results revealed that adolescents valued highly the opportunity to 'play and display' continually re-creating and decorating highly stylistic profiles (with older adolescents favouring plainer profiles). On the other hand, adolescents reported common everyday concerns, such as 'do people visit your profile and leave comments?' and 'Are you listed as anyone's top friend?' as well as varying degrees of tension in relation to privacy. The results also suggested that the binary classification that SNSs make of contacts as either 'friends' or not, did not tie with the varieties of privacy that they wished to sustain. In the most part, it seemed that being visible to strangers

(managed through setting one profile to 'public') is not so much a concern, as that of being visible to known but 'inappropriate' others, such as parents.

Yet considering the near universal adoption of SNSs by adolescents, Livingstone's (2008) data should only be regarded as representing a snapshot of adolescents' perceptions of the influence of SNSs. Especially since participants were recruited via market research, potentially raising questions about how representative the sample in the study can be considered to be. Although there is some reference to the participants' backgrounds (e.g. half male and female, spanning a range of socioeconomic status categories, spanning a range of geographical areas in London etc), any reference to their real-life peer relationships is not provided. This research also focused on SNS use and identity development, rather than the influence SNSs were having on their peer relations.

More recently, Tokunaga (2011) set out to identify 'negative event types' which occur on social networking sites. In this study Tokunaga (2011) described 'negative events' as an event which occurs online and evokes feelings of relational damage, worry or distrust in a user. In this study, a sample of 'emerging adults' (age 18-25) completed an open-ended questionnaire, which asked them to recall a specific episode in which they experienced interpersonal strain or relational problems while using SNSs. The results were extrapolated to give a detailed typology of 10 'negative event types (for a full explanation of each event please see Appendix 6.2.2). These are listed as the following:

- Denied or ignored friend request
- Deletion of message or identification tag
- Ranking disparities on Top Friends applications
- Personal surveillance of profiles
- Ignored questions or remarks
- Disparaging remarks posted on message boards
- Gossip discovered on third party's message board
- Restricted access to a friend's page
- Being removed as a friend
- Not being allowed to join a group/created undesirable group about person.

These results give an indication as to what may be some of the incidents that occur over SNSs. Collectively, they give some credence to the idea that the majority of people's experience of using SNSs, probably varies more along a continuum than current cyber-bullying research suggests. However, in a similar manner to cyber-bullying research, the key to a meaningful interpretation of these results is to view these events not as isolated incidents, but instead to view them within their real world social context. Thus, the real question is whether these 'negative online events' represent something that is unique to SNSs, or whether (in a similar manner to cyber-bullying), they might be best interpreted as reflections or occurrences that happen between people offline.

Some of Tokunaga's results can be viewed as online equivalents of events that happen within a face-to-face context. For example, people reject friendships offline, people can frequently discover gossip about themselves through a third-party source and people may also have experienced exclusion from groups amongst their peers. With this in mind, perhaps the more important, subtler question is actually, how these 'events', which occur via Facebook are altered by the experience of them occurring via a SNS?

Tokunaga's study does seem to have uncovered some novel features of SNSs (such as lowering a friend's ranking or deleting contacts or comments) for which there seems to be less obvious real world equivalents. However, without further exploration and based on the information available, the reader is left with a large degree of conjecture relating to how 'significant' any of the 'online negative event types' actually are. Tokunaga's (2011) results appear to have ignored any degree of social context in which these events might occur, coming across instead as quite deterministic in nature. Especially since it may be that many of the 'negative events' identified (such as denied or ignored friendship requests or ignored question or remarks) are actually a common occurrence. The 'significance' of these events will surely be determined by the social context and people's individual interpretations of the reasons behind users' actions.

One might speculate that events occurring over Facebook may be more significant due to them being explicitly recorded and publicly available to see. Following up on participants responses (either generally through focus-groups or individual interviews) would have provided the researchers with the opportunity to move beyond simply a

typography of 'online-negative events' and gather further, richer data, which, in turn, might have led to data which could have been analysed at a more interpretative level (rather than at the apparent surface-level provided here). Without this deeper level of analysis, it is impossible to tell whether these 'negative-events' are actually indicative of much wider underlying themes. As it is, the reader is left with a tantalising glimpse at what appears to be some interesting and revealing data, which, ultimately fails to portray a full or meaningful picture of the tensions/and or strains associated with SNSs.

Furthermore, the selective sample within this study (university students studying in Canada) naturally reduces the confidence that can be placed in generalising these results in any meaningful way to an adolescent sample. Especially since very little contextual background information is provided about the participants (including no attempt to understand the participants' own friendship groups or social networks). As such, within the study, it is difficult to know which SNS the participants were referring to, how much experience they had using SNSs etc.

Based on what we *already know* about the nature of adolescent peer relationships and their adoption of social networking sites, it is entirely likely that an adolescent sample would reveal a very different typology of 'negative events' with a very different meaning or significance attached to them. In support of this proposition, it seems appropriate to once again draw upon some of my own previous research (Isbister, unpublished report, 2011). Within this study, while interviewing adolescents generally about their experience of friendships and social networks, all of the participants interviewed mentioned the influence that SNSs were having on their everyday, face-to-face peer relationships.

Analysis of this data indicated that SNSs were having a mixed influence on adolescents' perceptions of their friendships and many of the incidents they referred to do not fit Tokunaga's (2011) typography. For example, amongst the participants, references were made to the SNS 'FormSpring', which enabled users to remain anonymous, yet at the same time ask penetrating and provocative questions of other users. Other SNS users mentioned 'Facebook Raping' ('Fraping'), where users SNS accounts are hacked into by another user, enabling that person to trick people by posting as that person on a SNS. The posting of photographs also continually emerged as a source of controversy, including people digitally manipulating people's Facebook pictures. While it is easy to

imagine how these events may have been significant events for the adolescents involved (potentially being interpreted as cyber-bullying), in each case, the significance attached to each event depended on the social context and the individual users' interpretation of the incident.

Tokunaga's (2011) research also adopts a very one-sided perspective and while there is an interest to discover 'online negative events', there is no reference to the contrasting positive experiences that the participants are likely to have had. While discussing the significance of SNSs within my previous study, every participant also mentioned the positive aspects of SNSs, such as the way it helped them to overcome some of the inconvenient practical barriers that could limit their friendships (such as living far away from their friends or going to a different school) and using SNSs to help them to organize their social lives.

One criticism which is shared by both Livingstone (2008) and Tokunaga (2011) is that there is typically very limited background information relating to the participants general use of SNSs and their existing real-life peer relations (or any associated attempt to explore how SNSs and real-life peer relations might be linked).

The most recent study which has explored the influence of SNSs is Reich et al. (2012), this study sampled a much larger group of adolescents. In this study, 251 students (age 13-16) completed an off-line survey (enquiring about face-to-face friendships). A further 126 participants completed an additional online questionnaire, which examined online friendships, how and why they use the internet, their activities on social networking sites (such as Facebook), their reasons for participation and crucially, how they perceive SNSs to impact upon their friendships. The results again conveyed a sense of the mixed influence that SNSs were perceived to be having on their friendships. When participants were asked about their reasons for having a profile on a SNS, the majority noted social motives such as 'to stay in touch with friends I do not see often' (84%), or to stay in touch with relatives (52%).

When asked if using SNSs had caused them any trouble, a quarter of participants noted that SNSs had caused them problems. The nature of these problems tended to be around rumours ('because of this one rumour about me'), conflict (they weren't in my

top 8 friends), profile security (ex-friend hacked in and changed everything to bad stuff') and infidelity ('my chick found out I was cheating on her with one of her friends'). On the other hand, 19% of pupils thought that SNS had actually fixed a problem by offering such things as a protected place to talk and a provided a valuable platform for friendship and romantic relationships.

Reich et al.'s (2012) research did give some consideration to exploring the overlap between offline friends and online friends. As might be expected, the results showed that there was considerable overlap between participants' offline and online social networks. Most of the participants' online friendships were from offline social networks. Respondents also reported that the friends they spent the most time with online were very good friends who they saw most often in-person (in and out of school). However, while providing interesting insights, it is again pertinent to question how generalizable these findings can be considered to be, especially considering the lower completion rate of the online survey, which ultimately yielded a smaller sample and would have reduced the ability to compare data from both sources. Additionally, although a larger sample of adolescents' views were sought than Livingstone's study, the sample was taken from three high schools in Southern California and participants were predominantly Latino (70%), followed by European-American (20%).

A further short-coming of the research undertaken by Tokunaga (2011), Livingstone (2008) and Reich et al. (2012) is that these studies do not consider the perceptions of adolescents who, for various reasons, do not engage with SNSs. This seems important because presumably, at some point, children and young people must have to make a decision about whether to engage in SNSs or not and given that SNSs are so widespread, whichever choice they make will have implications on their social lives (even for adolescents who are non SNS users).

To date, the only study to consider the point of view of the minority of non-SNS user adolescents is Baker and White (2012). They explored the common reasons for non-use of SNSs among a sample of Australian adolescents (N=69). Transcripts were coded by grouping responses along similar themes for non-use that had been commonly stated by participants. The results showed that the primary reasons offered by adolescents were: lack of motivation, poor use of time, preference for other forms of

communication, preference for engaging in other activities, cyber safety concerns and a dislike of self-presentation online.

Baker and White's (2012) study provides an interesting perspective, from a sample of adolescents who have previously been overlooked. However, this study has only really touched on some of the surface level reasons that adolescents give for not using SNSs. It does not provide clarity on the deeper and more important underlying question regarding their perceptions of how they believe their non-use actually influences their peer relationships.

2.10. Summary and research questions.

SNSs have become a global phenomenon and adolescents are at the forefront of these developments. As a developmental stage which is defined by important social changes, SNSs seem to have become an increasingly embedded and important contextual factor influencing adolescents' social lives. While it is well accepted that the majority of adolescents use SNSs, past this general statement, the virtual context generated by SNSs appears to operate from peer to peer, largely away from the supervision of adults, meaning very little further information is known about how adolescents are really engaging with SNSs.

Moreover, the research community appears to have been slow to provide clarity on what kind of influence SNSs are having on adolescents' peer relations. In attempting to answer this question it is helpful to draw upon a number of differing research fields, including existing adolescent peer relationships research, theories of Computer-Mediated-Communication, as well as the contrasting discourses surrounding the positively focused social capital research (with emerging adults, aged 18+) and the negatively focused cyber-bullying research (with adolescents, aged 13-18). As has been highlighted, while these research areas can provide a credible perspective from which to consider this influence, they are unconvincing in portraying the full spectrum of influence that SNSs are having on peer relationships. The net result is a large amount of conjecture, speculation and important unanswered questions.

Recent survey data (e.g. Lenhart et al., 2011) suggests that adolescents have ambivalent views about SNSs and the influence of SNSs is likely to be very mixed.

There have been a handful of studies (e.g. Livingstone, 2008; Tokunaga 2011, Reich et al., 2012) which have generated some insightful findings. However, considering their near universal adoption among adolescents, these findings only provide a snapshot of the influence of SNSs and cannot be taken as representative of all adolescents' wider experiences and perceptions of the influence of SNSs. Moreover, each of the studies, suffer from important methodological and sampling issues that limit their validity and reliability.

This study will answer the following research questions:

RQ1). How are adolescents using SNSs and how is this use linked to their face-to-face relations with peers?

This will include a number of related sub-questions. Including considerations of the following:

- Which SNSs do adolescents use?
- How many SNSs do adolescent use?
- At age do adolescents first start using SNSs?
- How do adolescents access SNSs?
- How often are adolescents using SNSs?
- How many 'contacts' do adolescents have on SNSs?

The data relating to adolescents' use of SNSs will then be explored in relation to adolescents' reports of their real-life peer relations, including the number of reported 'real-life' friends and the number of friends met face-to-face (in the last couple of weeks).

The information used to answer these questions will also provide a backdrop from which to consider the findings of the further research questions posed within this study.

RQ2). What advantages do adolescents perceive that SNSs bring to their peer relationships?

RQ3). What disadvantages do adolescents perceive that SNSs bring to their peer relationships?

RQ4). How do adolescents *who do not use* SNSs perceive that this is influencing their peer relationships?

By conveying both the positive and negative influence of SNSs, this research will convey a much needed (and long overdue) balanced perspective. This research will:

- Provide some more detailed information regarding adolescents' reports of how they are using and engaging with SNSs.
- Provide some more detailed information regarding adolescents' reports of their real life peer relations. Enabling the association between adolescents SNS use and their real-life peer relations to be explored in detail.
- Inform both existing adolescent peer relationship literature and theories of Computer-Mediated-Communication (conducted before SNSs exploded onto the scene).
- Address the methodological short-comings of recent research (e.g. Livingstone, 2008; Reich et al., 2012; Tokunaga, 2011).
- Challenge the contrasting and simplified picture inadvertently created by social capital research (conducted on emerging adults) and cyber-bullying research (conducted on emerging adults).

Chapter 3: Methodology

This chapter is will begin by outlining the research design (including epistemological position) and relevant background information relating to both phases of data collection. It will then outline the procedure (including ethical considerations), followed by an outline of the information about the data analysis undertaken.

3.1. Research Design.

A mixed-methodology approach was adopted in this research. The study adopted a two-phase sequential approach, consisting of two phases of data collection. Firstly, administering questionnaires (Phase 1) and secondly, conducting semi-structured interviews (Phase 2). Each phase was designed to complement the other phase, providing a mix of both breadth (Phase 1) and depth (Phase 2) in relation to the research questions.

Questionnaires were chosen for Phase 1 because in order to best answer RQ1 (i.e. how adolescents use SNSs), it was considered necessary to gather responses from a large number of participants and a questionnaire enabled this to be done in a quick and accessible way. Using a questionnaire also opened up the opportunity of asking open-ended questions relevant to answering RQs 2, 3 & 4 (i.e. adolescents' perceptions of the influence of SNSs) to a much broader sample of adolescents.

Semi-structured interviews were chosen for Phase 2 because they provided the best opportunity to explore the perceptions of adolescents', which were relevant for research questions 2, 3 & 4 (i.e. adolescents' perceptions of how SNSs were influencing their peer relationships) in more detail. Thus enabling me to report on the themes in a more context sensitive, personal and thorough way, as well as conveying some of the individual differences between participants.

The purpose of the Phase 1 was to:
- Gain sufficient quantitative information in order to best answer the associated sub-questions which made up RQ1 (i.e. how adolescents are using SNSs).
- Explore links between adolescents' use of SNSs and the association with their real-life peer relations.

- Gain qualitative data (from as wide a sample as possible), which would contribute towards answering RQ 2, 3 & 4 (i.e. adolescents perceptions of the influence of SNSs).
- Screen participants for their eligibility for Phase 2 (interviews).
- Help to shape the interview schedule for Phase 2.

The purpose of phase 2 was to:
- Triangulate and supplement the qualitative data (obtained in phase 1) and provide further understanding regarding the themes generated (from phase 1).
- Check further for further themes.

This study adopted a pragmatic perspective. Johnson and Christensen (2004) discuss the concept of pragmatism being centred philosophically and methodologically between quantitative and qualitative approaches, which can answer broader and a more complex range of research questions, since the researcher is not confined to a single method or approach. Pragmatism is also compatible with mixed methods designs as it advocates adopting the method that appears best suited to answering the research question at hand (Robson, 2002).

In order to answer RQ1 (i.e how adolescents are using SNS and how this relates to their real-life peer relations), a predominantly quantitative method of enquiry was favored. In order to answer RQ 2, 3 and 4 (i.e. adolescents' perceptions of how SNSs are influencing their peer relationships), a predominantly qualitative method of enquiry was favoured.

3.2. Phase 1 Background Information.

3.2.1. Phase 1 participant information: The data collection for Phase 1 took place within a local authority of one outer London Borough. The borough has six secondary schools in total, serving a mixed background in terms of socio-economic background and ethnic diversity. Due to the anticipated widespread use of SNSs, no specific school inclusion criteria was applied. The secondary schools were selected on an opportunistic basis because of existing links the researcher had with the school staff, built up through working as a trainee Educational Psychologist in both schools.

School A was a Comprehensive School, with a total of 666 pupils enrolled (aged 11-16 years). About two-thirds of the pupils were White British origin, with the remainder coming from a variety of ethnic backgrounds. School B was a secondary school with Academy status. It had a total of 771 pupils (aged 11-18 years). The largest group of pupils are from White/British heritage, although over three-quarters are from a range of ethnic and cultural backgrounds, with the largest proportion being from black African or Caribbean backgrounds. Across both schools, both the number of pupils on the SEN register and the number of pupils eligible for free school meals is higher than is typically found nationally (for more information regarding both schools see Appendix 6.3.1).

A decision to focus on one specific year group was made because studying a wider range of ages would present an extra layer of analysis, which would not be central to the research questions and would be beyond the scope of this study. Year 9/10s as a Year group were also chosen for the following reasons:

- Studying a younger age sample would present ethical difficulties as most SNSs state that SNSs users must be at least 13 or older.

- Year 9/10 are the middle year group within secondary schools in the UK and so it was considered that the social structures of the year group would be more settled and less transient than earlier year groups (such as year 7 and 8s).

- Due to the research spanning two academic years, it would not be possible to begin research on students in the final year of secondary school (Year 11).

Prior to data collection, each of the participants in Phase 1 were given a parental 'opt-out' letter (see Appendix 6.3.2). A total of 243 (out of a possible 250) Year 9 adolescents completed questionnaires. This included 126 adolescents from School A and 117 adolescents from school B. In total the gender balance was 128 males (52.7%) and 115 females (47.3%). Of the remaining 7 participants who did not complete questionnaires, 3 adolescents opted not to participate in the study and 4 adolescents were unable to be contacted due to long-term absences.

3.2.2. Questionnaire details: Two forms of questionnaires were developed for Phase 1; Questionnaire A (designed for adolescents who use SNSs) and Questionnaire B (designed for adolescents who *do not* use SNSs).

Questionnaire A had four main sections.

- Section 1 (Q1- Q9): Containing closed-ended questions which enquired about participants' SNS habits and aspects of their real-life peer relations. These questions were relevant for answering RQ1 (i.e. how adolescents were using SNSs and how this is linked to their real-life peer relations).

- Section 2 (Q10-Q12): Containing open-ended questions enquiring about participants' experiences of using SNSs and their perceptions of the advantages and disadvantages of using SNSs.

- Section 3 (Q13-Q15): Containing the questions necessary for the generation of SCMs (see section 3.2.4). This included getting participants to identify who they hung around with and any other groups they recognized within their year group.

- Section 4 ('About You'): Containing identifying questions, such as gender, form group and ethnicity.

Questionnaire B can be regarded as having three main sections.

- Section 1 (Q1-Q5): Containing open-ended questions enquiring about participants' experiences of *not* using SNSs. Including their perceptions of the relative advantages and disadvantages of not using SNSs.

- Section 2 (Q6-Q7): Containing the questions necessary for the generation of SCMs (see section 3.2.4).

- Section 3 ('About You'): Containing identifying questions, such as gender, form group and ethnicity.

Both forms of questionnaires were developed by the researcher in collaboration with two research supervisors.

3.2.3. Questionnaire piloting: Before commencing Phase 1 of the data collection both questionnaires were piloted. The pilot participants were all within Year 9 and did not attend either school A or school B. Questionnaire A was piloted on four participants. Questionnaire B was piloted on two participants. After completing the questionnaire, feedback was sought from participants as a group.

Piloting prompted several changes to the questionnaire. Firstly, providing information immediately on how many questions the questionnaire contained. Secondly, changing

some of the spacing of the questions (to provide more space for answers). Thirdly, changing the vocabulary and wording of questions to make them easier to understand. For more detail on exact changes made as a result of the questionnaire piloting process please see Appendix 6.3.4.3.

With the exception of Q1 (Which SNSs do you use?) the questionnaire questions were deliberately designed to be mutually exclusive. The issue of participants providing more than one possible answer to closed-ended questions was anticipated within the research supervision meetings prior to data collection. In order to prevent this occurring, a supplementary instruction reading 'Tick Just One' was inserted in bold and italics after each question. In addition to this, while participants were completing the questionnaires the researcher reminded the participants to complete only one response for each question. On the odd occasion where participants had ticked more than one response for a question, they were prompted to go back and circle the main response.

Examples of both questionnaires are presented in Appendices 6.3.3 & 6.3.4. Both forms of questionnaires were developed by the researcher with the specific research questions in mind and were created in collaboration with two research supervisors.

A paper and pencil questionnaire was favoured over an online questionnaire because it was felt that this method gave the researcher more control over who would fill out the questionnaires, making it easier to respect any parents right to chose to opt their son/daughter out of the research.

3.2.4. Social Cognitive Map (SCM) section of questionnaire

Both sets of questionnaires also contained questions which enabled the generation of two separate Social Cognitive Maps, SCMs (Cairns, Perrin & Cairns, 1985), one for each school. Social Cognitive Maps are a peer report method for identifying social groups of children or adolescents in school settings. Using this method, participants are asked to identify their friendship group, as well as any other friendship groups they recognise. Participants can report peer groups of any size (including dyads), as well as stating that they belong to more than one group at the same time. Each respondent's report can be considered the individual's 'social cognitive map' of their setting.

The SCM computer program works by collecting participants' lists of names, aggregating them into a single co-nomination matrix and then analyzing correlation patterns in the co-nomination matrix. The number of nominations a group receives can be used to identify perceived friendship cliques and clusters within a sample. A particular peer group of names is formed when participants' names are correlated with each other above a predetermined threshold. Each respondent's individual and group centrality is determined based on the number of nominations received. Centrality can be conceptualized as one measure of the perceived prominence within a setting[3]. Using this method, participants (and groups) can be classified as either central, secondary, peripheral or isolated. 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:

- Central = 27+ nominations
- Secondary = 15-26 nominations
- Peripheral = 5-14 nominations
- Isolated = <4 nominations

For a further detail of how Social Cognitive Maps are generated using this technique, please refer to Cairns, Perrin & Cairns (1985).

Using SCMs as a research tool served a dual purpose. Firstly, it provided data on Phase 1 participants' individual (and group) prominence, which could then be explored in relation to participants' reports of SNS use. Exploring the link between prominence and SNS use had *not* been explored by any previous research and therefore generated a unique aspect to this study. Secondly, when considering the inclusion criteria (for Phase 2 participants), due to the inherently social nature of SNSs and the associated research questions (which focused on aspects of adolescents' peer relations), this research wanted to explore the experience of the majority of adolescents who were recognized within their social setting as having a distinct set of peer relations (rather than being recognized as an isolated individual). The development of a SCM ensured

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[3] It is important to note that centrality/prominence, although likely related, is not a measure of popularity. While popular individuals are likely to have a high centrality, it is also possible that a prominent peer could be perceived positively or negatively and therefore may not necessarily be well liked by their peers.

that the researcher could be confident that each participant in Phase 2 satisfied this criteria.

3.3. Phase 2 background information.

3.3.1. Phase 2 participant information: Participants were screened for the eligibility for Phase 2, based on the following two sets of criteria outlined below:

SNS user participant inclusion criteria.

Participants must:

1). Be a current user at least one SNS (including Facebook).

2). Have personal experience of using SNS(s) for a minimum of at least two years.

3). Login to SNSs at least once a week or more.

4). Be part of a recognized social clique or cluster within their year group (as identified by the SCM exercise).

5). Have been in the UK education system for at least seven years and not be learning English as an additional language.

6). Have ticked the 'yes' category on the questionnaire, which referred to their willingness to interviewed at a later stage.

7). Have received parental consent to take part in the interview.

Non SNS participant inclusion criteria.

Participants must:

1). *Not* being a current user of SNSs.

2). Being part of a recognized social clique or cluster within their year group (as identified by the SCM exercise).

3). Have been in the UK education system for at least seven years and not be learning English as an additional language.

4). Have ticked the 'yes' category on the questionnaire, which referred to their willingness to interviewed at a later stage.

5). Have received parental consent to take part in the interview.

Based on the SNS inclusion criteria, 145 out of 233 participants were considered eligible for interview. Based on the non-SNS inclusion criteria, 7 out of 11 participants were considered eligible for interview.

The purpose of the inclusion criteria was to ensure the participants would:

- Have enough current (and past) experience of using SNSs (at least 2 years) in order to be able to reflect on their experiences.

- Be able to share their perceptions about the influence of SNSs, based on the experience of being part of a social clique (as is typical for majority of adolescents).

- Be able to manage the listening and speaking demands of the interview, without language issues being a barrier.
- Be willing and open to share their experiences.

Prior to commencing Phase 2, it was agreed that, due to practical time restrictions, the total number of participants for Phase 2 would be 16 SNS users and 5 SNS non-users. Participants were selected for interview using stratified random sampling method, whereby eligible participants were picked at random from each social clique (identified by the SCM exercise). This generated 31 potential SNS-user participants and 7 non-SNS user participants. Each of the 31 selected participants were given a parental 'opt-in' letter (see Appendix 6.3.5) and participants were then selected on a 'first-come, first-served' basis.

3.3.2. Interview details: There were two forms of semi-structured interview schedules: Interview Schedule A, designed for adolescents who reported using SNSs and Interview Schedule B, designed for adolescents who reported that they *did not* use SNSs (for actual examples, please see Appendices 6.3.6 & 6.3.7).

A total of 21 participants were interviewed in more detail (16 current SNS users and 5 non-users). Of the 16 SNS users, 8 participants attended School A (4 male, 4 female) and 8 attended School B (4 female, 4 male). Of the 5 non-users 3 attended School A (2 female and `1 male) and 2 attended School B (1 male and 1 female).

Interview schedule A contained questions which could be categorised under five broad headings. These were ordered sequentially as follows:
- Participants' experience of their secondary school and their general perceptions of their friendships/peer group.
- Participants' early use of SNSs.
- Participants' activities on SNSs and what they think of its' features.
- Participants' specific experiences of using SNSs.
- Participants' general views on adolescents' use of SNSs.

Interview schedule B contained questions which could be categorised under three broad headings. These were ordered sequentially as follows:

- Participants' experience of their secondary school and their general perceptions of their friendships/peer group (including general SNS amongst peers).
- Participants' perceptions of the advantages and disadvantages of non use.
- Participants' general views on adolescents' use of SNSs.

Semi-structured interviews were chosen as a research method for Phase 2 because while the questionnaire data from Phase 2 had provided a breadth of information, semi-structured interviews offered a more thorough and personal approach, which participants would be more likely to respond to, allowing them to open up and provide a much richer data set. Enabling the findings from Phase 1 to be explored in further detail and elaborated on. Semi-structured interviews also gave the researcher the flexibility to explore any other significant findings missed by Phase 1.

The interview questions were deliberately structured to flow in a natural progression which would allow the participant opportunities to convey their experiences. The sequence of interview questions was deliberately designed to be broad in nature at the beginning and then gradually focus in on specific experiences.

Focus groups were considered as an alternative data collection method. However, it was felt that the questionnaire data (from Phase 1) had already provided a breadth of information and the primary purpose of phase 2 was to provide more depth and detail to the research questions. In addition to this, given the complex nature of adolescents' peer relationships and with the potentially sensitive nature of the issues that may be discussed (such as potential incidents of cyber-bullying), it was felt that the presence of other participants (and the inherent group dynamics involved in groups), may actually prevent participants from being honest about their experiences.

Both interview schedules were designed in close collaboration with two research supervisors. The interview schedules were designed so that the themes generated from the open-ended questionnaire questions (from Phase 1) could be elaborated on. The interviews were semi-structured in order to allow the researcher the flexibility to explore findings as they arose during the course of the interview.

3.3.3. Interview piloting: Before commencing Phase 2 of the data collection, both interview schedules were piloted on 4 separate adolescent participants (who did not attend school A or B). Following each interview, feedback was sought from each participant individually. Participants' feedback and the researchers' own reflections on the interview prompted several changes to the interview schedule. This included the omission of a number of questions which participants found ambiguous, the changing of wording of questions and the merging of certain questions which participants felt were repetitive. For further details on the changes made to both interview schedules as a result of the questionnaire piloting process please see Appendix 6.3.7.3.

3.4. Procedure and ethical considerations.

Prior to each stage of this project, two separate ethics applications were approved by the Institute of Education Ethics Committee (for original Phase 1 and 2 ethics application forms see Appendices 3.3.9).

Prior to collecting any data, as a precaution, one designated pastoral member of staff was identified (within each school) who agreed to take on the role of being a primary point of contact for pupils in case participating in the study raised any issues for participants that they would like to discuss further.

The researcher attended a staff meeting within each school where the nature of the research was explained to staff members. The researcher also attended the Year 9 assemblies within each school, where the nature of the study and (what it involved) was explained to the pupils. This was followed up with a further more personal introduction within each form group, where participants were given another opportunity to ask any further questions.

3.4.1. Phase 1 procedure and ethical considerations.

During the Summer Term (2012), a research consent letter was sent home to parents. This explained the nature of the project and gave parents the opportunity to opt their son/daughter out of participating in the research project if they chose to (see Appendix 6.3.2).

The questionnaires were administered to pupils during their weekly ICT lessons. This meant that the researcher was present when the pupils filled in the questionnaire and the questionnaires were completed on the school premises (in class sizes of approximately 25-30 pupils). Prior to completing the questionnaire, information relating to anonymity, confidentiality and the participants' rights to withdraw (or abstain from answering any question) was read out from the first page of the questionnaire (see Appendices 6.3.3.1 & 6.3.4.2).

It was agreed in advance (based on the knowledge of the teacher), which students may require some additional support in order to manage the Literacy demands of the questionnaire and teaching assistants were made available to provide assistance in reading the questions aloud to the pupils and scribing for pupils (where required).

Pupils were then given a designated 15 minutes to complete the questionnaire, followed by a 5 minute research debriefing. Participants were required to include their name when completing the questionnaire so that the SCM information provided could be linked to each individual participant. It also meant that each participant could be contacted again should they be selected for Phase 2. Asking each participant to provide their name was also done as a precautionary measure, in case any information was included, which may lead the researcher to believe that the participants' safety of well-being was at risk.

At the end of the questionnaire, participants were given the option of opting themselves out of phase 2. During the research debriefing, participants were given more information about the purpose of the study and were given written information signposting both the agreed pastoral member of staff (who they could talk to if they wished). Participants where also given information on an approved Cyber-Mentors website (www.cybermentors.org.uk), which participants could access online if they preferred (for actual example of this Appendices 6.3.2.2 & 6.3.3.2).

During Phase 1, following on from the generation of two separate Social Composite Maps (one for each school), it became apparent that across both year groups there were a total of 20 pupils (10 in School A and 10 in School B) who were not identified by their peers as being central to any particular friendship group. In these cases, as a

precautionary measure, the researcher discretely informed the pastoral support team of the identified pupils, so that they could remain mindful of this and address this issue should they feel the need to.

3.4.2. Phase 2 procedure and ethical considerations.

Prior to progressing to interviews, the results from Phase 1 were analysed and a selection of the quantitative information was selected and included in a school letter which went out to the participants' parents (see Appendix 6.3.7). The researcher also presented the data from Phase 1 to the Year 9 pupils during their weekly assembly. This reminded each participant about what participating in Phase 2 would further involve.

Of the 21 participants who were selected, each participant was notified via their form tutor and invited for an informal discussion with the researcher which provided information on a) why they had been chosen and b) the interview process in more detail. The participants were then given a parental consent letter and asked to return the signed parental consent letter to the school Special Educational Needs Co-ordinator (SENCO).

Following the return of the parental consent letter, each participant was interviewed in a pre-booked room on the school premises during the weekly ICT lesson. Prior to commencing the interview, each participant was given written information relating to their participant rights.

During the semi-structured interview, participants were presented with their completed questionnaire (from phase 1). All participants were asked the same questions from the interview schedule, although differing follow up questions were asked in each interview, based on the participants' responses. A full transcription of a SNS user interview and a non-SNS user interview has been provided in Appendices 6.4.3 & 6.4.4). Upon completion of the interview, the participants were given a debriefing form and were offered the opportunity to ask any questions. Each interview was audio recorded and later transcribed verbatim.

During Phase 2, there was one occasion when a participant mentioned that they were receiving lots of swearing and racist comments from other people in their year group via SNSs, which had they reported had spilled over into bullying face-to-face. At the end of the interview, the researchers' duty to pass on information (where it was felt anybody's well-being and safety might be at risk) was explained to the participant. This information was then passed onto the designated pastoral support member of staff so that they could talk with the young person further and offer some further follow up support.

Following full completion of this research, the findings of the study were fed back to participating schools, via some whole school staff awareness training and a presentation to the pupils during their weekly assembly.

3.5. Analysis.

The data used to answer research question 1 (i.e. how adolescents are using SNSs) consisted of 243 sets of answers from the SNS questionnaire *closed* questions (from Phase 1). The results used to answer research question 2 & 3 (i.e. adolescents perceptions of the influence of SNSs) consisted of 243 sets of answers from the *open-ended* SNS questionnaire questions (from Phase 1), plus an additional 16 interview transcripts (Phase 2). The results used to answer research question 4 (i.e. non SNS user adolescent perspectives) consisted of 10 sets of open-ended answers from the Non-SNS questionnaire (Phase 1), plus an additional 5 interview transcripts.

3.5.1. Phase 1 analysis: The fixed-response questions from the questionnaire (questions 1-9) were coded and entered into SPSS. This quantitative information was then analyzed using descriptive statistics, including frequency tables, cross tabulations and where the conditions were met, Chi-Square Analyses. Participants' peer nominations of their friendship groups were entered into an excel spreadsheet and analyzed using a computer Social Composite Mapping Computer Program.

The open-ended response questions from the questionnaire (questions 10-12) were analysed using a thematic analysis. Thematic analysis was chosen as an interpretative method because it enabled qualitative information to be interpreted in a rich, detailed and flexible way. Thematic analysis was chosen over a number of alternative analyses including both Grounded Theory and Interpretive Phenomenological Analysis (IPA).

Grounded Theory was rejected because, rather than generating a theory, which would explain a phenomenon, my aim was to portray a description in detail within a particular setting. Interpretive Phenomenological Analysis was rejected because there were too many participants, the sample was not homogenous and the research focus was less interested in interpreting or going beyond the explanations the participants presented.

The Phase 1 thematic analysis was an inductive process, where the data were analysed in several distinct phases (as outlined in Braun & Clarke, 2006). Outlined as the following:

1). Familiarisation of data: Transcribing, reading and re-reading the data, noting down initial ideas.

2). Generating initial codes: Coding relevant features of the data and collating the data relevant to each code.

3). Searching for themes: Collating codes into potential themes.

4). Reviewing themes: Checking the themes work in relation to the coded extracts.

5). Defining and naming themes: Ongoing analysis to refine each theme, and the overall story the analysis tells; generating clear definitions and names for each theme.

Due to the paucity of prior research which could be used to inform the understanding of the subject matter, analysing the data inductively was a central part of the research strategy, with the aim being to generate a selection of themes that could sensitively portray subtle influences, which may not have been detected by previous studies.

For full Phase 1 coding maps (for both SNS users and non-SNS users) please see Appendices 6.4.1 and 6.4.2.

3.5.2. Phase 2 analysis: Following the completion of each interview, the audio recordings were transcribed. The Phase 2 thematic analysis was a more deductive process, where the data was analysed based on the categories generated from Phase 1 (while also allowing for the possibility of other categories emerging).

The full corpus was examined multiple times, in order to check that the data generated was indeed best represented by the themes and sub-themes generated. Where this

was not the case, the themes (and sub-themes) were adjusted and re-ordered to more accurately reflect the full data set.

During each phase of data collection, both the open-ended questionnaire responses and the original interview transcripts were discussed within supervision. In addition to this, during both phases of data collection, a data validity check was also conducted with a fellow Trainee Educational Psychologist who read and coded a sample of transcripts themselves. At the end of this process, any differences of opinion were discussed. This resulted in some adjustments and elaborations to the themes and subthemes developed. The aim of both of these processes was to listen to other alternative interpretations of the data and further reflect upon on my own data and interpretations, making changes where considered necessary.

For examples of full interview transcripts (one SNS user and one Non-SNS user), please see Appendices 6.4.3 and 6.4.4. For a full overview of themes, generated by all 21 participants, please see Appendices 6.4.5 and 6.4.6.

3.5.3. Use of NVivo during thematic analysis.
During both phases, the computer software program NVivo10 was used to assist the thematic analysis process. NVivo was used to work through the distinct phases of the thematic analysis (as outlined in section 3.5.1). Specifically, NVivo was used to assist with the process of picking out relevant transcribed data and sorting it into meaningful and coherent codes. NVivo also assisted in the process of merging and re-ordering of different codes into overarching themes and subthemes. The advantage of using NVivo was that it gave the researcher greater capacity and flexibility to review the data set and greater scope to experiment with the generation and reordering of codes and themes.

A full Phase 1 coding map (for both SNS users and non-SNS users) has been provided in Appendices 6.4.1 and 6.4.2. This has been directly lifted from the NVivo data set and provides detailed information on how the initial codes were grouped into themes and subthemes.

In addition to this, two full annotated interview transcripts (one SNS user and one SNS non-user) have been provided in Appendices 6.4.3. & 6.4.4.

A full Phase 2 overview of themes (for both SNS users and non-SNS users) has also been provided in Appendices 6.4.5. and 6.4.6. This has been directly lifted from the NVivo data set.

For both phases, the tallies reported represent the number of respondents who mentioned each theme.

3.6. Reflexivity

3.6.1. The researcher's attitude towards SNSs: This research takes the perspective that adolescents' use of SNSs is bi-directional. This means assuming that adolescents' use of SNSs will, to a large extent, be a reflection of their real-life social norms and values. While also remaining open to the possibility that SNSs may also be exerting some *additional* transformative social influences. Thus, the challenge when listening to participants' experiences and analysing the qualitative data; was to tease apart a). What is a SNS influence? and b). What is simply a reflection of real-world everyday behaviour?

3.6.2. Data bias: The study was conducted within a school environment and this setting may have inadvertently guided the participants' towards reporting on the peer relationships they have within school (as opposed to peer relationships outside of school). This may mean that the data gathered did not fully capture adolescents' peer relationships across both school *and* home settings.

3.6.3. Participant bias: The nature of this study and the research design, meant that the answers to the research questions were reliant on adolescents' self-reports, opening up the possibility of distortions created by participants not reporting honestly or potentially withholding information (especially with regards to some of the difficulties that they may be experienced whist using SNSs).

Chapter 4: Results

This chapter presents the results from analyses of the quantitative and qualitative data. The data is presented with respect to each of the research questions. Section 1 presents the results of the Phase 1 *quantitative* data which relates to RQ1 (i.e. how adolescents are using SNSs and how this links to their real-life peer relations). Section 2 presents the Phase 1 and 2 *qualitative* data which relates to RQ2 and RQ3 (i.e. adolescents' perceptions of how SNSs are influencing their social lives). Section 3 presents results from non-SNS user participants (RQ4). Section 4 presents data relating to cyber-bullying.

Section 1: Quantitative data (RQ1).

The following quantitative data results are presented using descriptive statistics, including frequency tables and cross tabulations. Percentages have been reported alongside frequencies (in brackets). The data from the questionnaire questions have also been further analysed according to school, gender and in relation to other questionnaire questions. Where appropriate, further statistical tests, have also been applied.

Which SNSs are adolescents using?

4.1.1. Cross tabulation to show which types of SNSs (and how many SNSs) adolescents are using (percentage within SNS type reported).

	1 SNS	2 SNSs	3+ SNSs	Total % (within type of SNS)
Facebook	49.1% (112)	32.9% (75)	18%% (41)	100% (228)
Twitter	1.9% (2)	62.9% (66)	35.2% (37)	100% (105)
Tumblr	-	21.7% (5)	78.3% (12)	100% (23)
MySpace	-	11.1% (2)	88.9% (16)	100% (18)
Bebo	-	12.5% (2)	87.5% (14)	100% (16)
Formspring	-	30% (3)	70% (7)	100% (10)
Flickr	-	-	100% (5)	100% (5)
Total	49.4% (114)	32.9% (76)	18% (41)	100% (231)

Most participants reported using either one or two SNSs, with this use being dominated by Facebook and to a lesser extent Twitter. Participants who use other SNSs tend to report using them *in addition* to using both Facebook and Twitter, although using 3 (or more) SNSs appears to be much less common.

When do adolescents first start using SNSs?

4.1.2. Frequency table to show when adolescents report first using SNSs.

Year of first use	% of participants	Cumulative % of participants
Year 4 (or before)	5.3% (13)	5.3% (13)
5	16.9% (41)	22.2% (54)
6	37% (90)	59.3% (144)
7	23% (56)	82.3% (200)
8	7% (17)	89.3% (217)
9	5.8% (14)	95.1% (231)
N/A (Non SNS users)	4.9% (12)	100% (243)

The three most widely reported years of first use amongst participants were Years 5, 6 & 7 (the years before, during and after transition to secondary school). This is despite a minimum age limit of 13 on most SNSs (including Facebook and Twitter). By the end of primary school (end of year 6), the majority of participants in this sample reported that they had already began using SNSs. The high number of adolescents who first reported using SNSs during year 5, 6 and 7, suggest that SNSs may be playing an important role during the transition from primary to secondary school. A small minority of adolescents reported that they do not report use SNSs.

How often do adolescents log-in to SNSs?

4.1.3. Frequency table to show how often adolescents are logging in to SNSs

Frequency of use	Percentage of participants	Cumulative percentage of participants
Less than once a week	9.9% (24)	10.4% (24)
Once a week	6.6% (16)	17.3% (40)
A couple of times a week	25.9% (63)	44.6% (103)
Every other day	22.2% (54)	68% (157)
Everyday	30.5% (74)	100% (231)

Adolescents tend to log onto SNSs frequently, the majority of SNS users login to SNSs either every day or every other day.

4.1.3.1. Cross tabulation the show the association between frequency of SNS use and gender (percentage within gender reported).

	Females	Males
Less than once a week	6.5% (7)	13.8% (17)
Once a week	5.6% (6)	8.1% (10)
A couple of times a week	24.1% (26)	30.1% (37)
Every other day	17.6% (19)	28.5% (35)
Everyday	46.6% (50)	19.5% (24)

A Chi-Square Analysis was conducted to explore the relationship between frequency of use and gender. This showed that there was a significant relationship between gender and frequency of use, X^2(4, N=231) =20.07, p=0.00, V=0.295. The above cross tabulation shows that, overall, female participants reported logging in to SNSs more frequently than male participants. Male participants most commonly reported logging on either a couple of times a week or every other day. Female participants most commonly reported that they login to SNSs every day.

4.1.3.2. Cross-tabulations to show the association between frequency of SNS use and year of reported first use (percentage within frequency of use reported).

	Year 4 (or before) & Year 5	Year 6 & 7	Year 8 & 9	Total
Once a week (or less)	22.9% (8)	57.1% (20)	20% (7)	100% (35)
A couple of times a week (or more)	23.5% (46)	63.3% (124)	13.3% (26)	100% (196)
Total	23.4% (54)	62.3% (144)	14.3% (33)	100% (231)

There appears to be little association between the school year that SNSs are first used and how frequently they are subsequently used. A Chi-Square Analysis confirmed that the relationship between year of reported first use and frequency of use was not statistically significant X^2(2, N=231)=1.13, p=0.57, V=0.07.

What is the main way that adolescents access SNSs?

4.1.4. Cross tabulation to show the association between main way of accessing SNSs and frequency of SNS use (percentage within frequency of use reported).

	Phone	Home Computer	Tablet	Computers at school	Total Percentage (frequency of use)
Once a week (or less)	13.8% (20)	12.7% (9)	38.5% (5)	50% (1)	15.2% (35)
Twice a week (or more)	86.2% (125)	87.3% (62)	61.5% (8)	50% (1)	84.8% (196)
Total	100% (145)	100% (71)	100% (13)	100% (2)	231 (100%)

Adolescents reported that they mainly access SNSs through either a mobile phone or home computer. A small minority of adolescents reported that they access SNSs via a tablet (such as an Ipad) or via computers at school. Adolescents who report logging into SNSs via either phone or home computer also appear to be more likely to login to SNSs more frequently. This makes intuitive sense. The high number of participants who report logging in to SNSs through their mobile phone would suggest that it is highly like that SNSs are being used across both at home *and* school settings.

How many SNS contacts do adolescents have?

4.1.5. Frequency table to show the number of contacts adolescents have on SNSs.

Number of SNS contacts	Percentage of participants
1-100	12.8% (29)
101-200	17.5% (38)
201-300	26.9% (62)
301-400	18.4% (43)
401-500	12% (29)
500+	12.4% (29)

The most commonly reported number of SNS contacts was between 201-300 contacts. The 500+ contacts category positively skews the data, with a higher than expected number of adolescents reporting having 500+ SNS contacts.

4.1.5.1. Cross-tabulation to show the association between reported number of SNS contacts and gender (percentage within gender reported).

	1-200 SNS contacts	201-400 SNS contacts	401+ SNS contacts	Total
Males	37.4% (46)	40.7% (50)	22% (27)	100% (123)
Females	18.7% (20)	52.3% (56)	29% (31)	100% (107)
Total	28.7% (66)	46.1% (106)	25.2% (58)	100% (230)

A Chi-Square Analysis was conducted to explore the relationship between number of SNS contacts and gender. This showed that there was a significant effect for gender, $X^2(2, N=230) = 9.79$, P=0.01, V=0.206. Analysis of the cross tabulation shows that across both genders, the most commonly reported category was to between 201-400 SNSs. Males were more likely (than females) to report having between 1-200 SNS contacts. Females were more likely (than males) to report having 401+ SNS contacts.

4.1.5.2. Cross-tabulation to show the association between the number of reported SNS contacts and frequency of SNS use (percentage within frequency of use reported).

	1-200 SNS contacts	201-400 SNS contacts	401+ SNS contacts	Total
Once a week (or less)	51.4% (18)	34.3% (12)	14.3% (5)	100% (35)
Twice a week (or more)	24.6% (48)	48.2% (94)	27.2% (53)	100% (195)
Total	28.7% (66)	46.1% (106)	25.2% (58)	100% (230)

A Chi-Square Analysis revealed that the relationship between reported frequency of SNS use and reported number of SNS contacts was significant, $X^2(2, N=230) = 10.64$, P=0.05, V=0.215. Analysis of the cross tabulation shows that adolescents who login once a week or less are most likely to report having between 1-200 SNS contacts. By contrast, adolescents who login more than twice a week (or more) are most likely to report having 201-400 SNS contacts. Of the adolescents who report having 401+ SNS contacts, the overwhelming majority also report logging in twice a week or more.

4.1.5.3. Cross-tabulation for number of SNS contacts and year of first use (percentage within year of first use reported).

	1-200 SNS contacts	201-400 SNS contacts	401+ SNS contacts	Total
Year 4 (or before & Year 5	22.2% (12)	42.6% (23)	35.2% (19)	100% (54)
Year 6 & 7	25.7% (37)	50% (72)	24.3% (35)	100% (144)
Year 8 & 9	53.1% (17)	34.4% (11)	12.5% (4)	13.9% (32)
Total	28.7% (66)	46.1% (106)	25.2% (58)	100% (230)

A Chi-Square Analysis revealed that the relationship between reported year of first SNS use and number of SNS contacts was statistically significant, X^2=(4, N=230) = *13.7*, P=0.008, V=0.244. Participants who reported beginning using SNSs during Years 4 & 5 were the *least* likely group of adolescents to report having 1-200 SNS contacts and the *most* likely to report having 401+ SNS contacts. By contrast, adolescents who reported beginning using SNSs during Year 8 & 9 were *more* likely to report having between 1-200 SNS contacts (53.1%), and *less* likely to report having 401+ SNS contacts. These trends make intuitive sense because presumably, the longer a participant uses SNSs for, the more opportunity they have to accumulate SNS contacts.

How many real-life friends do adolescents have?

4.1.6. Frequency table to show the number of real-life friends adolescents have.

Number of real-life friends	Percentage of participants
1-10	9.9% (24)
11-20	16% (39)
21-30	16.5% (40)
31-40	12.8% (31)
41-50	12.8% (31)
50+	26.7% (65)
Non-responses	4.9% (12)

The number of real-life friends that participants reported generated an uneven distribution. Participants' responses are skewed towards either the higher end (50+) or the lower end responses (<30). The single most commonly reported category amongst participants' responses was 50+ real-life friends. A large proportion of adolescents also reported having between 1-30 real-life friends.

4.1.6.1. Cross-tabulation to show the association between number of real-friends and gender (percentage within gender reported).

	1-20 real-life friends	21-40 real-life friends	41+ real-life friends	Total
Males	21.1% (26)	38.2% (47)	40.7% (50)	100% (123)
Females	32.7% (35)	28% (30)	39.3% (42)	100% (107)
Total	26.5% (61)	33.5% (77)	40% (92)	100% (230)

Unlike the reported number of SNS contacts, the number of reported real-life friends did not show any significant gender differences. The most commonly reported real-life friends category for males was between 21-40 real-life friends. The most commonly reported real-life friends category for female participants was 41+ real-life friends. However, a Chi-Square Analysis showed that the relationship between the number of reported real-life friends and gender did not reach statistical significance, X^2(2, N=230)=4.69, P=0.096, V=0.143, suggesting this is most likely to have occurred by chance.

4.1.6.2. Cross-tabulation to show the association between reported number of real-life friends and frequency of SNSs use (percentage within frequency reported).

	1-20 real-life friends	21-40 real-life friends	41+ real-life friends	Total
Once a week or less	51.4% (18)	34.3% (12)	14.3% (5)	35
More than once a week	24.6% (48)	48.2% (94)	27.2% (53)	195
Total	28.7% (66)	46.1% (106)	25.2% (58)	230 (100%)

The above cross tabulation highlights that adolescents who report having between 1-20 real-life friends are also more likely to report logging in to SNSs once a week or less. By contrast, adolescents who report logging into SNSs more than once a week tend to report having 21 (or more) real-life friends. However, a Chi-Square Analysis revealed that the relationship between frequency of use and number of real-life friends did not reach statistical significance X^2(2, N=230)=2.39, P=0.303, V=0.102.

4.1.6.3. Cross-tabulation the show the association between number of real-life friends and year of first use (percentage within real-life friends reported).

	1-20 real-life friends	21-40 real-life friends	41+ real-life friends
Year 4 (or before) & Year 5	19.7% (12)	20.8% (16)	48.1% (26)
Year 6 & 7	57.4% (35)	67.5% (52)	39.6% (57)
Year 8 & 9	43.8% (14)	11.7% (9)	28.1% (9)
Total	100% (61)	100% (77%)	100% (92)

Amongst adolescents who report having between 1-20, there is a higher percentage of participants reporting first using SNSs in Year 8 & 9. By contrast, amongst adolescents who report having 41+ real-life friends, there is a higher proportion of adolescents who report first using SNSs in either Year 4 (or before) or Year 5. However, a Chi-Square Analysis revealed that the relationship between number of real-life friends and reported year of first use of SNSs did not reach statistical significance $X^2(4, N=230)=7.07$, $P=0.132$, $V=0.124$.

4.1.6.4. Cross-tabulation to show the association between the number of reported real-life friends and number of SNS contacts (percentage within real-life friends reported).

	1-20 real-life friends	21-40 real-life friends	41+ real-life friends
1-200 SNS contacts	37.7% (23)	27.3% (21)	23.9% (22)
201-400 SNS contacts	34.4% (21)	49.4% (38)	51.1% (47)
400+ SNS contacts	27.9% (17)	23.4% (18)	25% (23)
Total	100% (61)	100% (77)	100% (92)

Amongst adolescents who report having between 1-20 real-life friends, adolescents are most likely to also report having between 1-200 SNS contacts. Amongst the adolescents who reported having either 21-40 real-life friends or 41+ real-life friends, they are most likely to report having between 201-400 SNS contacts. Interestingly, amongst adolescents who report having 400+ SNS contacts, there appears to be very little association with the number of reported real-life friends. A Chi-Square Analysis revealed that the relationship between number of real-life friends and number of SNS contacts did not reach statistical significance, $X^2(4, N=230)=5.27$, $P=02.26$, $V=0.107$.

How many real-life friends do adolescents report meeting up with face-to-face over the last couple of weeks?

4.1.7. Frequency table to show the number of friends adolescents have met face-to-face (in the last couple of weeks).

Number of friends met face-to-face (in the last couple of weeks)	Percentage of participants
1-10	21.4% (52)
11-20	22.6% (55)
21-30	17.7% (43)
31-40	9.1% (22)
41-50	9.9% (24)
50+	14% (34)

There is a high degree of variation in how many friends participants reported that they had seen face-to-face (in the last couple of weeks), with participants' responses showing a similar pattern to the reported number of real-life friends; participants responses were skewed towards either the lower (>30 friends) end or higher end (50+ friends) responses.

4.1.7.1. Cross-tabulation for number of friends met face-to-face (in the last week) and gender.

	1-20 friends face-to-face	21-40 friends face-to-face	41+ friends face-to-face	Total
Males	43.9% (54)	26% (32)	30.1% (37)	100% (123)
Females	47.7% (51)	28% (51)	24.3% (26)	100% (107)
Total	45.7% (105)	27% (105)	27.4% (63)	100% (230)

The most common category for both male and female participants was to report was meeting between 1-10 friends face-to-face (in the last week). Male participants were slightly more likely than female participants to report seeing 41+ friends face-to-face. However, a Chi-Square Analysis showed that the association between gender and number of friends met face-to-face was not statistically significant, $X^2=$ (2, N=230)=0.96, P=0.618, V=0.065.

4.1.7.2. Cross-tabulation for number of friends met up with face-to-face (in the last couple of weeks) and frequency of SNSs use (percentage within face-to-face friend met reported).

	1-20 real-life friends	21-40 real-life friends	41+ real-life friends	Total
Once a week or less	17.1% (18)	12.9% (8)	14.3% (9)	15.2% (35)
More than once a week	82.9% (87)	87.1 (54)	85.7% (54)	84.8% (195)
Total	100% (105)	100% (62)	100% (63)	100% (230)

A Chi-Square Analysis showed that the association between number of friends met face-to-face (in the last couple of weeks) and frequency of SNS use was not statistically significant $X^2(2, N=230)=2.39$, $P=0.3$, $V=0.1$.

What do adolescents do most frequently on SNSs?

4.2. Table to show frequency of reported activities on SNSs.

	Mean 1=always 5 = never	Standard Deviation
Chat with friends not seen everyday	2.37	1.17
Look for friends lost	2.95	1.16
Check up on news (amongst their contacts)	3.00	1.27
Manage my profile	3.07	1.26
Chat with friends seen everyday	3.08	1.14
Organise groups /events	3.55	1.22
Talk to new people	4.19	1.02
Other (games)	4.68	0.95

The table above gives an overall impression of how frequently adolescents report doing different activities on SNSs. As can be seen, the activities that adolescents report doing most frequently are; chatting with friends who they do not see every day, looking for lost friendships and checking up on social news (amongst their contacts). Very few adolescents reported ever talking to new people on SNSs or playing SNS games. The biggest range of reported frequency of use was with regards to how often participants reported that they checked up on social news (amongst their contacts), managed their profile, and organised groups/events, suggesting that adolescents' preference for using these SNS features varies greatly between individuals.

4.2.1. Table to show association between the frequency of reported activity on SNSs and gender.

Activity on SNSs (1 = always, 5 = never)	Males (M)		Females (F)		Most frequent by gender	Statistically significant (Mann-Whitney U Test)
	Mean	Standard deviation	Mean	Standard deviation		
Chat with friends not seen everyday	2.32	1.12	2.42	1.29	M	No
Check up on news	**2.82**	**1.26**	**3.2**	**1.26**	**M**	**Yes**
Manage my profile	2.94	1.24	3.22	1.26	M	No
Look for lost friends	3.04	1.11	2.86	1.21	F	No
Chat with friends seen everyday	3.14	1.11	3.01	1.17	F	No
Organise groups/events	3.43	1.24	3.68	1.19	M	No
Talk to new people	4.15	1	4.23	1.04	M	No
Play online games	4.63	1.03	4.74	0.85	M	No

There are some subtle differences with regards to the frequency (and variability) between genders. Overall, male participants reported doing activities more frequently. On the surface, the table above suggests that male participants tend to do the following activities more often; chatting with friends not seen every day, checking up on news and managing their profiles (among others) more frequently. By contrast, female participants typically reported that they chat with friends (that they see every day) more often than males and also look for more lost friends more often (which fits with the higher number of SNS contacts reported by females). A series of Mann-Whitney U tests were conducted to explore whether the frequency of reported activity on SNSs was statistically significant. This revealed that there were few actual ratings of statistically significant differences between genders. The only significant findings was the higher frequency with which males 'check up on news (amongst their SNS contacts), $U=5536.5$, $Z=-2.25$, $P=0.012$. This suggests that patterns of male and female SNS use is likely to be, for the most part, very similar.

4.3. Social Cognitive Map Data: An overview of adolescent friendship cliques identified by peers within sample.

School A   School B

Key

Central member/group

Secondary member/group

Peripheral member/group

Isolated members

Pupils who belong to two (or more) social cliques.
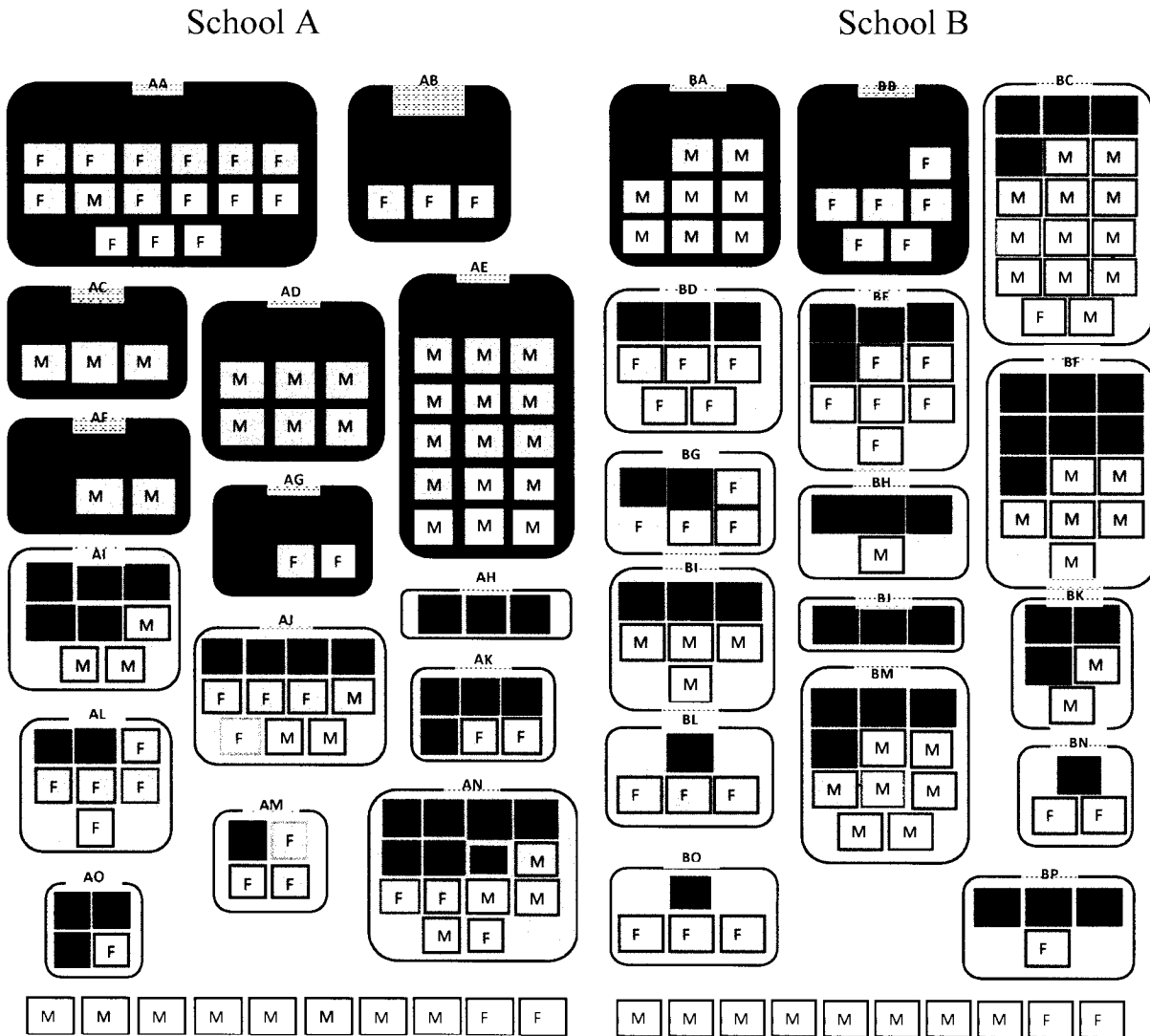
The above Social Composite Maps have been generated based upon the participant peer nomination data using the technique developed by Cairns, Perrin & Cairns (1985). While these friendship groups are likely to be continually evolving, they provide a

snapshot picture of the real-world friendship groups within their school (as perceived by the participants themselves).

As can be seen, there is a wide variation in sizes of the social cliques (with friendship groups ranging in size from groups of 3 members, to groups of 21 members). Friendship groups also appear to be largely dominated by same-sex members. There are some individuals who are also perceived to belong to more than one friendship group.

The SCMs also provide concurrent information on centrality (or perceived prominence) of the friendship groups (and individual members) within each setting. Centrality is determined by the number of times an individual (or group or individuals) is mentioned (with higher nominations equating to a higher centrality).

What is the relationship between an individual's prominence and their use of SNSs?

4.3.1. Cross-tabulation for _individual_ prominence and frequency of SNS use (percentage within frequency of SNS use reported).

	Isolated individuals	Peripheral individuals	Secondary individuals	Central individuals	Total
Once a week or less	27.6% (6)	26.5% (9)	26.5% (9)	29.4% (10)	100% (34)
A couple of times a week or more	5.7% (11)	16.6% (32)	33.2% (64)	44.6% (86)	100% (193)
Total	7.5% (17)	18.1% (41)	32.2% (73)	42.3% (96)	100% (227)

A Chi-Square Analysis showed that the association between individual centrality and frequency of SNS use was significant, $X^2(3$, N=227$) =9.046$, P =0.03, V=0.2. The above cross tabulation shows that logging into to SNSs once a week (or less) has very little association with an individual's perceived prominence. By contrast, adolescents who login to SNSs a couple of times a week (or more) are more likely to be perceived as more prominent within their social setting.

4.3.2. Cross-tabulation for _individual_ prominence and number of SNSs contacts (percentage within centrality reported).

	Isolates or Peripheral Individuals	Secondary Individuals	Central Individuals	Overall Percentage
1-200 SNS contacts	34.5% (20)	26% (19)	28.4% (27)	29.2% (66)
201-400 SNS contacts	41.4% (24)	41.1% (30)	52.6% (50)	46% (104)
401+ SNS contacts	24.1% (14)	32.9% (24)	18.9% (18)	24.8% (56)
Total	100% (58)	100% (73)	100% (95)	100% (226)

A Chi-Square Analysis revealed that the relationship between an individual's perceived prominence and the number of SNSs contacts was not statistically significant X^2 (4, N=226)=5.63, P = 0.23, V=0.11.

4.3.3. Cross-tabulation for _individual_ prominence and year of first use of SNSs (percentage within year of first use reported)

	Isolates or Peripheral Individuals	Secondary Individuals	Central Individuals	Overall Percentage
Year 4 & 5	21.2% (11)	36.5% (19)	42.3% (22)	100% (52)
Year 6 & 7	24.6% (35)	33.1% (47)	42.3% (60)	100% (142)
Year 8 & 9	36.4% (12)	21.2% (7)	42.4% (14)	100% (33)
Total	25.6% (58)	32.2% (73)	42.3% (96)	100% (227)

A Chi-Square Analysis revealed that the relationship between individual centrality and year of reported first use of SNSs was not statistically significant , X^2 (6, N=227)=3.528, P=0.474, V=0.88.. This is most clearly demonstrated by the most prominent individuals (central individuals).

What is the relationship between _group_ prominence and use of SNSs?

4.3.4. Cross-tabulation for _group_ prominence and frequency of SNS use (percentage within centrality data reported).

	Isolate or members of a peripheral group	Member of a secondary group or central group	Total
Once a week or less	22.8% (23)	8.7% (11)	15% (34)
A couple of times a week or more	77.2% (78)	91.3% (115)	85% (193)
Total	100% (101)	100% (126)	100% (227)

A Chi Square Analysis showed that the relationship between perceived group centrality and reported frequency of use was statistically significant, X^2 (2, N=227) = 8.87, P=0.03, V=0.2. As can be seen from the cross tabulation, adolescents who login to SNSs once a week (or less), are more likely to be identified as either isolated individuals or belonging to a friendship group with low perceived prominence. In contrast adolescents who login to SNSs a couple of times a week (or more), are more likely to be perceived to belong to a friendship group with a higher perceived prominence.

4.3.5. Cross-tabulation for _group_ prominence and number of SNS contacts (percentage within SNS contacts reported).

	Isolated individuals or members of peripheral friendship groups	Members of secondary or central friendship groups	Total
Between 1-200 SNS contacts	51.5% (34)	48.5% (32)	100% (66)
201-400 SNS contacts	44.2% (46)	55.8% (58)	100% (104)
401+ SNS contacts	37.5% (21)	62.5% (35)	100% (56)
Total	44.7% (101)	55.3% (125)	100% (226)

Amongst adolescents who report having 400 SNS contacts (or less) there appears to be little association between the number of SNS contacts they have and their friendship group prominence. Adolescents who report having 401+ SNS contacts appear to be more likely to be identified as belonging to a friendship group with a higher prominence. However, a Chi-Square Analysis showed that the relationship between perceived group centrality number of SNS contacts was not statistically significant X^2 (4, N=227)=3.43, P = 0.49, V=0.09., suggesting this is most likely to have occurred by chance.

Summary of Phase 1 & 2 Qualitative Data

RQ2). What advantages do adolescents perceive that SNSs bring to their peer relationships?

RQ3). What disadvantages do adolescents perceive that SNSs bring to their peer relationships?

The following thematic analysis was generated from the qualitative data collected from both the open-ended questionnaire questions (Phase 1) and the semi-structured interviews (Phase 2), for further details of this process, please see sections 3.5.1 and 3.5.2. The thematic analysis generated three broad categories: Advantages, Disadvantages and Acting differently online. An overall summary diagram of the results is displayed below:

Advantages	Disadvantages
Increased availability of social information	Lack of control over posting of information
Social expansion opportunities	Privacy concerns
Enhanced self-expressive opportunities	Diminished social cues
Increased social organisation	Relationship footprints
Overcoming 'real-world' barriers	Differing perceptions of SNS 'friends'
A source of entertainment	Impersonation risks
	Increased stranger danger
	Popularity pressure
	Spending too much time online

Acting differently online

Positive online behaviour changes	Negative online behaviour changes
Behaving more confidently	Behaving more confrontationally
Behaving more diplomatically	Behaving more 'two-faced'

RQ4). How do adolescents *who do not use* SNSs perceive that this has impacted on their social lives?

The thematic analysis from the data gathered by non-SNS users generated two broad categories; advantages and disadvantages. An overall summary diagram of the results is displayed below:

Non SNS user perceptions	
Advantages	**Disadvantages**
Avoiding 'trouble'	Missing out
Maintaining privacy	Peer pressure
Saving time	
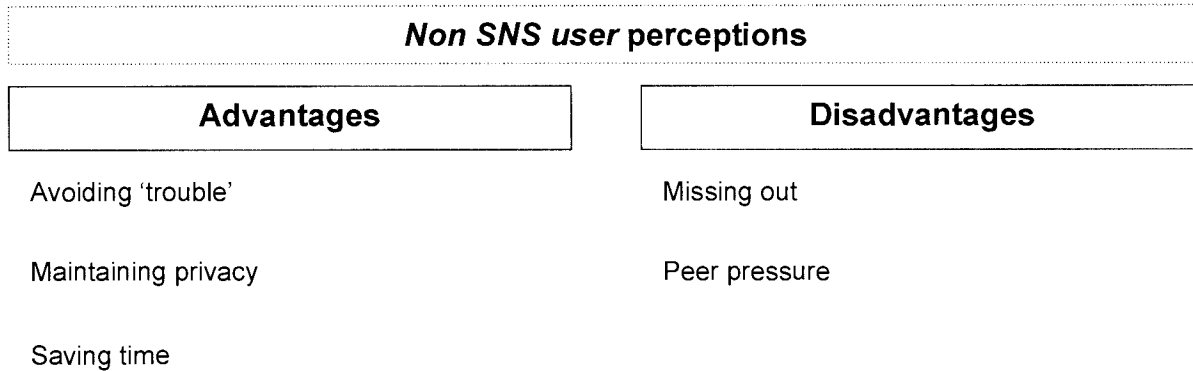
When presenting quotes, Phase 2 participants have been given pseudonyms and a unique identification code. The participant identification codes were generated using data from the SCM. The first letter of the code is determined by the school they belong to (either A or B). The second letter of the code corresponds to the particular social clique they have been identified in (ranging from A to P). The third letter of the code relates to the gender of the participant (M or F).

The tallies reported in the results represent the number of respondents who mentioned each theme.

For supplementary quotes, which further illustrate each theme, please see Appendix 6.5.

Section 2: Adolescent SNS User Perceptions (RQ 2 & 3).

4.4. Theme 1: Advantages of using SNSs

This theme summarises adolescents' perceptions of the advantages that SNSs are perceived to offer adolescents which are above and beyond the usual opportunities for face-to-face interaction. Many of the themes described map closely with some of the known characteristics and features of SNSs.

The following table gives an overview of the themes generated (and subthemes) along with information on the number of references during each phase of data collection. The themes have been organised according to their considered conceptual importance. Where direct quotes have not been provided for a theme, see appendix 6.5.

Theme	Sub-Themes	Number of References from Phase 1	Number of References from Phase 2	Illustrative Quotes (From Phase 1)
4.4.1. Increased availability of social information	Knowing more about other people Other people knowing more about you	28	13	You can find out more about people and people can find out more about you. It helps to get to know a person better, and share your personality with others.
4.4.2. Social expansion opportunities	Finding old friends Reuniting with friends from another country Linking up with people with similar interests Linking up with celebrities	31	16	It connects people together, and it lets you find people from your past which is a plus. With Twitter, I follow a range of people that share the same interests as me and I can make friends with them.
4.4.3. Enhanced opportunities for self-expression	Advertising aspects of yourself through a profile page General expression comments (unspecified)	8	8	Facebook allows me to tell the world who I am. Facebook is all about advertising to the world who you are and what you stand for.
4.4.4. Increased social organisation	Organising social groups Creating groups Calendar use	8	13	Facebook helps me to organise my social life – for example using groups/events features to arrange stuff. I like using it to organise events and for making groups.

4.4.5. Overcoming 'real-world' barriers	Overcoming Monetary Barriers	51	15	*You can talk to them whenever you want for free and keep in touch over long distances.*
	Overcoming Physical Barriers			*I've got ability to connect more with my friends and talk about things I did not have time to talk about within school hours.*
	Overcoming Temporal Barriers			
4.4.6. A source of entertainment	Sharing of videos and music	9	14	*Well it's fun, and you get to poke, chat, tag and play games on Facebook.*
	Playing online games			

4.4.1. Increased availability of social information

During phase 1, twenty-eight participants mentioned the dual advantage which SNSs gave them to find out more information about other users, while also simultaneously being able to present information about themselves. Collectively, this meant that there was an increased flow of social information as a result of using SNSs.

During phase 2, a further thirteen participants made reference to these advantages, when questioned about this further, ten of the participants mentioned that knowing more information about somebody (and having more up-to-date information about them), gave them more things to talk about when they met these people face-to-face. The following quote from Sophia is indicative of many of the comments made:

"With Facebook and Twitter you can be like, oh look, they are doing this, they are doing that, and when you meet up with them you have something to talk about straight away". [Sophia, AAF]

A further four participants mentioned that the increased mutual knowledge between users could actually help to facilitate the initiation of new friendships because users were more likely to realise that they share similar interests and have more things in common. The following quote came from Samuel, about the reasons for having so many SNS contacts:

"You can find out more information about people and then make better decisions about whether they are the sort of people you want to be friends with. I mean, I will talk to people at school face-to-face and obviously somebody's SNS thing does not tell you

everything about a person, but it can help to find out initially what they are like". [Samuel, BAM]

This finding seems to fit with the generally high number of participants from Phase 1, who reported frequently using SNSs to manage their profile and check for news (see section 4.2). However, this finding is not congruent with the non-significant associations found between patterns of SNS use and the number of real-life friends. This finding, coupled with the small number of participants, suggests that the initiation of new face-to-face friendships as a direct result of SNSs is probably fairly rare.

4.4.2. Increased social expansion opportunities

During phase 1, thirty one participants made reference to the opportunities that SNSs gave them to link up with people they would not ordinarily be able to meet up with on a regular basis. This included reuniting with people from their past (such as lost friends from their primary school or friends from another country) as well as being able to network with new people that they might not have met face-to-face before (such as celebrities or other people with known similar interests).

During phase 2, a further fifteen participants made reference the opportunities that SNSs gave them to expand their social horizons. Two participants who appeared to be particularly adept at using SNSs to expand their social horizons were Chloe and Samuel. Chloe described how she used Tumblr to create a fashion blog and make links with other users who shared her interest in fashion. Samuel mentioned using Facebook to advertise and recruit a new bassist for his band and then using Tumblr to establish an online group for people with similar music tastes. The following quotes from Samuel give a sense of this:

"Well when we formed our band we figured we needed more than just the three of us so I put a post out on Facebook to ask people if they knew of somebody who could play bass. One of the people in my year was friends with somebody who could so we recruited him into our band. Without Facebook we would have never have known and he might never have joined us." [Samuel, BAM]

"We have also have a Tumbleblog where the band members can post stuff up there. We have put up a few songs and a couple of videos that kind of thing. That way anyone who likes us can follow us easily and we can get in touch with other people if we want to. You know people in other bands or other like-minded people". [Samuel, BAM]

This theme seems consistent with the generally high number of SNS contacts that the participants from Phase 1 reported (see section 4.1.6). It is interesting to note that during Phase 1, most adolescents also reported rarely or never talking to unknown people (see section 4.2), suggesting that the people that adolescents link up with on SNSs are actually people that they *perceived* that they already know in real-life.

4.4.3. Opportunities for self-expression

During Phase 1, eight participants mentioned valuing the platform that SNSs gave them to project and express their personalities to other SNS users. During Phase 2, this was mentioned by a further eight participants who valued the expressive and creative opportunities which arose out of the profile creation process, the creation of specific blogs or just generally the increased freedom that arose at being able to broadcast their opinions to other users. Six out of the eight participants from Phase 1 who made reference to opportunities for self-expression were female. Similarly, six of the eight participants who referenced opportunities for self-expression in Phase 2 were female. A good example of the expressive benefits of SNSs was provided by Amelia, who explained how she used Tumblr to create a Tumbleblog that she felt was a reflection of her own personality.

"It has got loads of pictures of lyrics, band members and bands. It is also has pictures of food, nice clothes, logos. Stuff like that. It is like me expressing myself and documenting good things in life, sharing aspects of my personality with everybody else who follows you. I can advertise who I am". [Amelia, AGF]

The general importance SNSs for freedom of speech is well emphasized by the following quote from Daniel when responding to a question about whether teenagers should be banned from using SNSs:

"I think that is silly. In this country, you have the right to freedom and the right to speech. That is all SNSs is. The right to free speech. All you are doing is posting things. If you are gonna be racist then that is against the law, but it is all about freedom, we are not a communist country. If they took it away, they would take away a freedom". [Daniel, AFM].

4.4.4. Overcoming 'real-world' barriers

During phase 1, fifty one participants mentioned using SNSs as a convenient way of overcoming perceived 'real world' barriers, including overcoming geographical constraints (such as living far away from school friends), temporal constraints (such as not having enough time to talk to everybody) and monetary constrains (such as being the cheapest way of contacting their peers, compared to texting and phoning).

During Phase 2, a further fourteen participants made references to using SNSs to overcome real world barriers The nature of these barriers varied between participants depending on their personal circumstances. Eight of the participants, mentioned beginning to use SNSs around the time of transition from primary to secondary school because SNSs allowed them to overcome the associated social upheaval associated with this. This theme may partly explain why most adolescents appear to begin using SNSs around Years 5, 6 and 7 (see section 4.1.3). The convenience of using SNSs was well summed up by Evie:

"I think teenagers use them more than anybody else does. We are at that age where we want to talk to our friends and we want to talk to guys and stuff like that. We are at the age where we want to go out, we want to socialise, we don't want to be stuck with our parents. It is easy, it is free, it is simple". [Evie, BBF]

4.4.5. Increased social organisation

During phase 1, eight participants (6 males and 2 females) mentioned the ability provided by SNSs (particularly Facebook) to organise and manage their social lives. This included things such as using it to mass communicate with people, organise social events, create groups which centred around a common interest (like homework clubs) and using the online calendar to manage their schedule.

During phase 2, a further thirteen participants (8 males and 5 females) mentioned that they used SNSs to manage and organise their social lives. This included various specific examples, such as arranging social outings, organising parties, co-ordinating actions (such as 'secret santas') and remembering important dates. The slightly higher number of male participants who mentioned this theme fits with the data on reported frequency of activity (from Phase 1), which indicated that males are more likely to report using SNSs to organise groups and events than females. While being interviewed, Aiden provided a good example of how he had used Facebook to organise a social event:

"When I went to Thorpe Park... I went on Facebook and I was like, it was this amount or money, meet at this place, this time, on this day, who will be there? My friends replied and said they'll be there". [Aiden, BCM]

4.4.6. A source of entertainment

During Phase 1, nine of the participants mentioned the playful opportunities that SNSs enable for engaging in entertainment, mostly via the sharing online content (such as videos, music and photos). Two participants also mentioned playing online games with other users via SNSs. During Phase 2, fifteen participants made references to seeing SNSs as an additional source of entertainment usually as a platform for sharing online content.

4.5. Theme 2: Disadvantages of using SNSs

This theme summarises adolescents' perceptions of the disadvantages associated with using SNSs. Many of these disadvantages appear to have been linked to three main things. Firstly, a lack of digital literacy skills (e.g. not knowing how to block people, how to report people, how to increase their privacy settings or choosing passwords that can be hacked by other users). Secondly, accidents or misunderstandings, which have led to unintended side effects. Thirdly, other SNSs taking advantage of the features of SNSs, in order to deliberately cause trouble.

The following table gives an overview of the themes generated (and subthemes) along with information on the number of references during each phase of data collection. Where direct quotes have not been provided for each theme, please see appendix.

Theme	Sub-themes	Number of References from Phase 1	Number of References from Phase 2	Illustrative Quotes (From Phase 1)
4.5.1. Lack of control over the posting of information (by other SNS users)	*References to rumors and gossip* *Spreading of the argument* *Posting and tagging of unwanted photographs* *Unwelcome comments on photos*	33	14	*There are lots of rumours and secrets spread on social networking sites.* *People can put photos up that I don't want people to see. Also sometimes they don't tag you and leave embarrassing comments.*
4.5.2. Privacy concerns	*Not knowing how many times users are visiting profile pages* *References to private information being publicly available* *Specific references to stalkers*	28	15	*Sometimes I don't always want everyone knowing everything about me.* *There is no way of knowing who is looking at your FB page.*
4.5.3. Diminished social cues	*Misinterpreted comments / status updates* *Misinterpreted jokes* *Direct references to lack of social cues*	25	11	*You don't know whether people are joking or not, so some people can take it serious and it can lead to a fight.* *When you have a conversation in chats you can't see the person's facial expressions so you can take things the wrong way.*
4.5.4. Relationship footprints	*Rejected friendship requests* *Other relationship status changes*	38	11	*One time I ignored a friend's friend request and he asked me about it in school, it was quite awkward, I had to say sorry.* *We had an argument and my friend removed me as*

4.5.5. Popularity pressure	Pressure of having to gain lots of friends Pressure of having to gain lots of followers	7	6	*Sometimes I feel I need to have more Facebook friends than I have as my friends have more than me.* *Lots of people want to add you as a friend (even if they are not your friend). People want to have friends just to look cool.*
4.5.6. Differing perceptions of SNS 'friends'			1	N/A
4.5.7. Impersonation risks	Hacking into accounts Creation of fake profiles	19	8	*People can misuse it – for example fraping and setting up fake accounts.*
4.5.8. Increased stranger danger	*References to strangers* *References to paedophiles*	21	13	*Be careful who you add as a friend. Make sure you know who they are. Don't add random people or talk to strangers.*
4.5.9. Spending too much time online (including addiction)	Prioritising interaction over SNSs (rather than face-to-face) References to SNS addiction.			N/A

4.5.1. Lack of control over the posting of information (by other SNS users)

During Phase 1, thirty-three participants made comments that referenced having a lack of control over what information is posted about them. This usually included personal experiences of other SNS users posting rumours about them, other SNSs users broadcasting arguments that have occurred, or issues related to the posting, tagging and editing of photographs on SNSs.

During Phase 2, these issues were mentioned by a further fourteen participants. For eleven of the participants, this was related to the posting of photographs. Each of these participants had personal experience of specific occasions when other SNS users had uploaded photographs taken of them without their knowledge or permission, which were

then subsequently uploaded onto Facebook. Two examples of this occurring are provided below by Aiden and Bradley:

"I came from swimming and I came out the pool. I sat down on the chair and my friend took a photo. I was so tired from swimming up and down and I was depressed and everything. I had not put on my shirt. He took a picture and my eyes were closed and everything. People were like that is so funny. My friend uploaded into onto Facebook and when I went to look at my profile and other people's profiles – it was me". [Aiden, BCM]

"We were at a football tournament organised by the school. Bare [lots of] girls were taking pictures of us playing football for the school. I did not want somebody taking a picture of me without asking. When I asked her on the bus, I asked her if she had taken a picture of me. At that point I trusted her. Three hours later, somebody text me saying, have you checked out the picture on Facebook. I went up and said why did you do it – she just laughed". [Bradley, ANM]

During Phase 2, other concerns were raised regarding the rapid way in which SNSs could facilitate the quick spread of rumours and gossip. This is well illustrated by the following quote from Aiden:

"People come into school and stand in their little groups. If I walk past, they will whisper. SNSs make it easier though, they can just broadcast a message and it comes up on everybody's phone". [Aiden, BCM]

4.5.2. Privacy concerns

During Phase 1, twenty eight participants mentioned concerns related to how much information other users are potentially able to find out about them via their profile and who else might be able to access information about them. During Phase 2, a further tenparticipants mentioned concerns about this issue, mainly as a result of personal experiences of having their privacy compromised or not having faith in the privacy safeguards of a particular SNS. Amongst six of the ten participants, their concern tended to centre on wanting privacy from their parents. This is illustrated well by the following quote from Jack:

"That is the only one thing I don't like, that my parents can see everything that I can put on there. My mum has commented on my Facebook page before which is pretty embarrassing, I always delete her comments. There should be more privacy options. There are only ones like for your friends. There should be ones for your parents." [Jack, ACM]

The remaining six participants were either not concerned about information being available about them, did not believe that they posted anything that they would not mind sharing or otherwise had faith in the privacy settings of the SNSs they were using.

Tensions related to a lack of control over what is posted and issues to do with privacy appear to be an unintended side effect of both the increased availability of information and the mass communication capabilities made possible by SNSs. It would seem that while adolescents value the opportunities that SNSs give them to post information and gain access to other people's social information, this comes at a cost. Adolescents also feel uncomfortable about a). How easy it can be for other users to post information about them (without their permission) and b). The possibility of other SNSs being able to find information about them without them knowing.

4.5.3. Diminished social cues

During Phase 1, twenty five participants wrote comments that referenced the difficulties associated with interacting over a computer interface, which has a diminished number of social cues (compared with face-to-face). Comments referred to the fact that this made it harder to discern the true meaning or intent behind messages, which could then inadvertently lead to an increased likelihood of arguments occurring through comments being more easily misread or taken out of context.

During Phase 2, eleven participants directly mentioned examples of occasions when they had made comments, or read comments, which had been taken out of context. Based on the examples given, this tension appeared to be especially prevalent with regards to the use of jokes and sarcasm, this is well illustrated by the following quote from Evie:

"People put statuses up and it gets out of hand. Jokes turn into proper arguments. A couple of days ago, my friend posted this photo up. A couple of people started commenting on it and then one thing turned into another. Jokes started turning into proper arguments. More people got involved in it and massive arguments started". [Evie, BBF]

Of the eleven participants who referenced a lack of social cues being an issue, a further five participants mentioned that some SNS users will actually take advantage of this feature to post deliberately ambiguous messages, usually in the form of 'indirect statuses', which can escalate into much bigger arguments. As explained by Sophia:

"A lot of people give indirect tweets and statuses, it can make people more paranoid, people can think it is about them that can start an argument. People will be like, oh I don't like you anyway. People will think it is about them and it will start a massive argument when actually it is about somebody else. It was just a big misunderstanding". [Sophia, AAF]

4.5.4. Relationship footprints

During Phase 1, thirty eight participants made reference to disliking having to formally accept (or decline) contacts or having to formally state the relationship status between themselves and other users. During Phase 2, a further eleven participants also mentioned disliking this feature, which appeared to be more of an issue with both Facebook 'friends' and Twitter 'followers'. When questioned further about this, participants mentioned that this requirement inadvertently made the status of their relationships between their peers more salient and explicit, which, in turn led to an increased chance of SNSs users becoming offended or experiencing rejection. This was mentioned by Isabelle, who described an occasion when she chose to decline another peer and Sophia who described how this feature was used as a way of retaliating following an argument.

"Once I declined somebody then the next day I got to school and there was a big argument with everybody saying... why did you decline them?" [Isabelle, ALF]

"Quite a lot of people unfollowed each other. A lot of people took great offence to it. Some people don't realise how much offense people can take if you un-follow them on Twitter or de-friend them on Facebook". [Sophia, AAF]

The formal friendship negotiation feature of Facebook also appeared to create awkward dilemmas for users, when deciding whether or not to accept somebody as a SNS friend or not. On the one hand, they did not want to reject their request and cause offence, on the other hand, they might not consider another user a friend and would not want to give the wrong impression. This is well summarised by Kayla:

"You may not necessarily want that, but you do not want to be rude by declining either. So you don't mind talking to them on a 'hi-and-bye level' but because you don't have that relationship it can be quite hard. But some people take it the wrong way and think that because we are friends I think this and say this. It causes friction". [Kayla, BLF]

4.5.5. Popularity pressure

During Phase 1 seven participants (5 males, 2 females) mentioned that SNSs created an extra pressure to appear popular. Mostly this referred to the pressure to obtain lots of Facebook friends or Twitter followers. During Phase 2, the pressure to appear popular over SNSs was mentioned by six participants (4 males and 2 females). The higher proportion of males (across both phases) who mentioned this issue suggests that popularity pressure may be more prevalent for males. This pressure is well summed up by the following quote from Aiden and George when describing their feelings about having lots of friends on Facebook:

"You feel quite high up there because when you look at other people's friends and you see 300 you are like, nah you are not at my level yet. You feel quite popular if you know what I mean. Then you look at people with 4000 or 5000 and you are like wow – thats a lot of friends". [Aiden, BCM]

"I guess everybody also has say 300-400 friends on Facebook and if you have less, you are kind of seen as a bit of a social reject. On Facebook, if you post something you have to get likes on something, otherwise you are going to look a bit stupid and unsociable". [George, AEM]

When speaking to the participants in more detail regarding this issue, it appeared that for three of the participants, popularity pressure was something that was more prevalent when they first started using SNSs and generally this pressure had diminished over time or after a certain number of contacts has been passed. This is illustrated by the following quote from Lucas:

"When I was younger and we first started using Facebook, people seemed to think it was a good thing to have loads and loads of friends, as you get older, that kind of pressure is less important now". [Lucas, BIM]

Popularity Pressure may also to be another side-effect of SNSs requiring that the status of relationships between users be made explicit.

4.5.6. Differing perceptions of SNS friends

During Phase 2, when participants were explicitly asked whether SNSs were the same as real-friends or different, five of the participants thought that SNS friends were the same as real friends and fifteen participants saw them as different. This suggests that while most adolescents make a distinction between SNS friends and real-life friends, some adolescents are not. It would appear that SNSs have created some disparity regarding what the word 'Friends' actually means. This issue is well summed up by the following comment from Kayla:

"I think some people will see it like, ok we are friends on Facebook we must be close but other people will realize it is just not like that. When people can take it the wrong way, it can cause trouble. Like sometimes if you accept someone and you are not necessarily close friends; they will take it like you are best friends and they start to disturb you, always sending you messages". [Kayla, BLF]

While this issue was only mentioned by Kayla, it seemed to be an insightful and important point, as it could help to explain some of the high number of self-reported real-life friends and friends met face-to-face (reported in Phase 1). It may well also be a further factor contributing to the awkwardness surrounding the friendship negotiation feature of Facebook as well as fuelling other tensions such as popularity pressure and

the perception that other users of SNSs can act in a more two-faced manner (see section 4.6.4).

4.5.7. Impersonation risks

During Phase 1, twenty-three participants mentioned the risks of users impersonating themselves, either through hacking (usually referred to on Facebook as 'Facebook Raping or 'Fraping') or the creation of fake profiles. During Phase 2, these risks were referenced by a further eight participants. When discussing this issue, it was apparent that hacking into somebody's account was a fairly common occurrence with ten out of the eleven participants having experience of this, although it was usually considered not a serious issue as the majority of the time it was done as a practical joke, as explained by George:

"Yeah, people can do that. Sometimes it can go a little too far... people get a bit offended. It is generally done in good nature though". [George, AEM]

On the other hand, the creation fake profiles of other users tended to be perceived more seriously. Two of the participants interviewed had personal experience of either a fake profile being set up about them or they knew somebody who it had happened to. The following quotes from Kayla gives a sense of the serious implications of having this happen:

"We don't know who did it but it caused so much trouble. Different groups in our year have got messages, some of them didn't know what was going on and they thought it was her, so she was getting a lot of grief about it. People were getting frustrated because it was causing so much trouble". [Kayla, BLF]

4.5.8. Increased stranger danger

During Phase 1 nineteen participants mentioned the increased risk of being contacted by strangers or other SNS users acting as somebody else. During Phase 2, a further thirteen participants made reference to occasions when they had been contacted by somebody they did not know and were suspicious of. This is well illustrated by the following quote from Chloe, who talked generally about this issue:

"There are lots of people who try and contact you and you just know there is something not right about them. You look on their profile and they have no mutual friends. They can be from a different country. Or people that just don't look right to me. Mostly if they are people without mutual friends, they are people that I do not like". [Chloe, BDF]

Both impersonation risks and increased stranger danger appear to be consequences of other SNS users deliberately misusing SNSs and deliberately manipulating some of the features of SNSs to their advantage. In this case, impersonation risks and increased stranger danger seemed to exist because of the quick and easy way that SNS accounts can be set up, as well as the easy way in SNS users can give false information and gain anonymity.

4.5.9. Spending too much time online

During Phase 2 seven participants mentioned how much more they valued spending face-to-face time with their peers (compared to interacting over SNSs). Some participants were weary of spending too long on SNSs (at the expense of face-to-face time). This tension is well illustrated by Kian and Samuel, who described their own friend's behaviour changed after they began using SNSs:

"People started to stop like hanging out around after school. Instead they were going home straight away and going on computers at their own homes…I wanted to enjoy spending time with them, but now they are just glued to the computer". [Kian, BMM]

"Well there is so much happening online it can take over a bit, you can get a bit obsessed about how many 'followers' you've got or what other people are up to. Before you know it hours have gone by. You should not forget that there is a real life out there and not just on a computer". [Samuel, BAM]

This finding seems to contradict findings from the Phase 1 (see section 4.1.8.3), which highlighted that there was no significant association between the frequency of reported SNS use and the number of friends which adolescents report meeting up with face-to-face (in the last couple of weeks). This theme did not emerge when examining the questionnaire data (from Phase 1) and only arose via four participants (in Phase 2),

who all came from School A. This suggests that this issue may not be commonly experienced and may be a unique feature of their particular social context.

4.6. Theme 3: Acting differently online

This theme was developed as a result of *all* the participants in Phase 2 believing that people behaved differently when using SNSs (interacting over a computer interface). When asked about this in more detail, participants were quick to provide examples of people behaving in more negative ways. They also identified some ways in which SNSs could bring about positive changes in users' behaviour. The following themes (and subthemes) are outlined below:

Theme	Sub-themes	Number of References from Phase 1	Number of References from Phase 2	Illustrative Quotes (from Phase 1)
	8.1. Positive online behaviour			
4.6.1. Behaving more confidently (over-coming shyness)	Overcoming Shyness Cyber-Flirting	8	7	If you are too nervous to talk to them face-to-face, you can talk to them on a social networking site. It is easier to talk to people over Facebook such as girls and stuff. You can talk to them if you are not confident to talk face-to-face.
4.6.2. Behaving more diplomatically	Resolving problems online Disclosing more online	11	4	Yes because if you need to have an important conversation with someone or sort out a problem. I find it is easier over private chat in SNSs. Sometimes it is easier to say personal things over Facebook. It is easier to make up on Facebook, say sorry.
	8.2. Negative online behaviour			
4.6.3. Behaving more confrontationally	References to Hyping Being Braver/Ruder Online Saying things that would not be said face-to-face	8	12	*People can get rude to you and say things to you that they would not say to your face.* *People talk more dirty about people on Facebook.* *Talking bad behind screens so they can't get their heads banged off – that's Neeky!*
4.6.4.Behaving in a more two-faced manner	Being friends on SNSs but not face-to-face Being friends face-to-face but not on SNSs	6	12	*Some people don't add me on Facebook, even though we are friends in school. It's embarrassing when I see them in school after they have ignored me.* *Sometimes when I talk to someone on a SNS, they don't talk to me face-to-face.*

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Positive online behaviour changes

4.6.1. Behaving more confidently (over-coming shyness)

During phase 1, seven participants mentioned that they found SNSs actually helped them to overcome feelings of shyness, giving them the confidence online to talk to people that they did not know so well. During Phase 2, this perception was shared by nine of the participants, four of whom mentioned finding that SNSs made it easier to talk to peers of the opposite sex. When asked about the reasons for being able to act more confidently over SNSs, they attributed their increased confidence to SNSs having less social cues (compared with face-to-face interactions), which meant they could initiate conversations without worrying what other people would say or what they might look like. This is well expressed by the following quotes from Aiden and George:

"You don't really get to see the person's facial reaction. Like if I was to say hi, it might be that they are like, why is this person speaking to me? But on Facebook you don't get to see that. You only think it must be working well. Then you start messaging them and they start messaging you and then they see that you are a nice guy, when you get to face-to-face, you have already built that confidence". [Aiden, BCM]

"It is easier to talk with girls. Definitely easier, you can't really get embarrassed much or anything, because you are just typing the words. It is a lot easier talking online to girls. I think that is how most relationships start to be honest". [George, AEM]

4.6.2. Behaving more diplomatically

During Phase 1, eleven participants (8 females, 3 males) mentioned that they found SNSs a more conducive environment for sharing personal information and resolving problems that may have occurred in real-life. During Phase 2, acting more diplomatically was mentioned by a further four participants (3 females and 1 male), suggesting that this is a more prevalent theme for female SNSs users. When questioned further about the reason for SNSs users sometimes acting more diplomatically, the participants mentioned that the process of physically typing what they wanted to say (and being able to subsequently edit their messages) made it easier for

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them to find the words to resolve disputes or arguments. This is expressed by the following two quotes from Amelia and Isabelle:

"It is just easier to type out. You can organise your thoughts. In person, you have to say things quickly and it all gets jumbled up, over the internet you can type it out, cross it out and re-read it if you do something wrong". [Amelia, AGF]

"One time I had a big argument with my friend and through Facebook we were able to be friends again. She did not want to talk to me face-to-face because she was so angry. On Facebook I wrote her a big paragraph and we became friends again. It was a lot easier to get my thoughts down and say things in the right way". [Isabelle, ALF]

Negative online behaviour changes

4.6.3. Behaving more confrontationally

During Phase 1, eight participants mentioned how they believed SNSs were responsible for encouraging more deliberate confrontational behaviour (referred to as 'Hyping'). During Phase 2, this issue was mentioned by a further twelve participants. When questioned about the reasons for this, participants attributed people change in behaviour being due to being one stepped removed from the real-life situation and therefore feeling safer behind a computer screen. These perceptions are summarized well by the following quotes from George and Chloe:

"Some people are so much different. As soon as they get in front of a computer screen they can be so different to how they really are face-to-face. I find that quite weird sometimes. You get people we call 'keyboard warriors' who start arguments on Facebook but as soon as they get face-to-face they act differently". [George, AEM]

"There is such a difference between making a comment on a website and saying something face-to-face. It got into that situation because people were kind of just saying stuff that they would not say in person, saying more stuff, being more intimidating and more confrontational. Because they were behind a computer screen, they thought that nobody could say anything back to them". [Chloe, BDF]

4.6.4. Behaving in a more two-faced manner

During phase 1, six participants mentioned being annoyed by people acting like friends online and then not face-to-face (and vice versa). Or alternatively being very confident and chatty over SNSs and then being very shy in real-life. During Phase 2, this issue was mentioned by a further twelve participants, who each mentioned specific examples of their peers acting inconsistently between real-world and virtual settings. These perceptions are well summarized by the following quotes from Jack and Amelia:

"Sometimes people can be really confident and talkative on a SNS and then in real life they are completely different and don't want to talk to you". [Jack, ACM]

"It might be like on Twitter they are super nice to people, or super horrible. In real life, they are the complete opposite. There was this girl I used to know and she was really nice and all that. On Twitter, then after a while, I saw an argument between her and her friends, they were like oh yeah you do all of this stuff in real life – and I did not know that. It is easier to be two-faced on the internet." [Amelia, AGF]

Section 3: Adolescent *non-SNS user* Perceptions

RQ4). How do adolescents *who do not use* SNSs perceive that this has influenced their peers relationships?

School A   School B

Key	
No SNS used	⬛
1 SNS used	🟦
2 SNSs used	🟦
3 SNSs used	🟦
4 SNSs used	🟦
5 SNSs used	🟪

Pupils who belong to two (or more) social cliques.

Pupils who were interviewed for phase 2 (**further information relating to participants own perceptions of their friendship groups have been provided in Appendix XI).**
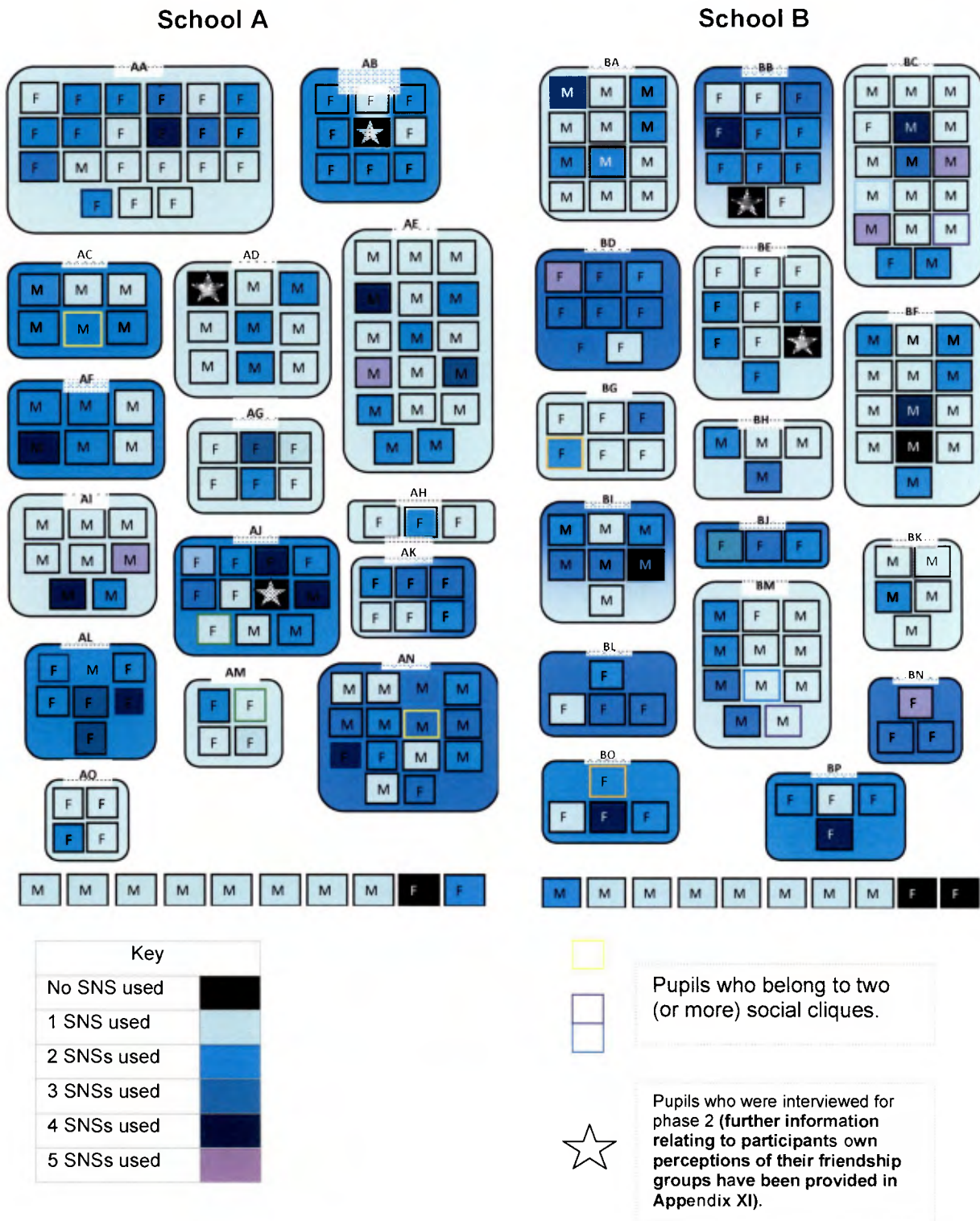
The above Social Composite Maps have been adapted from the SCM (see section 4.3) by combining data on participants' responses with how many SNSs each participant reported using. The group number of SNSs used has been determined by counting the most frequent number of responses within a social clique.

The SCM also gives an overview of the possible non-SNS user participants (from Phase 1) who were eligible for inclusion in Phase 2 (for inclusion criteria, please see p47), as well as an overview of the non SNS user participants who were actually interviewed during Phase 2.

As can be seen, adolescent non SNS users are perceived to be well integrated into a number of separate friendship groups, whose constituent members use a varying numbers of SNSs. Four out of the five participants interviewed, were adolescents who had previously used SNSs and decided to stop. Of the 11 participants who were not perceived to belong to a friendship group, four of these were members who did not use SNSs.

RQ4). How do adolescents *who do not use* SNSs perceive that this has impacted on their social lives?

Theme	Subthemes	Number of References from Phase 1	Number of References from Phase 2	Illustrative quotes from Phase 1
4.7. Advantages				
4.7.1. Avoiding 'trouble'	Avoiding arguments	5	5	*There are arguments on there, there no way that it has anything to do with me.*
	Avoiding Cyber-bullying			*I would say that you are too young to be going on SNSs, you don't know what trouble you might get into.*
	Avoiding trouble			*Many users have problems with their profile (like cyber-bullying).*
4.7.2. Maintaining privacy	Not having to share information	2	3	*I don't have to share my information.*
	Being able to withhold information about yourself			
4.7.3. Saving time	Having more face-to-face time	0	3	*N/A*
	Digital detox			
4.8. Disadvantages				
4.8.1. Missing out	Missing out on things during the holidays	2	3	*I can miss out on things during the holidays.*
	Being the last to hear about things			*Sometimes I am the last to hear about things (events, parties, trips).*
4.8.2. Peer pressure	Having to explain reasons for non-use	0	4	*N/A*
	Constant asking from other peers			

4.7. Advantages

4.7.1. Avoiding trouble

During Phase 1, five of the non SNS user participants mentioned the benefit of being able to avoid 'trouble' by not using SNSs. The word 'trouble' was used as a collective term which referred to many of the disadvantages of using SNSs (described in RQ3). This included avoiding misinterpretations (associated with a lack of social cues), avoiding confrontational behaviour and avoiding hacking (associated with impersonation risks). During Phase 2, avoiding 'trouble' was mentioned by all five participants. Four of the participants actually cited this as the main reason for ceasing to use SNSs. As explained by Lily:

"I don't get into any unnecessary trouble. I get myself on my own, I talk a lot and only to people to people I know. Another thing... you can follow somebody on SNSs who you think is your friend and it turns out it is somebody else. That can't happen to me anymore". [Lily, AAF]

4.7.2. Maintaining privacy

During Phase 1, two participants mentioned the benefit of not having to share so much information about themselves. During Phase 2, a further three of the participants mentioned that they found that by not using SNSs, it was easier to maintain their privacy. This included the benefit of not having to put pictures up about yourself and not feeling the need to have to let everybody know what you were doing all of the time. This is well illustrated by the following quotes from Grace and Madison:

"I just kind of like my own space, I like staying at home and doing my own things. I am not really influenced by what other people that much and I like to do my own things privately really". [Grace, ABF]

"Now that I don't use them people cannot always see what is going on in my life unless I let them". [Madison, BEF]

4.7.3. Saving time

During Phase 2, when asked for their reasons for not using SNSs, three participants mentioned being weary of how much time using SNSs took up. During Phase 2, this was mentioned by a further three participants, all of whom noticed how much more free

time they had after stopping using SNSs, freeing them up to speak face-to-face with their peers and engage more with their school work. This theme tallies with the 'Spending too much time online' theme identified via RQ3. Thomas summed up this position well when describing what prompted him to stop using SNSs:

"*I guess I did wonder whether it was worth all the time I was spending on them. You can spend lots of time checking and browsing and you could be spending the time actually being with people face-to-face. So I just decided that I needed to rid myself of all that distraction, give myself a 'digital detox' as they say*". [Thomas, ADM]

4.8. Disadvantages
4.8.1. Missing out

During Phase 1, two participants mentioned that they were usually the last to find out about news amongst their peers (especially during the holidays). This appears to relate to the 'Increased availability of social information' advantage identified by SNS users. During Phase 2, 'Missing out' was mentioned by a further three participants, although upon further questioning, all participants compensated for this disadvantage by utilising other forms of communication technologies (such as texting and using mobile phones).

4.8.2. Peer pressure

During Phase 2, four of the participants mentioned experiencing some pressure to use at least one SNS. This pressure stemmed from their peers not fully understanding their reasoning for not using SNSs, meaning that they had to repeatedly explain and justify their reasons for not using SNSs.

Results Section 4

4.9. References to Cyber-Bullying

Cyber-bullying was mentioned by participants during both Phases of data collection. During Phase 1 cyber-bullying was mentioned by thirteen participants. On five occasions, participants provided no further explanation as to the nature of their cyber-bullying experience and how it had actually occurred over a SNS. The remaining eight participants provided some further detail regarding specific cyber-bullying events which they had either experienced or witnessed via SNSs. These incidents referred to any (or a combination) of the following:

- Unkind comments
- The posting of deliberately ambiguous messages (usually in the form of 'indirect statuses'
- Users up-loading unwanted photographs
- The spreading of rumours
- SNS users hacking into other people's accounts,
- The creation of fake profiles (in order to impersonate other people).

During Phase 2 a further six participants had personal experience of either being cyber-bullied in the past or witnessing cyber-bullying occurring amongst one of their peers. The participants' accounts of cyber-bullying corroborated the results from Phase 1, suggesting that certain types, or combinations of behaviours (see above) were typically associated with cyber-bullying incidents.

It was interesting to note that amongst the Phase 2 participants who admitted recognising cyber-bullying online, all reported that it had happened to one of their peers (rather than themselves). While this is possible, it is also conceivable that some of the participant experiences may also have actually been personal experiences with they were reluctant to admit to.

During Phase 2, one participant (Bradley) considered himself to have been cyber-bullied and described an occasion when another user had tricked other people by creating a fake profile about him and then posted lots of provocative messages to other

people within his year group. The following quote from Bradley describes some of the consequences this resulted in:

"I ended up reporting him to Facebook for cyber-bullying. He got pulled off. The problem I had the most was he said some really horrible stuff to other people and I nearly had a fight because of it. Some Year 11 guy came up to me and said why are you swearing on Facebook? Something I had not done. After that I hated Facebook. I did not use it for three months." [Bradley, ANM]

This was clearly a traumatic experience for Bradley who considered himself a victim in this instance and blamed Facebook for making it so easy for somebody else to impersonate him. Bradley described how this affected his peer relations in two ways. Firstly, it seriously affected his relationship with the perpetrator. Secondly, Bradley perceived that the perpetrators actions had put him at risk of possible retaliations from other peers. This disclosure did generate some ethical issues regarding the safety of the participant and this prompted the researcher to follow the agreed protocol (as outlined in Appendix 6.3.9)

As can be seen, in each case where participants identified cyber-bullying occurring, the specific incidents which were identified as cyber-bullying appeared to be extreme examples of incidents (or combinations of incidents) which could be classified under many of the themes already identified within this research. For this reason, while it is fully recognised that the term 'cyber-bullying' can be a useful word which adolescents use to accurately describe their experiences of many of the serious negative consequences which can result from SNS use, it was not considered a theme in its' own right.

The relatively low number of references to cyber-bullying during both phases of data collection may be partially due to the fact that neither the questionnaires or the interviews contained questions specifically asking about cyber-bullying.

In addition to this, the low number of respondents who mentioned cyber-bullying during Phase 1 may be also partially explained by participants having to convey their experiences through the use of questionnaires. While this enabled the researcher to

gather the views of a wide range of adolescents, it is also likely to have affected the participants' willingness to disclose details of any potentially sensitive and/or contentious experiences. Participants may have also been reluctant to disclose details of cyber-bullying incidents due to having to add their name to each questionnaire and being reminded of the researchers' duty to follow up any incidents where it was felt their safety or well-being was at risk.

The relatively higher number of references to cyber-bullying in Phase 2 (compared to Phase 1) may be partially explained by using semi-structured interviews, which provided participants with a more personal experiences and was therefore more conducive to participants being more open about their experiences.

It is interesting to wonder about the link between participants' perceptions of attributing SNSs as responsible for being acting more negatively (see 4.6.3. & 4.6.4) and how this might link with incidents of cyber-bullying. On the basis of the relatively low number of references to cyber-bullying throughout the study, it is difficult to make any sweeping statements, other than to say that Bradley's cyber-bullying experience reminds us that cyber-bullying incidents are likely to be very real for those involved and are likely to be traumatic and distressing for those on the receiving end of these actions.

Chapter 5: Discussion

This study aimed to clarify how SNSs are being used by adolescents and what influence this can have on their peer relationships. The following chapter will begin by answering each of the research questions posed within this study. It will then discuss the implications of these findings with respect to existing academic literature. It will then consider some of the strengths and limitations of the present study and possible areas for future study. Finally, it will conclude by considering some of this study's wider implications, including for Educational Psychologists.

5.1. Answers to research questions.

RQ1). How are adolescents using SNSs and how is this use linked to their real-life peer relations?

The overwhelming majority of adolescents use SNSs; with most adolescents having either one or two SNS accounts. Virtually all SNS users have a Facebook account and a significant proportion of adolescents also use Twitter. Some adolescents also use other SNSs (such as Tumblr, MySpace and Formspring), although these tend to be used much less frequently and are typically used *in addition* to using either Facebook or Twitter.

Despite a common minimum age limit of 13, the vast majority of adolescents report first using SNSs during Years 5, 6 and 7 (ages 9-13). By the end of primary (year 6), the majority of adolescents have already started using SNSs. SNSs may be playing an important role during the transition from primary to secondary school.

Adolescents login to SNSs frequently, with the majority of adolescents logging in to SNSs either a couple of times a week or every day. Females generally report logging in more often than males. Adolescents usually login to SNSs via a mobile phone (presumably spanning both home and school settings) or a home computer. Adolescents who report using a mobile phone to access SNSs are also more frequently than adolescents who use other ways to access SNSs.

There is a high degree of variation in the number of SNS contacts adolescents have. The most commonly reported category is between 201-300 contacts; with females

typically reporting having a higher number of SNS contacts than males. Amongst both groups there are some adolescents who report having 500+ SNS contacts. Adolescents are likely to have higher numbers of SNS contacts if they login to SNSs more frequently and/or start using SNSs at an earlier age.

The number of real-life friends which adolescents report having also shows lots of variation. Most participants report either having less than 30 real-life friends or 50+ real-life friends, with no significant gender differences. The number of reported real-life friends is also not significantly linked to patterns of SNS use (for example, frequency of SNS use, year of first use or number of SNS contacts). This suggests that there is probably some degree of incongruence between peer relations online and peer relations in real-life.

Similar patterns were observed with regards to how often adolescents reported meeting up with friends face-to-face (in the last couple of weeks). Adolescents tend to report meeting with either less than 30 friends or 50+ friends. The number of friends which adolescents report meeting up with face-to-face also does not vary by gender and is also not significantly associated SNS use.

The most commonly reported activity on SNSs is chatting with friends that adolescents do not see every day. The frequency with which adolescents check up on news, manage their profiles and organise groups and events varies amongst individuals. The overwhelming majority of adolescents report that they do not talk to unknown people on SNSs or play SNS games. Male and female adolescents show very few significant differences with regards to the frequency of different activities on SNSs.

In real-life, most adolescents are perceived to belong to a recognised friendship group within their school (each of which is largely dominated by same sex members), although the size of friendship groups varies greatly (ranging in this case from 3 members to 21 members) and some individuals are recognised as members of more than one friendship group. Frequency of SNS use is linked to an adolescent's individual prominence within their social setting (in this case school). Adolescents who login to SNSs a couple of times a week (or more) are more likely to be perceived to have higher

individual prominence. Individual prominence does not appear to be related to the number of SNS contacts an adolescent has or when they first start using SNSs.

There is a similar association between frequency of SNSs and each adolescents' overall friendship group's prominence. Adolescents who login to SNSs once a week or less are more likely to be perceived as either isolated individuals or belonging to a friendship group with low prominence. By contrast, adolescents, who login to SNSs a couple of times a week (or more), are more likely to be perceived to belong to a friendship group with a higher prominence. Friendship group prominence does not appear to be associated with the number of SNSs contacts each adolescent has.

RQ2). What advantages do adolescents perceive that SNSs bring to their peer relationships?

Adolescents perceive that SNSs bring a host advantages to their peer relations (above and beyond face-to-face interactions). Including:

o *Increasing the availability of social information:* Enabling adolescents to find out more about each other. This can give adolescents more to talk about face-to-face. In some instances, it can also help to facilitate the initiation of new friendships.

o *Making it possible for adolescents to expand their social horizons:* Allowing adolescents to re-connect with lost friends, make connections with other users (with known shared interests) and connect with celebrities and other people they admire.

o *Providing a valuable platform that facilitates freedom of speech:* Giving adolescents opportunities to express their personalities to other SNS users.

o *Organise and manage their social lives:* Allowing the creation of online groups/events.

o *Convenience:* Making it possible to communicate with peers regardless of any of their real-world geographical, temporal and monetary constraints.

o *Entertainment:* Making it easy to share online content (such as photos, music and videos).

Adolescents also perceive that SNSs can be responsible for positive changes in people's behaviour when they are online. Including, in some instances, helping people

to overcome shyness (in turn helping to facilitate the initiation of new relationships) and helping people to act more diplomatically (providing an advantageous medium that can be used to help to resolve disputes and arguments originating in real-life).

The perceptions of male and female adolescents generally appear to be very similar. However, there are some minor differences, for example, within the sample studied, females were more likely to mention valuing the self-expressive opportunities that SNSs offer. On the other hand, males were more likely to mention valuing the opportunities SNSs provide for organising real-life social events.

The advantages highlighted fit the notion of SNSs being very much a social activity, which supplements and can, in some instances, enhance adolescents' social lives.

RQ3). What disadvantages do adolescents perceive that SNSs are bringing to their peer relationships?

Adolescents perceive that SNSs can bring numerous disadvantages. Including:

- *Affecting the control over what information other SNS users post about them* (particularly with regards to the use of photographs).
- *Privacy:* Creating concern over who might be able to find information about them and how much information is available to other SNS users (particularly with regards to parents).
- *Interacting over using less social cues (than face-to-face interaction):* Making it harder to discern the meaning behind comments and making it more likely that comments will be taken out of context, which then spark arguments. It also makes it possible for other users to deliberately post ambiguous messages in order to create trouble.
- *Having to formally state the status of relationships:* Formalising the making, breaking and changing of relationships, which can lead to increased chances of becoming offended or experiencing rejection.
- *Popularity pressure:* Creating a pressure to have to reach an acceptable number of Facebook friends or Twitter followers in order to be seen to be popular.
- *Creating some differing perceptions surrounding the meaning of the word 'Friends' on SNSs:* Exacerbating other identified tensions above, including exacerbating the impact of making relationship statuses more explicit,

heightening popularity pressure and giving rise to a perception that SNSs can make people act in two-faced ways.

o *Impersonation risks:* Creating the danger that SNS accounts can be hacked or fake profiles set up.

o *Increased stranger danger:* Making it easier to be contacted by strangers or by other users who are not who they say they are.

o *Time concerns:* Making adolescents weary of how much time they are spending online (at the expense of face-to-face time).

Adolescents also perceive that, in some instances, SNSs are responsible for peers acting more negatively when online. This includes acting in a more confrontational manner and in some instances, users acting in a more two-faced manner by either pretending to be friends online and not face-to-face or vice-versa.

Many of the perceived disadvantages of SNSs appear to be inevitable side-effects of the positive aspects of SNSs, which are exacerbated by poor digital literacy skills (e.g. not knowing how to block people, how to report people, how to increase their privacy settings or keeping their password secure). This can turn the positive features of SNSs into risky features. For example, privacy concerns, concerns over what is being posted by other members and concern about strangers are, to some extent, inevitable side-effects of linking up with vast numbers of people online. Nevertheless, this is made more prominent by adolescents' not knowing how to control their privacy setting, not knowing how to block or report people and giving little consideration to who they are linking up with online.

Many of the disadvantages associated with SNSs also appear to be a result of other SNS users deliberately misusing the features of SNSs. For example, the increased chance of having to deal with a fake profile being created arises because other SNS users are able to take advantage of the increased anonymity that using SNSs can provide. Similarly, the tensions caused by interacting over a medium with diminished social cues is made more prominent by the posting of messages (usually via 'indirect statuses') where users will take advantage of this by deliberately posting ambiguous messages (which they can later claim were misinterpreted).

RQ4). How do adolescents *who do not use* SNSs perceive that this has impacted on their social lives?

Adolescents who *do not* use SNSs were usually salient members of recognised friendship groups who have consciously decided (after some experimentation) to stop using SNSs. Adolescent who do not use SNSs perceive that this decision has brought with it a host advantages and disadvantages. Amongst this group, the perceived advantages of not using SNSs include:

o *Avoiding 'trouble'*: Avoiding many of the perceived disadvantages of using SNSs (described above), including avoiding hacking, misunderstandings (arising from a lack of social cues) and also people acting confrontationally.

o *Maintaining privacy*: Not having to let everybody know what is occurring all the time.

o *Saving time*: Being able to focus on face-to-face friends.

Amongst this group, the perceived *disadvantages* of not using SNSs include:

o *Missing out:* Being one of the last people to hear about social news or events (especially during the holidays).

o *Peer pressure:* Having to continually explain to other peers the reasons for not using SNSs.

To a large extent, adolescents who do not use SNSs perceive that they can compensate for the disadvantages of not using SNSs by utilising other forms of communication technology.

5.2. Relevance to existing peer relationship research.

5.2.1. The changing context of adolescent peer relationships.

Collectively, both the quantitative and qualitative results of this study have provided a richer insight into the virtual fabric of adolescents' peer-relations *and* how this links with their real-life peer relations.

While quantitative data contained in this study has been taken from a smaller sample than previous research (such as those quoted from Livingstone et al., 2013; Lenhart et al., 2011), the data both confirms, updates and extends existing adolescent SNS data.

Overall, the quantitative data quoted supports the notion that adolescents tend to be heavy users of SNSs. Based on the results of this study, 95% of adolescents recognize themselves as SNS users. This is an increase on the highest previous estimate of 80% of adolescents provided by Lenhart et al. (2011) and suggests that adolescents' use of SNSs has continued to rise further. It would also appear that SNS use amongst adolescents has reached a saturation point, as the small minority of adolescents who *do not* use SNSs have made a conscious effort (after some experimentation) to stop.

The results of this study also highlight that, despite a common minimum age requirement of 13, the majority of adolescents were using SNSs well before they reached adolescence, with most young people using them before (or very soon after) they reach secondary school.

5.2.1.1. The link between SNS use and real-life peer relations.

The data in this study also goes beyond previous reported data (such as those quoted from Livingstone et al., 2013 & Lenhart et al., 2011) by linking SNS use data with data about real-life peer relations. It would appear that SNSs make it possible to build up and maintain a large number of contacts. Furthermore, some patterns of SNS use appear to be linked to the number of SNS contacts an adolescent has and their perceived prominence within a social setting. Nevertheless, the actual *number* of real-life friends an adolescent has appears to be more resistant to patterns of SNS use.

The qualitative data fits the assertion that SNS are changing adolescents' experience of their peer relations, fulfilling a mixed and multi-faceted role in adolescents' social lives. Due to the high use of SNSs, this influence evens extends to adolescents who do not use SNSs. Both the identified advantages and disadvantages of using SNSs lend support to the notion that SNSs are having both an enriching and enhancing influence on adolescents' peer relationships. Yet, at the same time, SNSs are also having a complicating and undermining influence. Inevitably, it is in the way that each adolescent navigates their way through these contradictions, which ultimately determines what influence SNSs have.

While it has previously been suggested that SNSs have radically altered the lexicon surrounding social relationships (Livingstone, 2008), both the quantitative and

qualitative data suggest that SNSs may be responsible for creating some degree of shift (amongst some adolescents), surrounding what is actually meant by word 'friends'. Presently, there seems to be a split consensus amongst adolescents regarding whether SNS 'contacts' are the same as real-life friends. These differing perceptions may help to partially explain the responses of participants who reported having high numbers of real-life friends (such as 50+). It may also help to explain some of the origin and prominence of the tensions associated with using SNSs.

5.2.1.2. Exaggerating the features of real-life peer relations.

There are several examples of qualitative and quantitative data, which, on the surface, would appear to support for the notion that adolescents' perceptions of the influence of SNSs bare close resemblance to recognized nature of real-life adolescent motivations and social trends. For example, the quantitative and qualitative data suggests that adolescents are using SNSs as one way to expand their social horizons and organise their social lives. This mirrors the observations (such as those made by Cotterell, 2007) that in real-life adolescents will also look to expand their social worlds. Similarly, some adolescents are very weary of whether to accept their parents as SNS contacts or not. This fits trends (such as those made by Giordano, 2003; Youniss and Smollar, 1985), which highlight that adolescents are motivated towards achieving greater independence and autonomy from their parents.

This leads one to reflect on how the nature of these social trends may be being altered due to them occurring via SNSs. For example, if we map some of the qualitative data onto the premises of the Proximity-Similarity Hypothesis (Kandel, 1978; Shrum, Neil & Hunter, 1988), it would seem that SNSs are directly perceived to be greatly enhancing the two most influential factors (proximity and similarity), which are most responsible for relationship formation. With regards to proximity, adolescents can use SNSs to overcome physical real barriers much more easily than before. With regards to similarity, SNSs enable users to find out more about one another in a way that could be making this process easier than before. On the other hand, the quantitative data in this study, suggests that although these factors may be affecting the number of SNS contacts an adolescent has, amongst adolescents who make a strong distinction between SNS contacts and real-life friends, SNSs use is not affecting most people's experience of the number of real-life friends they have.

Furthermore, the increase in proximity and similarity is a mixed blessing that carries with it tensions, related to control of information, privacy and popularity pressure. While these tensions may have existed previously, they appear to be heightened and more salient as a result of SNSs. Adolescents are now socialising within a virtual context where their interactions and links are explicitly recorded and highlighted. For example, although in real-life, adolescents may shift the compass of their support away from their parents and more towards their peers; a number of factors associated with SNSs might potentially raise the profile of this transition. If adolescents allow their parents to become their 'friends' on a SNS, they open themselves up to a much greater degree of exposure than ever before. Additionally, the decision about whether to accept or decline a parents' friend request, is made more pronounced by adolescents having to either formally accept or decline the request online.

In other regards, SNSs appear to be making the potential power of the peer group more pervasive. SNSs are recording, archiving and advertising more aspects of adolescents' social relationships than ever before. SNSs are acting like a fabric which can transcend physical and temporal boundaries. Adolescents now have continuous access to social information. While this may make adolescents' social lives more efficient, exciting and entertaining, it is also exacerbating existing tensions. For example, due to its' public nature, SNSs are making issues such as privacy and how one is perceived by others more pertinent.

5.2.1.3. Introducing *new* dynamics into adolescent peer relations.
The results of this study also suggest that SNSs are introducing a new array of novel advantages and disadvantages for adolescents, where it is harder to think of comparable real-world equivalents. For example, adolescents now have a rich medium from which to engage in various self-expressive opportunities (such as the building of an online profile), the opportunity to play online games and share online content. On the other hand, adolescents are now spending large portions of their time interacting over an interface that carries with it diminished social cues and increased risk of being impersonated or deceived by other users.

As children get older (usually well before the onset of adolescence), their peer relations gain an important virtual fabric. On top of the usual social skills (which children acquire throughout their childhood), it is necessary for children to acquire digital literacy skills, which they then have to combine with digital social awareness. This study suggests that some adolescents' digital literacy skills and digital awareness skills are making them prone to negative experiences through SNSs. This can, in turn, have detrimental consequences for their peer relations. This is best illustrated by adolescents' posts (such as photos or status updates), which can sometimes result in unintended outcomes.

5.2.1.4. Encouraging users to act differently online.

The qualitative results of this study also suggest that SNSs are also perceived to be responsible for adolescents acting differently online than they would face-to-face. In some instances, SNSs appear to be playing a facilitative role in initiating friendships (including cross-sex relationships) and resolving problems (which have originated in offline). On the other hand, SNSs also appear to be contributing towards a perception that certain users can act more confrontationally and inconsistently towards each other online.

While these behaviours can be features of peer relationships offline, the results of this study suggest that under certain circumstances, SNSs can encourage this behaviour to occur more frequently and more intensely. These findings are not explained fully by any one particular theory of CMC, although the findings do support the central premise of theories of CMC, i.e. interacting over a CMC can create some differences in the way that people behave and interact with one another. The results also support the notion that adolescent SNS users are active users of SNSs who bring with them their past experiences and who readily adapt their behaviour in order to take advantage of some of the unique features of SNSs.

The perceived negative behavioural changes on SNSs might be partially explained by assertions made by the 'Cue-Filtered Out' theories (Culnan & Markus, 1987), which emphasize the increased likelihood of anti-social behaviour occurring via CMC. Indeed, this fits with many of the comments of participants in Phase 2, who mentioned that they believed SNS users act more confrontationally because they are one-step removed

from the real social situation. The perceived positive behavioural changes on SNSs might be partially explained by assertions made by the Hyper-Personal Interaction Model (Walther, 1996). Particularly the second and third dimensions of this model, which suggest that users may engage in more self-disclosure online, while also taking advantage of some of the features of SNSs (such as the delayed temporal characteristics of a CMC) in order to write more thoughtful and considered exchanges.

In summary, the results from this study suggest that SNSs are playing a mixed and multi-faceted role in adolescents' social lives. They are affecting adolescents' perceptions and experiences of their peer relations in a myriad of both subtle and sometimes dramatic ways. In both these regards, SNSs seem to be making the social aspect of adolescence more intense and dramatic, with more potential for more exaggerated and unfamiliar 'highs and lows'. The virtual context generated by SNSs appears to be acting both as a supplementary context for existing adolescent peer relations and as a new context altogether for expanding and experimenting beyond adolescents' immediate social horizons. SNSs carry with them the potential for both for great benefits *and* great risks. Although the influence of SNSs ultimately depends on the users' online behaviour and intentions.

5.3.   Contribution to social capital and cyber-bullying research.

The results of this research provide some much needed empirical data, which bridges the contrasting discourses which have artificially been created by the positively skewed social capital research and the negatively skewed cyber-bullying research.

5.3.1. Contributions to social capital research.

Both the quantitative and qualitative data in this study provide some empirical evidence that adolescents can use SNSs positive ways. Some of the data could be interpreted in line with previous constructions of the construct of Social Captial (such as Ellison et al., 2007). Lending support to the idea that SNSs allow adolescents to build up a large social networks and draw upon the increased 'relational benefits' which might be associated with this, including both the information benefits (so called Bridging Social Capital) and the emotional benefits (so called Bonding Social Capital). In support of this notion, some of the following findings appear pertinent:

- The generally high number of SNS contacts reported.

- The association of SNS use with individual/friendship group prominence.
- The increased availability of information.
- Social expansion opportunities.
- Increased social organisation.
- Increased entertainment opportunities.
- Increased self-expressive opportunities.

On the other hand, this research has highlighted that the influence of SNSs can be complicated and, at times, contradictory. The following findings could be used to undermine the assertion that SNS use has a linear influence on Social Capital:

- The number of SNS contacts was *not* found to be linked to number of real-life friends.

- The number of real-life friends is not significantly associated with any patterns of SNS use.

- SNS use carries with it a number of risks, which may undermine the benefits an adolescent receives from their peer relations, including most notably, impersonation risks, a lack of control over the posting of information about themselves, spending too much time online (to the detriment of face-to-face friends) and SNS users acting more confrontationally.

It seems as though most adolescents have fairly low thresholds for accepting SNS contacts, meaning many of their SNS contacts are probably fairly weak real-world peer connections and therefore one might consider how 'real' any of the proposed social capital gains actually are.

In any case, we should be cautious about trying to fit the findings of these results into social capital construct. This study does not provide any clarity on whether SNSs use actually causes an increase in social capital. It remains most probable that the relationship between SNS use and the 'relational benefits' are bi-directional. While adolescents probably do receive additional 'relational benefits' through using SNSs, it is also equally plausible that those adolescents who *already* receive a high degree of 'relational benefits' will also be enthusiastic SNS users anyway.

Moreover, the data in this study does not provide any consensus on what is actually meant by social capital. The epistemological argument that it is futile to try to quantify

the relational benefits people receive from their relationships into a single construct still remains as strong as ever.

5.3.2. Contribution to cyber-bullying research.

This research has shown that although the majority of adolescents do not readily admit to personal experience of cyber-bullying, adolescents still have to contend with a shifting tide of different risks and strains on SNSs. These are risks and strains that have previously not been detected by cyber-bullying research (such as Noret & Rivers, 2006; Smith et al., 2008). This seems to support the idea that cyber-bullying (in much the same way as real-life bullying) can be conceptualised as a continuum with associated grey areas. The data in this study portrays the experiences of some of the previously silent majority of adolescents, who do not identify with experiencing cyber-bullying.

The reported incidents of cyber-bullying (reported in this study) also provide some insight into the way in which the nature of cyber-bullying has evolved since the introduction of SNSs. SNSs (with their associated features) appears to have diversified the way in which cyber-bullying can occur. It has generated more ways in which cyber-bullying can take place. In this regard, it does seem that the myriad of new risks and strains (associated with SNSs) has collectively shifted the control (and thus power imbalance) further in favour of potential perpetrators.

Engaging with SNSs seems to carry with it an interesting juxtaposition. On the one hand, adolescents are able to gain greater control over some aspects of their social lives (such as being able to organise aspects of your social life and decide who to associate with). On the other hand, adolescent SNS users also become more vulnerable to the will of other SNSs, losing control of what information could be uploaded about them (for example, the uploading of photographs or the posting of gossip or rumours) and are vulnerable to impersonations and trickery from other users.

The results also suggest that in some instances, SNSs can lead to an increase in hostile and/or two-faced behavior, which is likely to encourage incidents of cyber-bullying. However, it is also worth noting that some qualitative data directly contradicts the notion that SNSs are always associated with negative behaviour (and an increased likelihood of cyber-bullying). For example, the results of this study suggest that in some

instances, SNSs can actually provide a valuable platform, which can help users to be more diplomatic, fix problems and actually prevent arguments escalating.

5.4. Contribution to recent research.

This study has attempted to address some of the perceived weaknesses and shortcomings identified in recent SNS research. The qualitative results of this study have helped to move our collective understanding away from reporting on specific incidents, which occur on SNSs (which are very context specific) and instead providing a tapestry of wider themes. These themes help us to make more sense of reported incidents. For example, take the following three comments reported by Livingstone (2008); Do people visit your profile?, Are you listed as anybody's top friend?, Should you allow your parents as a friend on a SNS? These comments could be indicative of experiences of popularity pressure, relationship footprints, differing perceptions of SNS friends and issues related to privacy.

Similarly, many of the 'Negative Event Types' identified by Tokunaga (2011) appear to be indicative of the wider tensions and strains identified in this research. For example, denied or ignored friendships may be indicative of strains related to relationship footprints and/or differing perceptions of SNSs friends. Similarly, discovering gossip on a third party's message board might be indicative of issues related to a lack of control over the posting of information (by other users) and/or concerns about privacy.

The results of the study appear to be most consistent with the results of Reich et al.'s (2012). They fit Reich et al.'s notion of the influence of SNSs being mixed and fit with the assertion that the main reason for using SNSs in order to stay in touch with people that it is not possible to see every day. The results of this study also found evidence that was consistent with Reich et al.'s (2012) data (that is not well known, or reported), which suggested that SNSs, on occasion, may make it easier to fix real-world problems and help with the development of new friendships and romantic relationships.

The results of this study also provide a unique insight into the perceptions of the minority of adolescents who (for various reasons) have chosen not to use SNSs. This is a subsection of adolescents whose views have remained unreported up until now. Baker and White (2012) reported on some of the surface-level reasons that adolescents

give for not using SNSs. On the basis of these results, it would seem that the decision not to use SNSs also carries with it important social implications. Adolescents who do not use SNSs have made this decision on the basis of a conscious decision making process which has involved carefully weighing up the relative advantages and disadvantages associated with each choice.

5.5.   Strengths of this study.

By exploring both the positive and negative influences of SNSs, this research strived to maintain a neutral, balanced and pragmatic approach to exploring adolescents' use of SNSs. In adopting this stance, the research was able to:

o   Gather a large amount of quantitative data, which explored adolescents' use of SNSs and the association with real-life adolescent peer relations.

o   Move away from the epistemological issues associated with social capital research and the conceptual issues associated with cyber-bullying research.

o   Report on the full spectrum of influence of SNSs (including several more subtle tensions and risks).

A further strength of this study was the adoption of a mixed methods approach and two phases of data collection, which helped to improve it's credibility, validity and reliability. Administering a questionnaire (Phase 1) made it possible to:

o   Provide relevant background information regarding adolescents' use of SNSs and link this to adolescents' perceptions of their real-world social structures

o   Incorporate the perceptions of a relatively large and diverse sample of adolescents

o   Provide a high degree of transparency surrounding the process involved in selecting participants for Phase 2

Using semi-structured interviews (Phase 2) made it possible to:

o   Provide further background information regarding each participants' real-world social structures (from each participants' own perspectives)

o   Specifically ask follow up on interesting data gathered in Phase 1.

o   Incorporate the views of a selection of adolescents in finer detail, linking (where appropriate) to Phase 1 data.

o   Benefit from a more personable and flexible method of data collection, which gave participants a greater amount of freedom and flexibility to communicate their experiences.

5.6.   Limitations of this study.

In order to best understand the significance of this research; they should be interpreted in the light of both its methodological limitations and its social and historical context.

Research design limitations: The design of this study meant it relied upon adolescents' retrospective self-reports, potentially giving rise to distortions in the data and therefore raising questions related to the validity of the findings. This is an important consideration, especially given that the research design involved: a). Exploring a context that usually only occurs between peers (away from the supervision of adults), b). Requiring participants to share potentially private and/or sensitive aspects of their social lives. This may help to explain the relatively high number of blank responses provided in the open-ended questionnaire (during Phase 1) and the relatively high number of adolescents who also declined the opportunity to participate in Phase 2.

In addition to this, given the cross-sectional design of this study, it is necessary to be cautious regarding how much to infer regarding causality. For example, while it may be tempting to conclude causality on the basis of significant associations between patterns of SNS use and real-life peer relations, this would be inappropriate. Take for example the finding that frequency of SNS use appears to be related to an adolescents' prominence within a social setting. It would be tempting to conclude that adolescents' use of SNSs causes an increase in prominence. However, it may equally be the case that individuals who are already prominent happen to be frequent users of SNSs anyway. Indeed, the true relationship between these two variables is probably bi-directional.

Social and historical considerations: From a social perspective, it is recognised that this study was only conducted on two cohorts of adolescents within two schools. This raises important considerations over the how representative the findings of this study are. This consideration is especially important regarding the qualitative data, where due to

practical time and resource constraints, only a small number of participants (N=21) views could be explored.

From a historical perspective, SNSs (much like most things on the internet) represent a 'moving target' for researchers (Livingstone & Brake, 2010), meaning that many of the findings presented in this study will be prone to becoming quickly out-of-date. Given the rapid way in which SNSs are continually evolving, it is likely that much of the quantitative data (such as which SNSs adolescents are using, how they are accessing SNSs etc) are likely to change over time. As SNSs change and evolve, so also will their perceived advantages and disadvantages.

Adolescents' use of SNSs (and their relationship with them) is *also* likely to change overtime. It could be argued that this research was conducted during an unusual social period, when SNSs are still relatively new and people are still adjusting to the social implications associated with using them. SNSs are currently a very popular form of communication technology among adolescents, however, just as SNSs replaced earlier forms of communication technology, it is also probable that overtime SNSs will be replaced (or supplemented) with a newer form of technology, reducing the popularity and significance (and subsequent significance) of SNSs further.

This research also chose to focus specifically on adolescents' perceptions of how SNSs are influencing their social lives. However, most adolescents' peer relationships are usually multi-modal, moving interchangeably between a range of different communication technologies. While it is probable that the positive and negative influences identified in this study also apply to other forms of technology, it is also equally possible that other forms of communication technology may be generating other, unidentified positive and negative influences.

5.7. Areas of future study.

In light of the findings (and limitations) of this study, there are a number of future research possibilities.

5.7.1. *A range of different research methodologies:*

Given the limited scope this research has for determining (with any degree of confidence) the causal influence of SNSs, research in the future may want to consider adopting research designs (such as longitudinal designs) that may provide further clarity on the likely nature of the causal links between SNS use and real-life peer relations.

Future research could also take advantage of a wider range of research methodologies, incorporating research designs that are less reliant on adolescents' retrospective self-reports. For example, it would be interesting to study the influence of SNSs on one particular friendship, either by adopting an ethnographic approach and reporting it as an in-depth case study. There are also a range of other interesting measures that could be explored in relation to SNSs in the future. For example, SNS use could be explored in relation to measurements of say friendship quality or motivation to form friendships.

5.7.2. *A range of other children and young people:*

All previous research (including this one) has tended to think of adolescence as a single construct. However, in some respects, it can be useful to think of adolescence as three distinct stages, early (10-13 years), middle (14-17 years) and late adolescence (18-21 years). This research explored middle adolescents' use of SNSs. Nevertheless, it would be interesting to see how adolescents use of SNSs changes *during the course of adolescence*. Especially, given that it is likely that different developmental tasks may be more or less prominent during these different periods.

Children and young people are adopting communications *before* adolescence; highlighting a need to prioritise SNS research with children of earlier ages. This might include further exploration into the role that SNSs are having during the transition from primary to secondary school.

Having studied the influence of SNSs amongst adolescents in a general way, it would be interesting for future research to focus on specific groups of adolescents who may

well be using SNSs differently. This research highlighted some differences with regards to gender. Given that there is a well established research evidence base on peer relationship gender differences, future research could also explore gender differences in more depth. It would be interesting to explore SNS use amongst children and young people who have been diagnosed as being on the Autistic Spectrum. Especially given that children and young people who are on the Autistic Spectrum are often recognised as developing different types of friendships and tend to have greater difficulty picking up on social cues.

5.8. Wider implications: Protecting and empowering (minimising risks and maximising opportunities).

The results of this study should be interpreted in light of existing influential policies and laws, such as Every Child Matters (2003) and the subsequent Children's Act (2004), which has set the tone for a wider involvement in the healthy development and safeguarding of children and young people. They also challenge us to consider how to balance fundamental human rights issues (such as those set out by the UN Convention on the Rights of The Child, 1989). They also have implications for the European Commissions' Safer Internet Programme (2009), the European regulatory body responsible for ensuring a safer online environment for children and young people.

The UN Convention on the Rights of The Child (1989) emphasises the right of a child for freedom of expression though any medium of the child's choice (Art. 13), freedom of association and peaceful assembly (Art.15) as well as the right of leisure and play opportunities (Art. 31). On the other hand, The Convention on the Rights of The Child also emphases the right to privacy (Art. 16) and protection from material injurious to the child's well being (Art. 17). In other words, banning adolescents from using SNSs impinges on their freedoms related to expression, association and leisure and play opportunities. Yet giving adolescents a free reign on SNSs exposes them to risks related to privacy and material that could be potentially harmful to them.

Given this position, an honest and pragmatic approach is needed. We need to help children and young people to maximise the opportunities provided by SNSs, while also minimizing their exposure to risks. Moreover, given the transient nature of SNSs, the responsibility for safe and responsible SNS use has to be collectively shared by all

stakeholders. This includes online regulatory bodies, SNS companies, adults involved in the care and education of children and young people and children and young people themselves.

In light of the findings of this study, stakeholders should consider the following eight points:

1). Article 12 of the UN Convention on the Rights of the Child, emphasises 'Respect for the views of the child', meaning when adults make decisions that affect children, children have the right to say what they think should happen and have their opinions taken into account. The UN Convention on the Rights of the Child also recognizes that children's ability to form and express their opinions increases with age (naturally giving the views of adolescents greater weight). Adolescents are experienced, well-connected, mobile, frequent, active, thoughtful, multi-users of SNSs, directly engaging adolescents in any decisions which affect their access and use of SNSs should be paramount. Children and young people are the ultimate stakeholders.

2). The picture portrayed by the media (and cyber-bullying research) surrounding adolescents' use of SNSs (and other communication technologies) is evidently disproportionately negatively skewed. This research shows that, for the most part, adolescents use SNSs in sensible and pro-social ways, utilizing the benefits of SNSs in order to enhance their social lives.

3). This research has also shown that SNSs can (and do on occasion) damage adolescents' peer relations. Many of these risks are in direct violation of the European Commission's Safer Internet Programme (2009), which has been signed by most major internet providers in Europe. Online regulatory bodies (and SNS companies themselves) have a legal responsibility to find further ways to reduce the risks to children and young people. In light of this study, one approach, which SNS companies could make a valuable contribution is to help improve children and young people's digital literacy skills. This might be achieved by providing compulsory online tutorials, modifying SNS interfaces in order to make the safety features more prominent and user friendly.

4). By the time children reach adolescence, most young people will have already started using SNSs. Given this fact, SNS developers might want to consider adopting an approach that encourages and rewards children and young people to be honest about their age. Encouraging children and young people to be honest about their age would open up greater capacity to build in more effective 'child-friendly' default settings.

5). Adolescents are using SNSs to overcome geographical and temporal constraints. The importance of this should not be underestimated, especially as they transition from primary to secondary school. Using SNSs during this time enables adolescents to both maintain their existing peer relations and quickly build up connections with new peers in their new school.

6). Schools are well placed to provide support children and young people. Most children and young people seem to begin using SNSs in Years 5, 6 or 7 (the years before, during, or following transition to secondary schools). It would therefore be advisable to provide some strategic, targeted and continued school-based support from Year 4 onwards which can raise children and young people's awareness of both the benefits and risks associated with using SNSs and how to use them safely and responsibly (if at all) *before* they begin using SNSs. This work could be incorporated into circle-time activities or within Personal, Health and Education lessons.

7). It is worth considering that the adolescents spoken to within this study had received no formal support with regards to using SNSs, yet they presented as experienced, thoughtful and sensible SNS users. Children and young people learn directly from their own personal experiences of using SNSs (just as they will learn from their personal experiences in real-life). It will never be possible to completely eradicate all the risks associated with using SNSs and it is important that we value children's own capacity to manage the risks themselves. When tensions and strains are experienced, we should also recognize the potential learning value in these incidents. It is in how children and young people overcome these experiences that they learn how to avoid them in the future.

8). The rapid rise of SNSs means that there is still much that is unknown regarding the social and emotional influence that SNSs are having on children and young people.

There is much to be gained from prioritizing further research into SNS use among children and young people. With the ultimate aim of disseminating the findings of this research back to all stakeholders and ultimately children and young people themselves. While the responsibility for children and young people's SNS use is not the sole responsibility of any one stakeholder. Stakeholders are in different positions, which allow them to make complementary contributions to help children and young people use SNSs safely and in the most beneficial way possible.

5.8.1. The contribution of Educational Psychologists.

As Educational Psychologists, working as scientist practitioners, our role is to utilise our knowledge of both psychology and child development in order to promote children's learning and general development. This includes a high consideration to the multiple, interacting environmental systems, which influence children's development (Bronfenbrenner, 1979).

The quality of children's peer relationships carries with it a high precedence. This is perhaps most acutely highlighted by the Good Childhood Enquiry (Layard & Dunn, 2009), one the biggest inquiries into the condition of childhood ever conducted in the UK, which showed that that when children themselves were asked about the elements of a good childhood, having friends was a theme they mentioned most often. As Educational Psychologists it is imperative that we understand the importance of any contextual changes, which may impact upon the quality of children's peer relations.

At an individual child level, as Educational Psychologists, we are likely to work with some of the most socially vulnerable children who may either not have access SNS technology or who may be more susceptible to being on the receiving end of some of the risks and strains identified. When we meet children and young people, we should be making a point of directly asking them about their experiences of using SNSs. This may lead into unchartered territory and generate new understandings about the factors affecting children and young people's well-being.

We should also be encouraging children and young people's parents/carers to enquire about their child's experiences online. This may open up valuable avenues for supportive discussions. It may lead to greater awareness of some of the

tensions/strains their child may be experiencing when using SNSs. Potentially raising concerns before they escalate. It may also lead to greater awareness of how SNSs may actually be enhancing and benefiting their son/daughter's social lives.

At a school/community level we should look for opportunities to put early intervention, multi-disciplinary working and preventative measures at the heart of our practice. In this context, this means raising staffs' awareness of patterns of SNS use amongst children and young people. As Educational Psychologists we can help schools to keep pace with these changes by developing progressive school-wide policies which tackle these issues directly. Whole school policies on SNS use should be in addition to other policies (separate from other more general policies relating to children's access to the internet). These policies should include guidance on how schools expect children and young people to behave on SNSs and include proactive steps to circumvent issues occurring before they do (for example, policies on the uploading of photographs within school). It should also include protocols on how best to deal with specific incidents (such as those which have been identified within this research) if and when they occur.

At a more practical, hands on level, as Educational Psychologists we should look for opportunities to work *with* schools, parents and other stakeholders (including SNS companies themselves) to ensure that children receive adult support and guidance (whether class-based or online). If this is not occurring, Educational Psychologists need to be sufficiently up-to-date with developments in online to be able to provide this guidance and support to children directly if necessary.

At a whole service level, at a time when our profession is facing significant challenges and changes, we should see children's use of SNSs as an opportunity to extend our area of expertise. The findings of this research have been fed back to participating schools, helping to raise awareness SNS influences amongst both pupils and staff. Given the relatively recent move towards doctorate status, as Educational Psychologists, we have research skills, which could help to continue to extend people's awareness and knowledge of this area. Educational Psychologists, as scientist practitioners, are well placed to conduct further research into this area and translate this into further practical support at various different levels.

Finally, all Educational Psychologists should consider how they themselves are personally using SNSs (if at all). If Educational Psychologists choose to use SNSs, they should be aware that their duty to uphold the highest standards of professional practice and conduct also extend into cyberspace. This includes being mindful of the possible professional implications (intended or otherwise) which could arise from SNS use. If Educational Psychologists do decide to engage with SNSs, it is recommended that should adopt some precautionary measures, such as using sensible pseudonyms (such as a middle), adopting the highest privacy settings, keeping a secure password and maintaining professional boundaries (between work and home) when posting any kind of information on SNSs.

5.9. Concluding remarks

This research began by posing the reflection of what it must be like to grow up as an adolescent in a world where SNSs form a ubiquitous part of their social lives. Through multiple means, this research has explored adolescents' use and perceptions of SNSs, painting a picture, which partly helps us to answer this important consideration.

Adolescents are experienced, mobile and frequent users of SNSs, who are doing much of their socializing (and growing up) online. While patterns of SNS use appear to be related to adolescents' prominence within a social setting and the number of people they can connect with, they appear to have less influence on the actual number of recognized real-life friends an adolescent has.

SNSs are having a mixed and multi-faceted influence on adolescents peer relations. SNSs appear to be exaggerating the existing dynamics of their relationships and also introducing new dynamics altogether. Amongst both users and non-users, this is affecting adolescent peer relations in both subtle and (in some cases) blatant ways. SNSs are both a supplementary context for existing adolescent peer relations *and* a new context used by adolescents to both expand and experiment with their social horizons. SNSs seem to be making the social aspect of adolescence more intense and dramatic, with more potential for more exaggerated and unfamiliar 'highs and lows'. In this regard, SNSs carry with them the potential for both great benefits and great risks.

From a research point of view, the findings of this study helps to update the existing academic knowledge base surrounding adolescents' real-life peer relations, raising questions about the validity of both social capital and cyber-bullying discourses and extending recent SNS research.

From a practical perspective, the findings of this study touch upon the foundation of existing policies that are concerned with the well-being of children and young people. SNSs are challenging stakeholders to work together, to find creative approaches which respect the balance between minimising risks and maximising opportunities. Each stakeholder has a unique contribution to make. There are opportunities for Educational Psychologists to make a contribution at a child, school and service level in this area.

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Appendix 6.2.1: Literature review search strategy.

In order to gain a comprehensive overview of literature in this field a number of academic research databases and search engines were utilised both prior to commencing data collection and throughout the project. These included; PsychINFO, PsychLit, MEDline, ERIC, Swetswise, Google Scholar, as well as several other university library catalogues. The following search terms (and connections of search terms) were used; social networking sites, adolescence, teenagers, peer relationships, popularity, rejection, peer relations, friends, friendships, peers, peer groups, cliques, social networks, computer-mediated communication, social capital, bullying and cyber-bullying. In order to stay up-to-date with the current published literature, these terms were checked periodically throughout the duration of this research project.

When selecting literature to reference, no specific inclusion criteria were applied, although studies were carefully considered with regards to both their quality and relevance before being included.

Appendix 6.2.2: Summary and explanation of 'Negative Event Types' identified by Tokunaga (2011).

| Negative Event	Explanation
Denied or ignored friend request:	The person initiates a friend request to the other, which is either denied or ignored. Individuals may also say that their friend requests were declined or rejected. Denied requests are not followed by administrative message saying the friend request is denied. Instead, respondents click on the other's profile and see "Friend Requested" returned to "Add as a Friend." Ignored requests stay in the "Friend Requested" mode for a longer-than expected period of time.
Deletion of message or identification tag:	The person authors a message on the other's profile or an identification marker is placed on a picture of the other, but subsequent visits to the other's profile page indicate the other person deleted the public message or removed the identity marker.
Ranking disparities on Top Friends applications:	The person visits the other's profile and notices that the friend uses a Top Friends application on which he or she does not appear or is ranked lower than expected.
Personal surveillance of profiles	The person is told about the number of times the other visits his or her profile to engage in surveillance. This information may come from mutual third-party members or those engaging in the surveillance.
Ignored question or remark	The person waits longer than expected for a response to a question or comment posted to another's message board.
Disparaging remarks posted on message boards	The person find comments that were considered belittling or demeaning posted on own profile's message board. Disparaging remarks can be anything from careless jokes to abusive language (i.e., flaming).
Gossip discovered on third party's message board	The person visits a profile page and finds out that a third party has written about him or her without his or her permission or knowledge. The information does not have to be negative; at times, it is positive but still unwanted.
Restricted access to a friend's page	The person finds that, although a friend request is approved, he or she has limited access to what can be performed on the other's profile. Restricted access includes an inability to see others' comments, personal information, status updates, photos, videos, and write on the other's message board.
Removed as a friend:	The person is no longer able to access the other's profile because he or she was removed as a friend.
Not allowed to join a group/created undesirable group about person:	The person discovers groups others are able to join but he or she is disallowed from joining. Further, groups are created about the person without prior consent or knowledge.

Appendix 6.3.1: School A & B background information (data taken from most recent OFSTED reports).

School	Information	Relevant Background Information (taken from the latest OFSTED reports)
School A	Type of school: Comprehensive School Category: Community. Age range of pupils: 11-16 years. Gender of pupils: Mixed. Number of students on roll: 666.	The school is regarded as a Specialist Arts College. It mainly serves students from the local area, where there are some pockets of social and economic disadvantage. About two-thirds of students are White British origin and the remainder come from a variety of ethnic backgrounds. The number of students with learning difficulties and/or disabilities, including those with a statement of special educational needs, is much higher than typically found nationally.
School B	Type of school: Academy School Category: Maintained. Age range of pupils: 11-18 years. Gender of pupils: Mixed. Number of students on roll: 771.	The school has a specialist Science and performing Arts status. It is smaller in size than most secondary schools. The largest group of students are from White/British heritage, although over three quarters are from a range of ethnic and cultural backgrounds, most of which are from black African or Caribbean backgrounds. The proportion of students known to be eligible for free school meals is almost twice the national average. A third of students – a proportion much higher than is found nationally – have special educational needs and/or disabilities, these mainly being moderate learning needs and behavioural, emotional and social difficulties.

**Appendix 6.3.2:** Phase 1 'opt out' letter to parents.

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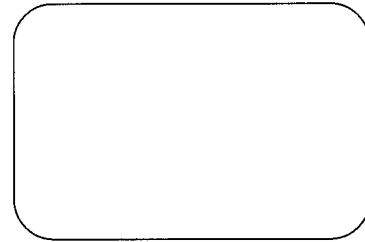
Dear Parent(s),

My name is Joe Isbister and I am a Trainee Educational Psychologist working in ███ ███████████████.

I am writing to you to request permission for the involvement of your son/daughter in an exciting research project taking place at Bishopsford Arts College. The project is exploring *young people's use of social networking sites and their views on how this is influencing their peer relationships*.
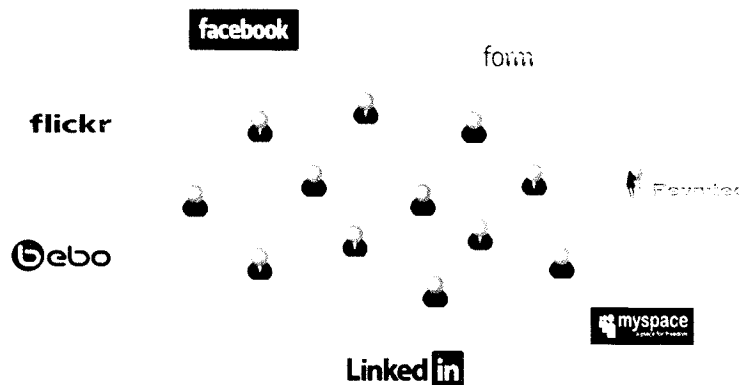
What will the benefits of this project be?
This project will:
- Raise awareness of any social issues (such as cyber-bullying), which may be associated with young people using social networks sites.
- Highlight any potential positive influences that social networking sites are having on young people's peer relationships.

Parents and school staff will receive a letter sharing these findings. The results of the project will also be used to develop some whole school staff awareness training. This will inform school staff about how to help teenagers harness the benefits of social networking sites, while also staying safe online.

What does the project involve?
This project has two parts:
Part 1: This year, all students in Year 9 will be asked to complete a social networking site questionnaire in school. This will take about 15 minutes in total to complete.

Part 2: In the Autumn Term (after the summer holidays), a selection of Year 9 students (between 5-10 pupils) will be interviewed in more detail regarding their views about social networking sites. Each interview will take about 45 minutes to complete.

What else do I need to know about this project?
The project is being carried out in association with Merton Local Education Authority together with the Institute of Education. It has undergone a rigorous ethical approval process.

All information will be treated with the strictest confidentiality and your son/daughter's identity will remain anonymous. The only time someone will be identified will be if it is felt that the well-being or safety of the person (or anybody else) is in danger. In this case, a designated member of staff, will be informed, who will address this issue according to school policy.

The pupils themselves will be informed about this project and will also be asked if they would like to participate. They will also have the option of opting out (at anytime) if they choose to.

If you **do not** wish your son/daughter to participate in this project please complete the slip below and return to the school office.

Please feel free to contact me at ███████████████████ if you have any further queries.

Yours faithfully

Joe Isbister
████████████████████████████

- -

I would **not like** my son/daughter to participate in this project being conducted in school.

Name of pupil: ....

Signed   .... (parent/carer)

Social Networking Site Questionnaire (A)

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

- This is a questionnaire about how teenagers (such as yourselves) are using social networking sites and how you think this is influencing the relationships you have with people your age.

- It is not a test and there are no right or wrong answers.

- You will be required to write your name. However, your answers will be made anonymous, meaning that nobody will be able to trace the answers you give on this questionnaire back to you.

- The answers you give are also confidential (meaning they will only be looked at by the researcher and not shared with anybody else). 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.

- Please try to answer all of the questions, although if for any reason there is a question that you would rather not answer you can leave it blank).

- There are roughly 20 questions. They should take you about 15 minutes to complete. If for any reason you decide you do not want to continue, you can stop and withdraw at any point.

- Once the questionnaire has been completed, there will be an opportunity to ask any further 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.

- There are two versions of this questionnaire, you will fill either... Questionnaire A for people who *do* use social networking sites. **Questionnaire B for people who do not use social networking sites.**

Student Consent

I have been informed of and understand the purposes of this study and its procedures and wish to participate. I also understand that in the debriefing session at the end of my participation I will have further opportunity to ask any questions about this study.

I understand that the data collected for this study is strictly confidential and I will not be identifiable in any report associated with this research.

I further understand that I may withdraw from the study at any time if I choose to.

Print Name   Signature

....

Social Networking Site Questionnaire

Thank you for agreeing to take part in my questionnaire about:
1). **Whether you use social networking sites.**
2). **If so... how you use social networking sites.**
3). **How you think social networking sites may influence your relationships with other people your age.**

flickr

bebo

tumblr.

form

facebook

myspace
a place for freedom

Linked in
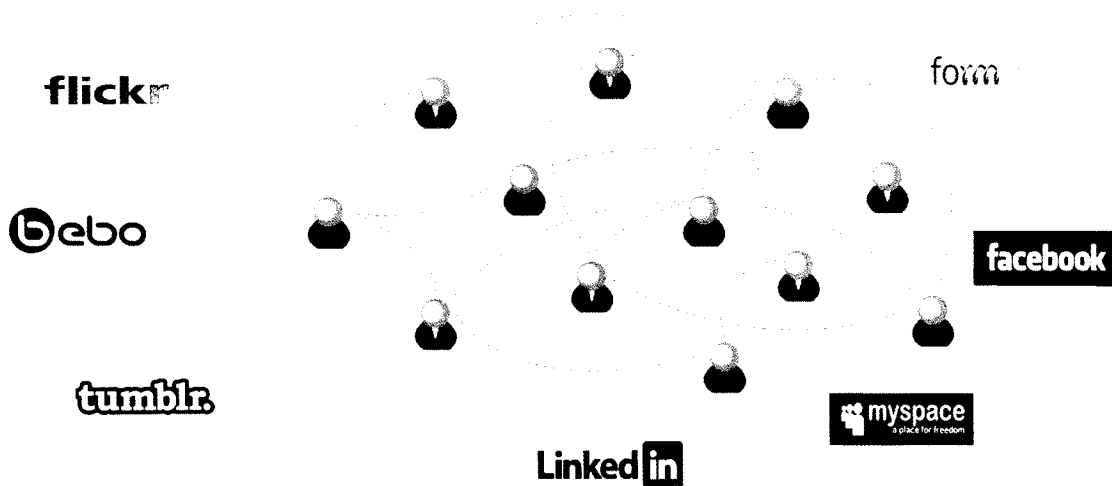
Please turn over to begin...

Questionnaire A: For people who use social networking sites

Q1). Which social networking site(s) do you use?

facebook	Bebo	myspace		form	tumblr	flickr	Linked

Other (please list)

Q2). Which school year were you in when you first started using social networking sites? *Tick just one*

Year 4 (or before)	Year 5	Year 6	Year 7	Year 8	Year 9

Q3). Roughly how often do you login to social networking sites? *Tick just one*

Less than once a week	Once a week	A couple of times a week	Every other day	Everyday (please specify roughly how often?)

Q4). What is the *main* way you access social networking sites? *Tick just one*

| On my phone	On computers at school	On computers at home	On a tablet (e.g. ipad)	Other (please specify any other ways)

Q5). Roughly how many 'Friends' to you have on social networking sites?

1-100	101-200	201-300	301-400	401-500	500+
					Roughly how

					many?

Q6). Of your 'Friends' on social networking sites, roughly how many would you consider *real friends*?

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

Q7). In the last couple of weeks, how many of your actual friends have you met with 'face-to-face'?

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

Q8). How many profiles do you tend to set up when you use a social networking site?

1	2	3	4+

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

Q9). What do you tend to use SNSs for?

1 = Always
2 = Sometimes
3 = Often
4 = Rarely
5 = Never

	1	2	3	4	5
a). To chat with friends that I see everyday					
b). To chat to friends and family that I do not see everyday					
c). To look for old friends I have lost touch with					
d). To check up on the latest news among my friends					
e). To talk to new people that I do not know yet.					
f). To manage my profile (such as updating my status, posting photos & videos)					
g). To organize or join events					
h). Other reason(s) (please list)					

Q10). Are there any ways that you think social networking sites make your relationships with other people your age *better?* If so… in what way?

Q11). Are there any ways that you think social networking sites put *strain on* your relationships with other people your age? If so… in what way?

Q12). Are you aware of any occasions when you (or your friends) have felt that using social networking sites have led to difficulties or misunderstandings with other people your age?
If so… could you briefly describe what happened?

Q13). 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 networking sites?

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

Q14). Do you <u>hang around in any group(s)</u>?

Please list people by name below (including the first letter of their surname if possible) e.g...

Group 1: Sam P, Jason G, Harry R, Amy T, Yasmin V.

I hang around with:

Q15). What about other people? Are there people in your year group that you think tend to <u>hang around together a lot</u>? Who are they? You can list up to four groups...

Group 1:
Group 2:
Group 3:
Group 4:

Remember to add the first letter of their surname if you know it...

About You!

In order for me to make sense of your responses, it would really help me to know a bit about yourself. Including:

Are you male or female?	
Which form group are you in?	
What ethnicity do you consider yourself to be? e.g. White, Black Caribbean, Pakistani etc.	

Thanks for your help. One final thing... I will be interviewing people later in the year. If you are happy to talk more about your experiences and be considered for this please tick the 'yes' box, if you would prefer not to take part, please tick the 'no' box.

Appendix 6.3.3.2: Debriefing form

Thank you for your time.

- If you are currently experiencing any difficulties or are troubled by anything related to using social networking sites (or anything to do with this study), the best person to speak to in school is _____. They can be contacted by _____. They can offer support or guidance related to anything you are concerned about. The information you give to them will be private between yourselves, unless they think that you (or anybody else) is at risk of harm or danger.

- Alternatively, there is a website called 'CyberMentors' (available at http://cybermentors.org.uk) which you can visit. This website is run by young people like you and is dedicated to supporting teenagers online. The site contains lots of useful information and advice. It also offers the opportunity to chat to CyberMentors online if you want to. The site is secure and you can keep all your chats private. There are also counsellors available for anything really serious.

Appendix 6.3.4: Non-SNS user questionnaire

Appendix 6.3.4.1: Participant rights

Social Networking Site Questionnaire (B)

- This questionnaire is not a test and there are no right or wrong answers.

- You will be required to write your name. However, your answers will be made anonymous, meaning that nobody will be able to trace the answers you give on this questionnaire back to you.

- The answers you give are also confidential (meaning they will only be looked at by the researcher and not shared with anybody else). 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.

- Please try to answer all of the questions, although if for any reason there is a question that you would rather not answer you can leave it blank).

- There are roughly 20 questions. They should take you about 15 minutes to complete. If for any reason you decide you do not want to continue, you can stop and withdraw at any point.

- Once the questionnaire has been completed, there will be an opportunity to ask any further 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.

- There are two versions of this questionnaire, you will fill either... Questionnaire A for people who *do* use social networking sites. Questionnaire B for people who do not use social networking sites.

Student Consent

I have been informed of and understand the purposes of this study and its procedures and wish to participate. I also understand that in the debriefing session at the end of my participation I will have further opportunity to ask any questions about this study.

I understand that the data collected for this study is strictly confidential and I will not be identifiable in any report associated with this research.

I further understand that I may withdraw from the study at any time if I choose to.

Print Name   Signature

……………………………………   ……………………………………

Social Networking Site Questionnaire (B)

Thank you for agreeing to take part in my questionnaire about:

1). Whether you have ever used social networking sites.

2). If not ... why you don't use them.

3). How you think your <u>non use</u> of social networking sites may influence your relationships with other people your age.

flickr

form

bebo

facebook

tumblr.

myspace
a place for freedom

Linked in
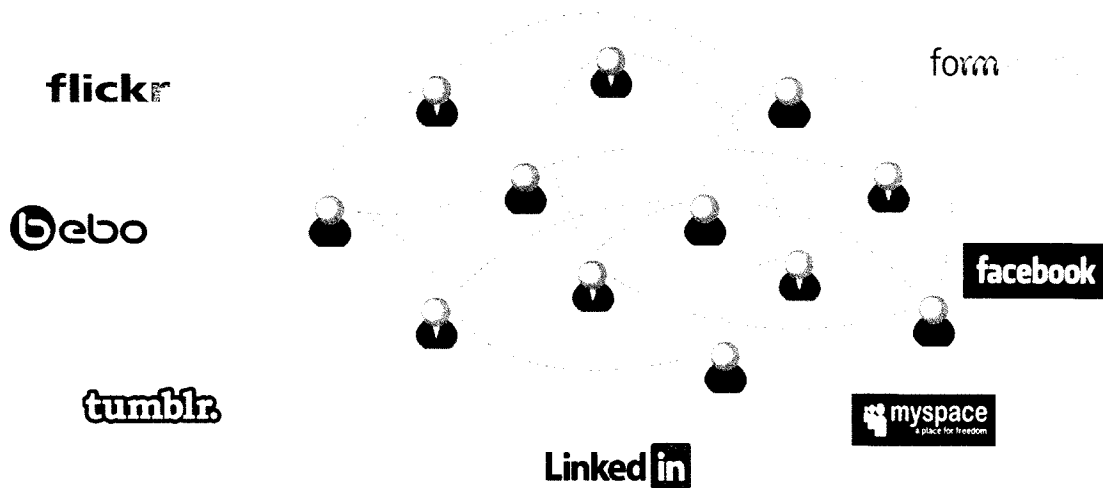
Questionnaire B: For people who *do not* use social networking sites

Q1). Have you ever used any social networking sites before?

Yes   No

↓   ↓

If so *when* did you stop and *what*   Is there any particular reason for this?
made you stop?

Q2). Do you find there are any *advantages* to you <u>not</u> using social networking sites?

Q3). Do you find there are any disadvantages to <u>not</u> using social networking sites?

Q4). Is there anything that you would <u>change</u> about social networking sites which might make you more likely to use them in the future?

Q5). What <u>advice</u> would you give to people younger than you (such as younger brother or sister) if their friendship/peer group had just started using social networking sites?

The next couple of questions are about groups or 'gangs' that hang around together within your Year group...

Q6). Do you <u>hang around in any group(s)</u>?

Please list people by name below (including the first letter of their surname if possible). For example...

Group 1: Sam P, Jason G, Harry R, Amy T, Yasmin V.

I hang around with:

Q7). What about other people? Are there people in your year group that you think tend to <u>hang around together a lot</u>? Who are they? You can list up to four different groups...

Group 1:
Group 2:
Group 3:
Group 4:

Remember to add the first letter of their surname if you know it...

About You!

In order for me to make sense of your responses, it would really help me to know a bit about yourself. Including:

Are you male or female?	
Which form group are you in?	
What ethnicity do you consider yourself to be? e.g. White, Black Caribbean, Pakistani etc.	

Thanks for your help. One final thing… I will be interviewing people later in the year. If you are happy to talk more about your experiences and be considered for this please tick the 'yes' box, if you would prefer not to take part, please tick the 'no' box.

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 6.3.4.2: Debriefing form

Thank you for your time.

- If you are currently experiencing any difficulties or are troubled by anything related to using social networking sites (or anything to do with this study), the best person to speak to in school is _____. They can be contacted by _____. They can offer support or guidance related to anything you are concerned about. The information you give to them will be private between yourselves, unless they think that you (or anybody else) is at risk of harm or danger.

- Alternatively, there is a website called 'CyberMentors' (available at http://cybermentors.org.uk) which you can visit. This website is run by young people like you and is dedicated to supporting teenagers online. The site contains lots of useful information and advice. It also offers the opportunity to chat to CyberMentors online if you want to. The site is secure and you can keep all your chats private. There are also counsellors available for anything really serious.

Appendix 6.3.4.3. Questionnaire pilot changes

Questionnaire A pilot changes	Questionnaire B pilot changes
Q1). Friends Re-united was replaced with Tumblr. As Friends Re-united is apparently not a well known SNS.	More space added to all open-ended questions.
Q3, 6, 7). Line removed as participants were missing question prompts.	Socio-composite questions edited in line with Questionnaire A.
Q9). Re-worked from a ranking question to a Likert-style question.	About You Section). Ethnicity examples added as some adolescents unfamiliar with this term.
Q10, 11, 12, 13). Given more room to write as people were writing in the margins.	
Q12). Reworded to reduce emphasis on personal experience.	
Socio-Composite Questions (Q14 & Q15). Questions switched around as getting repeat answers. Questions also reworded to explicitly ask for names of people (not names of groups). Both questions given prompts for participants to include first letter of surnames of people as well.	
About You Section). Ethnicity examples added as some adolescents unfamiliar with this term.	

Appendix 6.3.5: Parental 'opt in' consent letter for interviews during Phase 2 data collection

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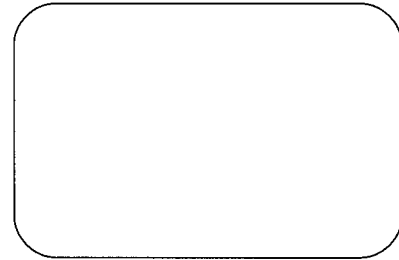
Dear Parent(s),

I am pleased to inform you that your son/daughter has been selected to participate in the second phase of the project which is exploring *young people's use of social networking sites and their views on how this is influencing their social lives.*

tumblr.   Bebo

facebook

myspace
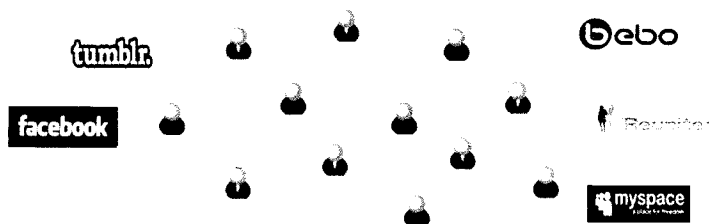
What does the project involve?
During the summer term, every pupil in Year 9 (now Year 10) completed a questionnaire, which enquired about how teenagers are using social networking sites. You may remember receiving a letter recently that showed some of these results.

As a follow up to this, I would like to interview a sample of teenagers in more detail about how they think social networking sites are influencing their social lives. Each interview will be conducted in school and will last approximately 45 minutes. Each interview will be fitted into the school day to ensure there is minimal disruption to lessons.

What will the benefits of this project be?
The aim of this project is to:
- Raise awareness of any social issues (such as cyber-bullying), which may be associated with young people using social networks sites.
- Highlight any potential positive influences that social networking sites are having on young people's social lives.

The results of the project will also be used to develop some **whole school staff awareness training** which will enable staff to help teenagers both harness the benefits of social networking sites, while also ensuring they stay safe online.

What else do I need to know about this project?
The project is being carried out in association with ███ Local Education Authority together with the Institute of Education. It has undergone a rigorous ethical approval process.

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The interviews will be digitally recorded and later transcribed. All information gathered will be treated with the strictest confidentiality and your son/daughter's identity will remain anonymous. The only time someone will be identified will be if it is felt that the well being or safety of the person (or anybody else) is in danger. In this case, a designated member of staff, will be informed, who will address this issue according to school policy.

The pupils themselves will be informed about this project and will also be asked if they would like to participate. They will be made aware of their right to opt out (at anytime) if they choose to.

If you are happy to allow your son/daughter to be interviewed, please sign the slip below and return it to the school office by _____.

If you have any further questions, please feel free to contact me at Joe.isbiste█████████ if you have any further queries.

Yours faithfully

Joe Isbister

████ Educational Psychology Service

--- ---

☐   Yes... I am happy for my son/daughter to be interviewed.

Name _____

Signed _____ Parent/Guardian

--- ---

6.3.6.1: Participant rights (Phase 2)

Important Participant Information

Thank you for agreeing to participate in my study. Before you start the interview it is important that you read through the following information...

- You are about to be asked a series of questions about your views on using social networking sites.

- The interview is not a test and there are no right or wrong answers.

- The interview will be recorded, however, the answers you give will be made anonymous, meaning that nobody will be able to trace the answers you give back to you.

- The answers you give in this interview are also confidential (meaning they will only be listened to by the researchers and not shared with anybody else). 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.

- It would be great if you answered all of the questions, although if for any reason you do not want to answer a question you do not have to. You can also stop the interview and withdraw from participating in this project at anytime.

- The whole interview should take about 45 minutes in total.

- At the end of the interview, there will be an opportunity to ask any further questions, should you have any.

I have been informed of my rights as a participant and I understand the purposes of this study and its procedures and wish to participate.

Print Name   Signature

....

Preamble... Thank you for agreeing to talk with me today. I would like to chat with you about about your social life and your experience of using SNSs.

How long have you been at [insert school]
What do you think about [insert school]

Do you have a particular friendship group that you hang around with in school?
Prompts...   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?

Do you have any other friends outside of school?
Prompt...   How did you meet your friends outside of school?

Which SNSs do you and your friends tend to use?

How come you and your friends use those particular SNSs?
Prompts...   Do you use them for different things?
                          Has that always been the case?

When did you first start using SNSs?

What influenced your decision to start using SNSs then?
Prompt ...   Did anything else influence this decision?

Did you notice any changes to your social life after you started using SNSs?

What do you and your friends usually do on SNSs?

Could you talk me though a few examples of how you (or your friends) have recently used SNSs... say in the last couple of days?

Do you and your friends use SNS for anything else?

I can see that you have _ friends on SNSs.

What do you think about having _ friends on SNSs?
Prompt...   Can you think of anything good about this?
Prompt...   Can you think of anything bad about this?

How do you decide who to accept (and who to reject) as a friend?

Has this ever caused any difficulties between you and other users?

Prompt...   Can you tell me about this?

In your opinion, are 'SNS friends' the same as 'real friends' or are they different?

Prompt...   Please explain further...

What do you think about people being able to find out things about you through your SNS?

Prompt...   Can you think of anything good about this?
Prompt...   Can you think of anything bad about this?

Either...	**Or**
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].	**Can you think of a time when you thought that SNSs have caused trouble for you or other people you know?**
	Prompt...
Prompts...	How do you think SNSs specifically contributed towards this problem?
Could you tell me a bit more about this...	
How do you think SNSs specifically contributed towards this problem?	

Do you find that any other social issues / difficulties ever arise as result of you using SNSs?

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.

> Somebody changing the relationship status between you and them (e.g. from a close friend to an acquaintance).

> Finding yourself being restricted from accessing information on one of your friend's profile pages

> 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 cyber-bullying you

Can you think of a time when using SNSs have really helped you?

Prompts…   Talk me through what happened?
                Could you tell me more…
                How do you think SNSs *specifically* helped in this case?

In your experience, do you think that people act the same on SNSs or do people act differently?

Prompt… Please explain…

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?

Prompts   What about children younger than yourself?
               Should people of any age be allowed to use SNSs?

What do you think about other people your age *who deliberately do not* use SNSs?

Prompts   Can you think of any advantages for those people?
               Can you think of any disadvantages for those people?

Is there anything at all about SNSs that we have not yet talked about that you would like to mention?

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6.3.6.2: Debriefing form (Phase 2).

Debriefing Form

What is this project about?

The aim of this project is to learn about how teenagers use social networking sites and to explore their views about how this is influencing their social lives.

Why are you doing this project?

Presently very little is known about how teenagers are using social networking sites and what influence this is having on teenagers social lives. The study intends to raise awareness of some of the negative aspects associated with using social networking sites (such as cyber-bullying) and also raise awareness of some of the positive aspects of using social networking sites.

What will the interview be used for?

The interview you have given will be written down (word-for-word) and then studied alongside other interview transcripts for any recurring patterns or themes. Your data will be made anonymous, meaning that nobody will be able to trace the answers you gave back to you.

Other important information:

If you are currently experiencing any difficulties or are troubled by anything related to using social networking sites, the best person to speak to in school is _____. _____ can offer support and guidance related to anything you are concerned about. The information you give to them will be kept private between yourselves. The only time information will be passed on is if _____ thinks that you (or anybody else) is at risk of harm or danger.

Alternatively, if you would rather not speak to somebody you know, there is a website called 'CyberMentors' (available at http://cybermentors.org.uk) which you can visit. This website is run by young people like you and is dedicated to supporting teenagers online. The site contains lots of useful information and advice. It also offers the opportunity to chat to CyberMentors online if you want to. The site is secure and you can keep all your chats private. There are also counsellors available for anything really serious.

Appendix 6.3.7: Non SNS interview schedule

6.3.7.1. Participant Rights (Phase 2)

Important Participant Information

Thank you for agreeing to participate in my study. Before you start the interview it is important that you read through the following information...

- You are about to be asked a series of questions about your views on using social networking sites.

- The interview is not a test and there are no right or wrong answers.

- The interview will be recorded, however, the answers you give will be made anonymous, meaning that nobody will be able to trace the answers you give back to you.

- The answers you give in this interview are also confidential (meaning they will only be listened to by the researchers and not shared with anybody else). 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.

- It would be great if you answered all of the questions, although if for any reason you do not want to answer a question you do not have to. You can also stop the interview and withdraw from participating in this project at anytime.

- The whole interview should take about 45 minutes in total.

- At the end of the interview, there will be an opportunity to ask any further questions, should you have any.

I have been informed of my rights as a participant and I understand the purposes of this study and its procedures and wish to participate.

Print Name   Signature

....

Interview Schedule (Non SNS Version)

Preamble... Thank you for agreeing to talk with me today. I would like to chat with you about about your social life and your views about your decision not to use SNSs.

General Social Life Questions (to get context)

How long have you been at [insert school]
What do you think about [insert school]

Do you have a particular friendship group that you hang around with in school?
Prompts   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?

Do you have any other friends outside of school?
Prompts   How did you meet your friends outside of school?

Do any of your friends use SNSs?

How come you have decided not to use any kinds of social networking sites?

Do you think this decision has affected your social life in any way? And if so how?

Do find that there are any advantages in not using SNSs?
Prompt   Please explain...
                Can you think of an example?

Do you find there are any disadvantages in not using social networking sites?
Prompt   Please explain...
                Can you think of an example?

[Possible question]

I can see that you did use SNSs before – what happened to make you stop?

When you stopped using SNSs, did this have any impact on your social life?

If you suddenly decided to start using SNSs, how do you think your social life might change?

Prompt...   In what ways might it make your social life better?
             In what ways might it make your social life worse?

If everybody else stopped using SNSs along with you... how do you think things might change?

Prompt   In what ways might things be better?
          In what ways might things be worse?

How do you think your friends (who do use SNSs) view your decision not to use them?

If one of your friends had only just started using SNSs, is there any advice would you give them?

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?

Prompt   What about children younger than yourself?
          Should anybody of any age be allowed to use SNSs?

Is there anything at all about SNSs that we have not yet talked about that you would like to mention?

Appendix 6.3.7.2: Debriefing form (Phase 2).

What is this project about?

The aim of this project is to learn about how teenagers use social networking sites and to explore their views about how this is influencing their social lives.

Why are you doing this project?

Presently very little is known about how teenagers are using social networking sites and what influence this is having on teenagers social lives. The study intends to raise awareness of some of the negative aspects associated with using social networking sites (such as cyber-bullying) and also raise awareness of some of the positive aspects of using social networking sites.

What will the interview be used for?

The interview you have given will be written down (word-for-word) and then studied alongside other interview transcripts for any recurring patterns or themes. Your data will be made anonymous, meaning that nobody will be able to trace the answers you gave back to you.

Other important information:

If you are currently experiencing any difficulties or are troubled by anything related to using social networking sites, the best person to speak to in school is _____.
_____ can offer support and guidance related to anything you are concerned about. The information you give to them will be kept private between yourselves. The only time information will be passed on is if _____ thinks that you (or anybody else) is at risk of harm or danger.

Alternatively, if you would rather not speak to somebody you know, there is a website called 'CyberMentors' (available at http://cybermentors.org.uk) which you can visit. This website is run by young people like you and is dedicated to supporting teenagers online. The site contains lots of useful information and advice. It also offers the opportunity to chat to CyberMentors online if you want to. The site is secure and you can keep all your chats private. There are also counsellors available for anything really serious.

Appendix 6.3.7.3. Interview schedule pilot changes.

SNS user interview schedule pilot changes	Non SNS user interview schedule pilot changes
How many friends do you have question and how many best friends question both omitted as participants found these hard to answer.	Question regarding 'if SNSs were never invented...' removed as participants felt this question was confusing and difficult to answer.
'Is there anything else you might use SNSs for?' changed to 'Do any of your friends use SNSs for anything else?'.	Prompt inserted regarding what made non-SNS users stop, as all participants spoken to within pilot mentioned that most non-users are people that have stopped through choice/protest.
Prompts based on participants' answers from Phase 1 kept as this provided rich data.	
Questions asking about profile omitted as participants felt these questions were 'silly' and they did not respond with coherent answers.	
Several questions merged which yielded similar responses.	
Tips or advice question gotten rid of due to repetition.	
General feedback: Too many questions asking the same thing. Cut back on the number of questions and only focus on the core main ones.	

Appendix 6.3.8: Parental information letter received by parents (at end of Phase 1).

IOE

**Leading education
and social research**

Institute of Education
University of London
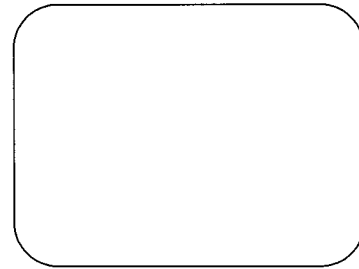
Dear Parent(s),

My name is Joe Isbister and I am a Trainee Educational Psychologist working in ██████ Local Education Authority.

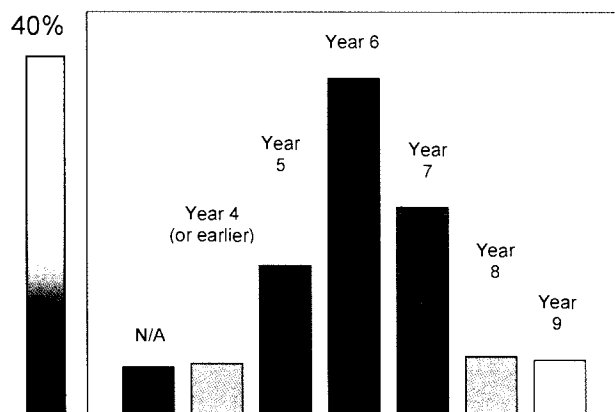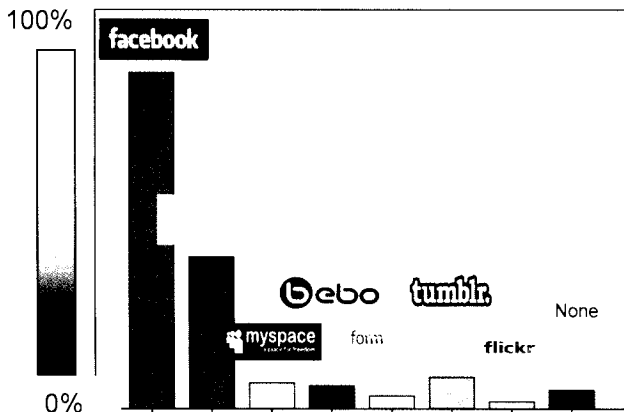As you may remember, I wrote a letter last summer term, explaining about an exciting project taking place at ███████████████████; which is *exploring young people's use of social networking sites and their views on how this is influencing their social lives.*
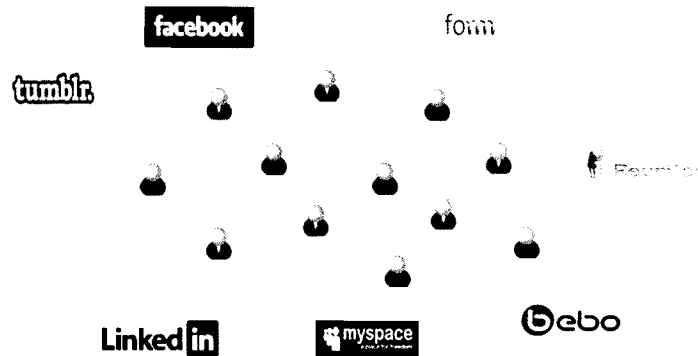
As part of this project, last term, every pupil in Year 9 (now Year 10) was asked to fill out a questionnaire which asked them about their use of social networking sites. I thought you might be interested in some of the answers to the questions we asked...
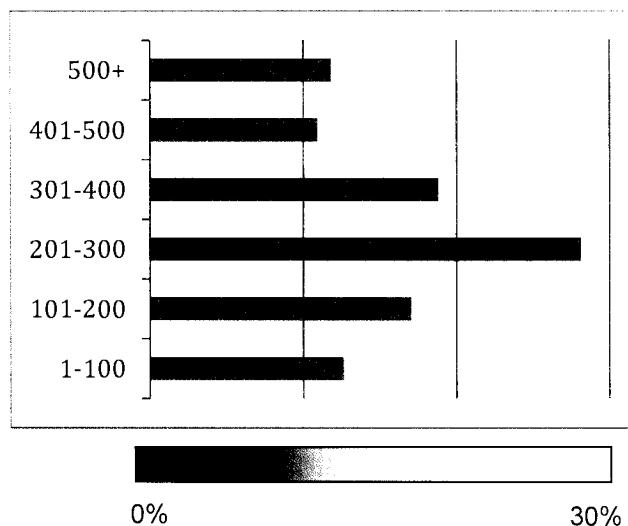
Q1). Which social networking sites are teenagers using?

Q2). What school year do teenagers report first starting to use social networking sites?

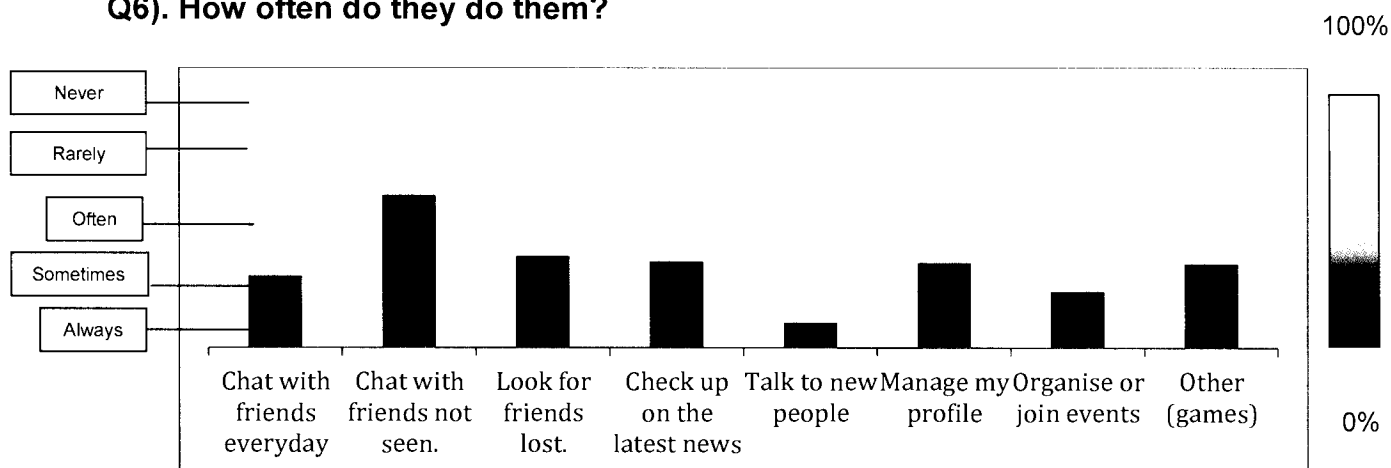## Q3). How often do teenagers log-on to social networking sites?

- Less than once a week
- Once a week
- A couple of times a week
- Every other day
- Everyday
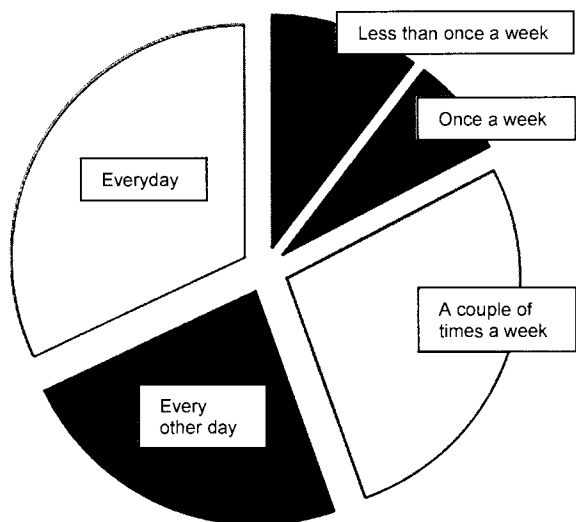
Q4). How many 'friends' do teenagers have on social networking sites?

500+
401-500
301-400
201-300
101-200
1-100

0%   30%

Q5). What do adolescents say they do on social networking sites?
Q6). How often do they do them?

100%

- Never
- Rarely
- Often
- Sometimes
- Always

Chat with friends everyday | Chat with friends not seen. | Look for friends lost. | Check up on the latest news | Talk to new people | Manage my profile | Organise or join events | Other (games)

0%

Phase 2 of this project involves interviewing a sample of pupils (in more detail) about how they think social networking sites are influencing their social lives. Should your son/daughter be selected for Phase 2 (an interview), you will receive a letter in the next month asking for your permission.

At the end of phase 2, the results will be used to develop some awareness training for staff at ███████████████; so that the school can be better equipped at supporting young people to use social networking sites.

Yours faithfully

Joe Isbister

STUDENT RESEARCH ETHICS APPROVAL FORM
Psychology & Human Development

This form should be completed with reference to the BPS Code of Ethics and Conduct – available online from www.bps.org.uk

Course: Doctorate in Professional Educational, Child and Adolescent Psychology (Yr 2)

Title of project: Exploring adolescents' perceptions of how social networking sites are impacting on their peer relationships.

Name of researcher(s): Dr Ed Baines & Dr Karen Majors

Date: 26/02/12

Intended start date of data collection: Start of summer term (April 2012) for Phase 1.

1. Summary of planned research

Purpose: To explore adolescents' perceptions of how social networking sites are influencing their peer relationships.

Academic Rationale: Social networking sites (SNS) are a global movement and growing in use exponentially. Children are at the forefront of these developments.

Research is increasingly recognising the importance of the 'peer group' on child development. SNS are having a profound impact on children's peer relationships. They have added a new dimension to their interactions and created a virtual space where children 'hang-out' and socialise.

There is growing social concern about children's use of social networks. This has led to a discourse disparity among the research (depending on which age demographic is being studied). Research on 'emerging adults' (age 18-25) has a positive discourse. By contrast, research on adolescents (age 13-17) has a negative discourse, usually centred on the issue of cyber-bullying.

Yet this is not the whole picture. A consistent research finding is that only a small minority of adolescents report having experience of cyber-bullying. In addition, numerous conceptual and methodological problems inherent in cyber-bullying research suggest that there may be other more subtle and complex social issues than cyber-bullying research is currently portraying. In addition there is a paucity of research which has examined the positive aspects of this technology with respect to adolescent's peer relationships.

This research will challenge the current discourse and give a balanced portrayal of how adolescents themselves see SNSs as impacting on their peer relationships. It will address the following questions…

RQ1). What purpose/role do adolescents perceive SNSs have in relation to their peer

relationships?

RQ2). What positive aspects (or benefits) do adolescents perceive that SNSs are bringing to their peer relationships?

RQ3). What negative aspects (or costs) do adolescents perceive that SNSs are having on their peer relationships?

Methods and Measurements: This research will be conducted in two phases. Phase 1 will use a questionnaire to gather data (see example attached). This questionnaire has two aims:
1). To build up a picture of the local context relevant to the subject I am researching.
2). To help inform the questions that will be asked in the follow up interviews (Phase 2).

The questionnaire will contain a mixture of closed and open-ended questions. The results will be analysed statistically (for closed questions) and analysed using content analysis (for open-ended questions).

Participants: This study will involve recruiting adolescents in Year 9 (age 14-15) who attend secondary schools within a South London Borough. It is interested in gathering the views of both males and females and users and non-users of social networking sites. In light of the research scope and tight timings that this study needs to be completed in, I will be focusing on adolescents within Year 9 (approx age 14-15). This has been chosen as it is the 'middle' year group in secondary schools and focusing on this year group will not clash with preparations for exams (such as GCSEs).

Recruitment Methods: Participants will be recruited through the secondary schools they attend. This study will recruit participants from two separate schools. The exact schools have not been decided yet, although it is likely that I will initially approach the two secondary schools that I currently work in. Although, this still needs to be determined through discussions (during supervision) with my research supervisors.

Schools will be approached by letter and e-mail. This will be followed up by telephone and face-to-face meeting with key staff (if needed).

[Please note... a separate application will be made for Phase 2 of this research proposal once the data from Phase 1 has been collected].

2. Specific ethical issues

Informed Consent: The parents of the adolescents in my sample will be informed of my research via a letter (see parent letter). This will offer them the opportunity to opt their son/daughter out of the research. In addition, to this, before administering the questionnaires, the research aims will be made clear to the participants (see administration and instructor script) and they will be asked to sign a sheet indicating that they have given their informed consent to participate (i.e. the student will be required to opt into the research). The consent form is the first page of the questionnaire.

Upon completion of the questionnaire, the participants will be asked to record on the questionnaire, if they would like to be considered for being interviewed (Phase 2 of the research). Please see P6 of the SNS Questionnaire.

Control: The questionnaire will be a 'paper-and-pencil questionnaire' (rather than an online survey). Participants will be required to note their name on the questionnaire. This is to ensure that the researcher has control over which adolescents within the school are completing the questionnaire and to ensure that the wishes of adolescents' parents, who have decided to opt out of the research are respected and adhered to.

Anonymity and confidentiality: All participants' responses will be made anonymous and will not be shared with any other third party. The questionnaires themselves will be stored in a locked cupboard, accessible only by the researcher. The completed questionnaires will not be held any longer than is needed. Upon completion of this study, the questionnaires will be shredded.

Harm: All care will be taken to ensure that there is no distress caused to participants at any point. Participants will be made aware of their right to withdraw before completing the questionnaire and will be reminded they can choose to leave a question blank if they do not want to answer a question (see administration instruction script). Upon completing the questionnaire, participants will also be given an information sheet, which will direct them to an agreed designated member of staff (agreed with the school beforehand), who they can contact if they would like. In addition to this, it will also signpost other support services they can contact (such as Cyber-Mentors) if they need to.

All participants will be required to give their name when filling out the SNS questionnaire. If when analysing the results of the questionnaire any issues arise amongst students where the researcher feels that the participant (or any other students) are at risk, this information will be passed to a designated member of school (identified and agreed beforehand). This will be explained to the students beforehand (see instructions and administrations script) and participants will also be reminded by the debriefing form given after the questionnaires (see debriefing form).

Debriefing: Participants will be made aware of the purpose of the study before consenting to take part. Upon completion of the questionnaire, participants will be given the opportunity to ask any further questions they may have.

3. Further details

Please answer the following questions.

		YES	NO	N/A
1	Will you describe the exactly what is involved in the research to participants in advance, so that they are informed about what to expect?	X	☐	☐
2	Will you tell participants that their participation is voluntary?	X	☐	☐
3	Will you obtain written consent for participation?	X	☐	☐
4	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	X
5	Will you tell participants that they may withdraw from the research at any time and for any reason?	X	☐	☐
6	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	X	☐	☐
7	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	X	☐	☐
8	Will you debrief participants at the end of their participation (i.e. give them a brief explanation of the study)?	X	☐	☐

If you have ticked **No** to any of Q1-8, please ensure further details are given in section 2 above.

		YES	NO	N/A
9	Will your project involve deliberately misleading participants in any way?	☐	X	☐
10	Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort? If **Yes**, give details on a separate sheet and state what you will tell them to do if they should experience any problems (e.g. who they can contact for help).	☐	X	☐
11	Will your project involve human participants as a secondary source of data (e.g. using existing data sets)	☐	X	☐

If you have ticked **Yes** to any of 9 - 11, please provide a full explanation in section 2 above.

		YES	NO	N/A
12	Does your project involve working with any of the following special groups?			
	• Animals	☐	X	☐
	• School age children (under 16 years of age)	X	☐	☐
	• Young people of 17-18 years of age	☐	X	☐
	• People with learning or communication difficulties	☐	X	☐
	• Patients	☐	X	☐
	• People in custody	☐	X	☐
	• People engaged in illegal activities (e.g. drug-taking)	☐	X	☐

STUDENT RESEARCH ETHICS APPROVAL FORM Psychology & Human Development

This form should be completed with reference to the BPS Code of Ethics and Conduct – available online from www.bps.org.uk

Course: Doctorate in Professional Educational, Child and Adolescent Psychology (Yr 2)

Title of project: Exploring adolescents' use of social networking sites and their perceptions of how this is influencing their peer relationships.

Name of researcher(s): Dr Ed Baines & Dr Karen Majors

Date: 20/11/12

Intended start date of data collection: December 2012 and January 2013.

3. Summary of planned research

[Please note... this application should be read as a supplement to the ethics application submitted (February 2012) for Phase 1 of this research]

Purpose: To explore adolescents' use of social networking sites and their perceptions of how this is influencing their peer relationships.

Academic Rationale: Social networking sites (SNS) are a global movement and growing in use exponentially. Adolescents are at the forefront of these developments.

SNSs are potentially having a profound influence on children's peer relationships; adding a new dimension to their interactions and creating a virtual space where young people can 'hang-out' and socialise.

Although it is known adolescents are heavy users of SNSs, very little detailed information is known beyond this (for example, which SNSs adolescents are using, how often they log-in, what they do when they are online etc).

Moreover, the influence of SNSs has not been thoroughly explored. Existing research into adolescent peer relationships (and theories of computer mediated communication) were conducted before the advent of SNSs and while providing some insight, ultimately lead to lots of speculation and conjecture.

Research which has looked specifically into the influence of SNSs (and communication technologies in general) is split into two contrasting discourses (depending on which age demographic is being studied). Research on 'emerging adults' (age 18-25) has a positive discourse emphasising the increased social capital associated with using SNSs. By contrast, research on adolescents (age 13-17) has a negative discourse, usually centred on the issue of cyber-bullying. Both of these discourses are not representative of the full spectrum of influence that SNSs are having. Moreover, both discourses have numerous conceptual and methodological issues which raise questions about their validity and reliability.

A handful of recent research studies (e.g. Livingstone, 2008; Reich, Subrahmanyam & Espinoza 2012; Tokunaga, 2011) have highlighted that SNSs appear to be responsible for a number of more subtle influences than has currently been detected by either social capital and cyber-bullying research, although given the widespread use of SNSs by adolescents, this research can only be considered as presenting a glimmer of insight into the social influence SNSs may be having. Moreover, each of the studies examined have various methodological weaknesses, which diminish the credibility of their findings and limit their wider applicability.

This research will challenge the current discourse and give a balanced portrayal of how adolescents themselves see SNSs as impacting on their peer relationships. It will address the following questions...

RQ1). How are adolescents engaging with SNSs?
- Which SNSs are adolescents using?
- At what age are adolescents first accessing SNSs?
- How adolescents are adolescents accessing SNSs?
- How often are adolescents using SNSs?
- How many friends do adolescents tend to have on SNSs?
- What do adolescents do on SNSs and how often do they do them?

RQ2). What benefits do adolescents perceive that SNSs are bringing to their peer relationships?

RQ3). What benefits do adolescents perceive that SNSs are bringing to their peer relationships?

RQ4). How do adolescents who *do not* use social networking sites perceive that this has impacted upon their social lives?

Methods and Measurements:
This study is employing a two-phase, sequential, mixed-methods approach to answering the above research questions. Two hundred and forty three Year 9 pupils (spanning two schools) having already competed a SNS questionnaire (see ethics application 1, submitted February 2012.

Phase 2: As a follow up from Phase 1, a further proposed 12-16 participants will be followed up via semi-structured interviews. The participants will be selected from within the sample of adolescents who completed the SNS questionnaire, during phase 1.

Participants will be screened based on their responses to some of the questions contained in the questionnaire they filled out during phase 1. Participants will be considered eligible for interviews if they satisfy the following criteria:
1). Be a current user at least one SNS (including Facebook).
2). Have personal experience of using SNS(s) for a minimum of at least one year.
3). Currently login to SNSs at least a couple of times a week or more.
4). Be part of a recognized social clique or cluster within their year group (as identified by the SCM exercise).
4). Have been in the UK education system for at least seven years and not be learning

English as an additional language.
5). Have ticked the 'yes' category on the questionnaire question which referred to their willingness to be interviewed at a later stage.

Of those participants who meet the above criteria, an equal balance of males and females will be purposively selected based on the responses they have provided for the qualitative questionnaire questions.

Participants will be interviewed according to a semi-structured interview schedule (see appendix).

4. Specific ethical issues

Informed Consent: The parents of the adolescents selected will be informed of the research via a second letter. This will contain a section, for the adolescents themselves to sign and a section where the parents/guardians will be required to sign (in order for their son/daughter to be able to take part in the semi-structured interview).

Before conducting the semi-structured interviews, the research aims will be made clear to the participants (see administration and instructor script) and they will be asked to sign a further sheet indicating that they have understood the instructions and their rights (as participants) has been made clear to them.

Control: Participants will only be approach if they have previously consented to being interviewed (when filling out the questionnaire). Adolescent participants will only be interviewed once a parental consent signature has been obtained.

Anonymity and confidentiality: All participants' responses will be made anonymous and will not be shared with any other third party. Where participants responses are recorded, they will be given pseudo names. The interview recordings will be transcribed and stored on a password protected file.

Harm: All care will be taken to ensure that there is no distress caused to participants at any point. Participants will be given a sheet which will remind them of their rights including, anonymity, confidentiality and their right to refrain from answering any given question, as well as their right to withdraw at any point from the interview process.

Upon completion of the interview, participants will be debriefed as to the purpose of the research via a debriefing form. The debriefing form will also contain details of the contact details of the agreed designated member of staff (decided upon during phase 1) who has *agreed to be a primary point of contact should participants want to discuss any issues that may have arisen during the interview process (e.g. bullying issues). Participants will also be provided with details for the cybermentor website* (www.cybermentors.org.uk), which contains practical advice and tips about how to stay safe online. They also provide a service which enables users to talk to online cybermentors anonymously, should they prefer to stay anonymous and instead talk to somebody they do not know personally.

3. Further details

Please answer the following questions.

		YES	NO	N/A
1	Will you describe the exactly what is involved in the research to participants in advance, so that they are informed about what to expect?	X	☐	☐
2	Will you tell participants that their participation is voluntary?	X	☐	☐
3	Will you obtain written consent for participation?	X	☐	☐
4	If the research is observational, will you ask participants for their consent to being observed?	☐	☐	X
5	Will you tell participants that they may withdraw from the research at any time and for any reason?	X	☐	☐
6	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	X	☐	☐
7	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	X	☐	☐
8	Will you debrief participants at the end of their participation (i.e. give them a brief explanation of the study)?	X	☐	☐

If you have ticked **No** to any of Q1-8, please ensure further details are given in section 2 above.

		YES	NO	N/A
9	Will your project involve deliberately misleading participants in any way?	☐	X	☐
10	Is there any realistic risk of any participants experiencing either physical or psychological distress or discomfort? If **Yes**, give details on a separate sheet and state what you will tell them to do if they should experience any problems (e.g. who they can contact for help).	☐	X	☐
11	Will your project involve human participants as a secondary source of data (e.g. using existing data sets)	☐	X	☐

If you have ticked **Yes** to any of 9 - 11, please provide a full explanation in section 2 above.

12	Does your project involve working with any of the following special groups?	YES	NO	N/A
	• Animals	☐	X	☐
	• School age children (under 16 years of age)	X	☐	☐
	• Young people of 17-18 years of age	☐	X	☐
	• People with learning or communication difficulties	☐	X	☐
	• Patients	☐	X	☐
	• People in custody	☐	X	☐
	• People engaged in illegal activities (e.g. drug-taking)	☐	X	☐

Appendix 6.4.1: Phase 1 SNS User Thematic Analysis Coding Map.

Theme 1: Advantages

Increased availability of social information (28)

Knowing more information about other people (19)

Other people knowing more about you (9)

Social expansion opportunities (31)

Reunification opportunities (16)

Networking opportunities (15)

Finding old friends Unspecified (12)

Reuniting old school friends (primary) (3)

Reuniting friends from another country (3)

Linking up with new people with similar interests (9)

Linking up with new people (celebrities) (7)

Opportunities for Self-expression (8)

Advertising aspects of yourself through a profile page (3)

General expression comments (unspecified) (5)

Increased social organisation (8)

Organising Social Events (6)

Creating Groups (1)

Calendar Use (1)

Increased opportunities to overcome 'real-world' barriers (60)

Overcoming Monetary Barriers (7)

Overcoming Physical Barriers (24)

Overcoming Temporal Barriers (19)

A source of entertainment (9)

Sharing of videos and music (5)

Playing online games (4)

Theme 2: Disadvantages

Lack of control over posting of information (33)

Information spreading risks (15)   ### Photograph issues (18)

| Direct references to rumours or gossip (13) | People talking 'behind your back' (6) | Spreading of arguments (1) | Uploading of unwanted pictures (12) | Being tagged in unwanted photos (4) | Unwanted comments relating to photos (1) | Edited photos (1) |

Privacy concerns (28)

| Not knowing how many times users are visiting profile pages (6) | References to private information being publicly available (20) | Specific references to stalkers (2) |

Diminished social cues (25)

| Misinterpreted comments 5 | Misinterpreted status updates 7 | References to misinterpreted jokes 4 | References to Misinterpretations (unspecified) 7 | References to a Lack of social cues 2 |

Relationship footprints (38)

| Possibilities for Exclusion | | Possibilities for Rejection | |
| References to being excluded from specific SNS groups (3) | References to being excluded from specific events (11) | Rejected 'friendship' requests (12) | Other relationship status changes (10) |

Popularity pressure (7)

| References to pressure of having to gain lots of 'friends' (6) | References to pressure of having to gain lots of 'followers' (1) |

Impersonation risks (19)

| Hacking into accounts 14 | Creation of fake profiles 5 |

Stranger danger (21)

| Reference to strangers 19 | Reference to potential paedophiles 2 |

Theme 3: Acting differently online perceptions

Positive influences

Acting more confidently (8)

Cyber-flirting (4)   Overcoming Shyness (4)

Acting more diplomatically (11)

Disclosing more online   Resolving problems online

1   9

Negative influences

Acting more confrontationally (8)

References to Hyping (2)   Being braver and ruder online (3)   References to saying things that would not be said face-to-face (3)

Acting more two-faced (6)

Being friends on Facebook but not face-to-face (2)   Being friends face-to-face but not on Facebook (3)   Friendship difficulties across settings (unspecified) (1)

Appendix 6.4.2: Phase 1 <u>Non-SNS</u> user thematic analysis coding map.

Avoiding 'trouble' (5)

Avoiding
cyber-
bullying (2)

Avoiding
arguments (1)

Avoiding trouble
(unspecified) (1)

Missing out (2)

Missing out on things
during the holidays (1)

Being the last to hear
about things (1)

Maintaining privacy (2)

Peer pressure (2)

Appendix 6.4.3: Full example of SNS user interview transcript (Sophia interview)

Transcription	Code/Subtheme	Theme
Preamble... Thank you for agreeing to talk with me today. I would like to chat with you about about your social life and your experience of using SNSs.	Background information on friendship groups.	
How long have you been at ▉▉▉▉▉ for?		
Three years		
What do you think about your school?		
I'm not really a big fan of it. It is good to socialise with people at school and it has good education, I'm just not a massive fan of the school itself.		
Do you have a particular group of people you hang around with?		
Yeah there is a group of about 10-15 of us. We all hang around each other. We don't always hang around as a big group, but most of the time we just hang together.		
Great... how come you think those particular people hang around together?		
Because we have got the most in common and we all get along with each other. We have lots in common, which makes it easier.		
What sort of things do you have in common?		
Like music, celebrities, interests, hobbies stuff like that, it is all really good.		
Has it always been that way as a group, or has it evolved over time?		
We have dropped a few and picked a few people up. But it has pretty much stayed constant over the last two years.		
And you have known any of them since primary?		
No... I came to this school knowing nobody.		
Wow! What about outside of school, who do you hang around with?		
I mostly hang around with my friendship group in school. There is about five of us who live nearby which is good.		
How did you meet them?		
On the bus and outside of school.		
I can see that you started using SNSs since you were in Year 6, what made you start using them then?		
I don't know, everybody in primary school was talking about		

Facebook. So I just set up my own account, although I did not start using it properly until I got to secondary school.		
So... you got influenced by your friends then?		
Yeah		
Was there anything else that influenced you then?		
Not really.		
When you started using it first of all, did you notice any changes to your social life?		
Not really first of all. I just had the account.		
So you just started out not using it very much then?		
Yeah.		
Ok, I can see that you use Facebook and Twitter. How come you use both of these ones?		
Because they are both different in some ways. Twitter you can tweet people and tweet celebrities. Facebook is like properly together. It is like different in some ways. Twitter is for world-wide people and Facebook is for people you see everyday or people you have lost touch with. You can tweet people and stuff like that.	Networking Opportunities Reunification Opportunities	Increased Opportunities for Social Expansion
Have you used any other SNSs, or have you always used those.		
I have always used those.		
Do you have a favourite one of those two?		
Twitter.		
How come?		
Cause like on Facebook I have so many friends on Facebook. My Facebook page is so blocked up. Whereas on Twitter, they can follow me, but I can't follow them, so I like don't get everything. I can sensor what I have on my homepage.		
I see. What do you and your friends usually do on SNSs?		
We post pictures, videos, chat to each other, organise events and stuff like that.	Sharing of online content Organising social events	A Source of Entertainment Increased Social Organisation
What kind of videos?		
Say if you find a funny video on YouTube you would share that. Or if you make a funny video you can upload it and put it on Facebook. Stuff like that.		
Can you talk me through a few examples of a time you have used it?		
Yeah there was this video we took together. We posted on	Posting videos	A Source of

Transcript	Code	Theme
Facebook and people started commenting and liking it... it was pretty cool.		Entertainment
What was the video about...		
It was of us dancing and messing about in the kitchen.		
Ok cool.		
It wasn't!		
Sounds fun. Is there anything else you and your friends use SNSs for?		
Stalking celebrities.	Networking Opportunities	Social Expansion
Ok which celebrities...		
Justin Bieber.		
Oh really... cool.		
And you say you use it to organise stuff... could you talk me through that?		
Yeah if you are going somewhere or you have a party to go to you can tag people all at once. Like we did our secret santa through Facebook. Obviously a text, it is difficult to all speak together, so we did this thing on Facebook where we all tagged each other in. Everybody did it. We just discussed what we were going to do and how we were going to do it through Facebook.	Organising social events	Increased Social Organisation Opportunities
Ok... so how do you decide what you are going to put up and what you are not going to put up?		
Well... it really depends on who I have on my Facebook. Like if the picture is inappropriate I would not put it on because I got half my family on there. Twitter I have not got half my family on, so it kind of varies between them.	Concern with parents seeing SNS	Privacy Concerns
Are your parents on Facebook then?		
Yeah they kind of stalk my page.		
Ok and what do you think about lots of people being able to find out lots about you?		
Kind of creepy, worrying that people can know that much about you without actually knowing you.	Private information being publicly available	Privacy Concerns
Can you think of anything good about this?		
Not really.		
Ok, I can see that you have over 500 friends.		
Yeah.		
What are some of the good things about having so many friends?		

You can share interests. People at school that you don't usually speak to, you can use Facebook. Get to know them that way. If they like your status or you like theirs you can get to know them that way.	Knowing more about other people / other people knowing more about you.	Increased Availability of Social Information
Are there any bad things about this?		
Yeah, so many friends! You can get into lots of arguments and there are lots of people out there that you don't know which could be dangerous.	Reference to strangers	Increased Stranger Danger
How do you decide who you are going to accept and who you are going to reject?		
You can see how many mutual friends you have. You can look that way and see if you actually know them first.		
Do you know all the people you are friends with then?		
Yeah.		
Ok. In your opinion... do you find there is any difference between your friends and your SNS friends?		
Yeah. I'm much more close to my real friends than other SNS friends. I actually see them properly outside of Facebook. I am friends with loads of people on Facebook but I don't generally see them outside of Facebook.		
Can you maybe think of a time when using a SNS (either Facebook or Twitter) and it has caused you trouble?		
Lots of times.		
Can you tell me about that?		
People put statuses up and it gets out of hand. Jokes turn into proper arguments. A couple of days ago, my friend posted this photo up. A couple of people started commenting on it and then one thing turned into another. Jokes started turning into proper arguments. More people got involved in it and massive arguments started. People started sharing the photo so even more people got involved. It was really just not necessary.	Unwanted comments on photos Sharing information with other users	Lack of control over posting of information
How do you think the SNS influenced that then?		
You can't see what is a joke on Facebook. It is just writing. You can't see if they are being sarcastic or not. A joke can be taken really seriously.	Jokes being taken seriously	Diminished Social Cues
Yeah... any other times you can think of?		
People like start writing Facebook statuses about you and it is obviously about you, that turns into arguments and then that turns into fall outs. People start being petty about that.	Indirect Statuses	Diminished Social Cues
Are there any other social difficulties arising from using it?		
People can become anti-social if they start using it.		
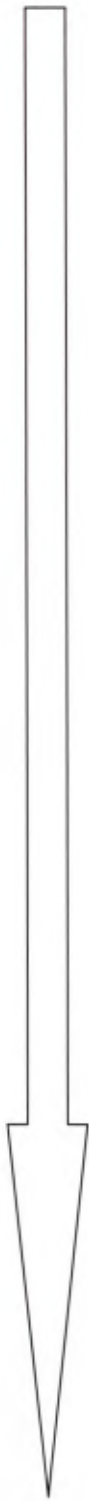
Oh really, so you think that you start using it more than talking to people face-to-face?	People becoming more anti-social	Spending Too Much Time Online
Yeah like over Christmas I got my new phone and I have been on it 24/7. Some of my friends and family are getting really annoyed.		
Yeah I saw that you said you logged on a lot.		
Yeah I am on it all the time. I am constantly logged on.		
Ok so I am going to read out some of the other things that people have mentioned. For each example I would like you say if you have ever had the same thing happen to you etc.		
Friendship requests ignored.		
Yeah all the time.		
Lots of them?		
I've got about 30 of them right now. Mostly people with no mutual friends, people with weird names like from Russia, something like that. I just completely and utterly ignore them.	Rejected friendship requests / references to unknown users	Relationship Footprints / Increased Stranger Danger
Ok, do you ever find that when you are ignoring friendship requests like that, then that has been a problem in your school		
I did once have a time when I accepted somebody from another school and they started talking to me and I had to delete them.		
What about somebody changing a relationship status...	Deleted friendship requests	Relationship Footprints
No not really.		
Being restricted from accessing information?		
No not really.		
Having unwanted pictures uploaded about you.		
Yes... all the time. Last night somebody uploaded a photo of me where they had zoomed into my face when I was scared. It is on my wall now - For everybody to see.	Uploading of unwanted pictures	Lack of control over posting of information
When that happens, what do you do?		
It depends on the photo. Most of the time I just laugh and untag it. So it is not on my wall, but people can still see it.		
Finding gossip or rumours about you on other people's Facebook pages?		
All the time. All the time, people are always talking about you, looking at your photos or commenting about you on other people's walls. It kind of spirals out of control. Because what is said on Facebook, people don't know the context and they take it really seriously.	People talking about you.	Information Spreading Risks
What about being excluded from a group or event?		

Yeah a couple of weeks ago. One of my friends did this party and included a massive group and a load of us were not invited. She was trying to keep it a secret but we found out anyway, everybody was talking about it round school. It was kind of annoying.	Excluded from a social event on a SNS	Relationship Footprints
Having a fake profile created about you?		
No. Safe to say no.		
Hacking into your account.		
Yes... my friends are doing that all the time. All the time.	Hacking example	Impersonation Risks
Ok, and is it a joke?		
Yeah.		
Has it caused you problems?		
No no.		
You were saying how jokes can be seen as being taken seriously?		
Yeah jokes can be taken seriously. It is usually ok if you know the person. If you don't know the person, then it might be taken seriously and cause problems.		
So what kind of things might people say when they hack into your account then?		
Like... I'm a lesbian, or they will post a funny animal picture and put it on my profile page. Stuff like that. One of them put where I work as Michael Jackson's bed warmer. Stuff like. I was like Oh God!		
Obviously joking then!		
Yeah.		
On the other hand, can you think of a time when SNSs have helped you?		
Yeah, most of my family live far away from me so I use it to keep in touch with them, tell them how my life is going and stuff like that.	Overcoming geographical barriers	Overcoming Barriers
So it convenient like that?		
Yeah.		
In your experience. Do you think people act the same or differently on SNSs?		
Differently.		
Ok how so?		
I think they act more confrontationally. We call them keyboard		

Interview	Acting confrontationally	Acting More Confrontationally
warriors, they try and pick a fight with everybody. It changes them, as soon as they are behind a keyboard, they change.	Acting confrontationally	Acting More Confrontationally
Can you think of a time when that has happened and you have thought to yourself... that is a keyboard warrior right there...		
Yeah all the time. For example people younger than me act harder than they actually are. That really annoys people on Facebook and that is what causes fights and arguments.		
If SNSs had never been invented. How would your social life be different now?		
A lot different. I would not have the access to people from different schools and be able to mix with them. It would just be my school and my school alone. I would only be friends with the people in my friendship group, I would not be able to branch off and make friends with anybody else.	Not being able to branch out without SNSs	Social Expansion Opportunities
Debate about SNS question. What do you think?		
I think teenagers use them more than anybody else does. We are at that age where we want to talk to our friends and we want to talk to guys and stuff like that. Planning an event is perfect. We are at the age where we want to go out, we want to socialise, we don't want to be stuck with our parents. It is easy, it is free, it simple. As long as you are careful with it, there should not be any issues.	Using SNSs to plan events Overcoming monetary barriers	Increased Social Organisation Overcoming Real-World Barriers
And, as you say, you are of the age where you want to be talking with boys. Is it easier or harder to do this on SNSs?		
Yeah easier.		
How do they help?		
Well kind of like. Facebook, if you add a load of people, you get to know them better. You meet them, you can add them on Facebook. If they have not got credit on their phone you can still speak to them.	Getting to know people better Used when no credit on phone	Increased Access to Social Information Overcoming Real-World Barriers
What do you think about people who deliberately do not use SNSs?		
Those sort of people in my school, not to stereotype them, but they are the sort of people that are really shy. They have their own two people in their friendship group and stay together. Whereas other people might want to be more confident and go out and want to talk with other people, they have SNSs and that is the main reason.		
Ok... can you think of any advantages?		
Yeah they don't have the stress of Facebook banter, the comments about them, they might not have any bother because nobody really knows them. But socially in your life, it is not really good.		
Is there anything else to mention?		

Depends... Facebook I think it is targeted at teenagers. It is what we use. It does not cost anything. People can have it on their phones now. You can inbox them as well as text them. It is so much better, it is just a quick and easy way. If I did not have Facebook, my social life would just go down hill completely.	Does not cost anything (overcoming monetary barriers)	Overcoming Real World Barriers

Appendix 6.4.4: Full example of non-SNS user interview transcript (Thomas interview)

Transcription	Code/Subtheme	Theme
How long have you been at ▮▮▮▮▮▮ for? Erm... only really a term and last term ... it was ▮▮▮▮▮ before that. **And did you join ▮▮▮▮▮ in Year 7?** Yeah that's right. **I see, and where did you go to school before that? For primary...** Erm... my primary school was ▮▮▮▮▮▮▮▮. **And... What do you think about ▮▮▮▮▮?** I guess it is alright. Obviously sometimes it can be tough, but mostly it is good. And at school, do you have a particular group that you hang around with in school? Erm... Not a group as such... but yeah I've got some friends and I suppose we mostly hang around together so yeah. **Are these friends from your primary school?** I only really came to school with one of my best friends from primary school. But we are still friends so that is good. **But you have other friends too?** Yeah from knowing him I guess we have mutual friends really. Friends of friends, stuff like that. And have you always hung around with these people or has it changed over time? Erm... at first, when I first came to the school it was difficult because I did not really know anyone. I knew this guy ▮▮▮▮ from primary, but that was it. I guess over time as I have got to know people a bit better I have gained more friends. Both of us made friends and I think people just joined up that way. **And how come those particular people hang around together?** I don't know really. I guess we are all in the same tutor groups so that helps, sort of seeing people everyday. There is not a lot of us in them, but we mostly meet up in the mornings that way. We all hang out at lunchtimes to and will sometimes do things after school. **And do you have many things in common?** Err... yeah a load of us live near each other and we like the same kind of stuff, so I that probably helps.	Background information on friendship groups	

And what kind of stuff is that?

Just normal stuff really, like playing football, basketball... hanging with each other after school.

Do you hang around with any people from other groups?

Yeah I've got other friends

And how did you meet them?

Just by hanging out after school and meeting people through other people really. I play football at the weekend so I know a few people from that and they go to other schools that way too.

And amongst the friends that you know, which SNSs do they tend to use?

Erm... the normal one is mainly Facebook. I think Twitter is pretty popular as well. I only ever used Facebook.

And how come you yourself have decided not to use any kinds of social networking sites?

I used to but I guess I just decided that I was getting more hassle than it was worth. I mean there are loads of ways you can find yourself in trouble when you use them and to be honest... sorry I lost my line of thread.

When you use them it is fair enough if people want to use them but I guess I always thought they were overrated. For me personally, most of the people I want to speak to I can speak with anyway just through texting and stuff like that.

And you mentioned that you thought SNSs cause a lot of hassle, what do you mean by hassle?

I don't know. Just things like people arguing, people fighting, people taking things the wrong way. That kind of thing I guess.

I see and these things happened to you?

Yeah.

Was there anything else that influenced your decision to stop using them?

Not really. I guess I did wonder whether it was worth all the time I was spending on them. You can spend lots of time checking and browsing and you could be spending the time actually being with people face-to-face. So I just decided that I needed to rid myself of all that distraction, give myself a 'digital detox' as they say.

A digital detox – that is a good way to put it. What do you mean by that?

More hassle than it is worth. Lots of ways of finding yourself in trouble Compensating by using other forms of communication technologies	Avoidance of 'Trouble'
Spending Too Much Time Online	Spending Too Much Time Online

Just focusing on your real friends and stop using a computer screen to interact – like it can get a bit sad I think if people do it too much. You have people on there that you don't really know. I think you should spend time with your real friends.		

Do you think this decision has in any way affected your social life?

Erm… I suppose it probably has.

How do you mean?

I don't know, it is bound really, I mean most people have SNSs so it will be have an influence.

OK… speaking of influence… do you find that there are any advantages in not using SNSs?

Like I say, it is just a way of avoiding all the arguments and fighting and stuff.

Do you find there are any other advantages?

Not really no.

What about any disadvantages in not using social networking sites?

Nah… not really, I mean I definitely prefer things since I stopped.

How long have you not been on for?

Dunno, probably about 8 months.

I see… are there any disadvantages then, in your opinion?

Not really. Maybe some of my friends think it is a bit odd but, I think I know different.

What do you mean by odd or different?

Well maybe a bit extreme, I mean everybody knows that people can run into problems with SNSs like Facebook, but that does not mean that everybody has to stop using them.

Do you feel pressure from your friends to use them then?

Yeah yeah… sometimes they ask me 'why are you not on

Facebook' and I have to explain to them everytime'. It can be really

annoying. Most people just accept it though.

And… if you did decide to start using SNSs again. How do you think your social life might change?

I'm not really sure. I have been on them before and know some of the risks, I might be a bit more cautious about what I say and what

Column 2	Column 3
Avoiding arguments and fighting	Avoiding Trouble
Having to explain decision about not using SNSs	Peer Pressure

kind of things I put up. So maybe it would be better if I did it again. My friends keep asking me to get a Twitter account because it is different to Facebook and I don't know might do that in the future.		
And if you got a Twitter account, can you see any advantages to this?		
Yeah... maybe it would be easier to keep in touch with some of my old friends, you know like from primary school.	Would be easier to keep in touch	Missing Out
Anything else?		
Not that I can think of.		
If everybody else stopped using SNSs along with you…		
Can you think of any advantages to this?		
That is a difficult question, I really don't know.		
Can you think of any disadvantages to this?		
Again I don't know really. People might be a bit more bored I guess.		
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 about this?		
In an ideal world maybe yeah, but I can't see that happening. People love going on SNSs and there are more SNSs than ever before. I don't reckon that will never happen.		
What about children younger than yourself?		
Yeah… there should be an age limit of course. I think most SNSs say that you need to be at least 13 to go on them.		
And you think this is a good idea?		
Yeah.		
How come?		
Because if young people are using them, there are a lot of risks, I mean you hear of bad things happening in the news and to be honest there are a load of weirdos out there. So young children using them is probably a bad thing.	Risk of strangers	Avoidance of 'Trouble'
Anything else?		
No I don't think so.		

Appendix 6.4.5: Phase 2 individual SNS user participant overview of themes.

	Sophia (AAF)	Jack (ACM)	George (AEM)	Daniel (AFM)	Amelia (AGF)	Mia (AHF)	Isabelle (ALF)	Bradley (ANM)	Samuel (BAM)	Evie (BBF)	Aiden (BCM)	Chloe (BDF)	Lucas (BIM)	Kayla (BLF)	Kian (BMM)	Ava (BPF)
Advantages																
Increased Opportunities to Overcome Real World Barriers	X		X	X		X	X	X	X	X	X	X	X	X	X	X
Social Expansion	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X
Increased Availability of Social Information	X	X	X		X	X	X	X	X	X	X	X		X		X
Increased Opportunities for Social Organization	X	X	X	X				X	X	X	X	X	X	X	X	X
A Source of Entertainment	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Opportunities for Self-Expression	X		X	X					X	X	X	X				X
Disadvantages																
Relatinship Footprints			X	X				X	X	X		X	X	X		X
Privacy Issues	X	X			X	X	X	X		X	X	X	X	X	X	X
Diminished Social Cues	X		X	X	X			X	X	X		X	X	X		X
Increased Stranger Danger			X	X	X	X	X	X	X	X	X	X		X	X	X
Impersonation Risks	X		X					X		X		X	X	X	X	
Lack of control of information	X		X	X	X	X	X	X		X	X	X	X	X	X	
Popularity Pressure			X									X	X	X		
Spending Too Much Time Online	X		X		X	X										

Differing Perceptions of SNS Friends					X											
Acting Differently Online																
Acting More Confidently	X	X	X			X			X	X	X	X			X	
Acting More Diplomatically					X	X	X								X	
Acting More Confrontationally	X		X	X	X	X	X	X	X			X	X	X	X	
Acting More Two-Faced	X	X	X			X			X	X	X	X		X	X	X
References to Cyber-Bullying				X		X	X	X							X	

Appendix 6.4.6: Phase 2 individual non-SNS user participant overview of themes.

	Grace (ABF)	Lily (AJF)	Thomas (ADM)	Jasmine (BBM)	Madison (BEM)
Positive Influences					
Avoiding 'Trouble'	X		X	X	X
Maintaining Privacy	X				X
Saving Time			X	X	X
Negative Influences					
Missing Out	X	X			X
Peer Pressure	X		X	X	X
References to Cyber-bullying	X	X		X	

Appendix 6.4.7: Relevant SNS background information of phase 2 participants.

Participant Identification Code	SNSs used	Number of SNS contacts	Frequency of use	Used SNS since...	Main way(s) of accessing SNSs	Ethnicity (as recorded by school records)
AAF Sophia	Facebook & Twitter (Previously Bebo & Formspring)	500+	Everyday	Year 8	Phone	White
ACM Jack	Facebook	100-200	Every other day	Year 6	Phone Home Computer	White
AEM George	Facebook & Twitter	300-400	Every-day	Year 6	Phone	White
AFM Daniel	Facebook & Twitter	200-300	Everyday	Year 6	Phone and Tablet	White
AGF Amelia	Facebook, Twitter & Tumblr	1-100	Everyday	Year 6	Phone	Mixed-Race
AHF Mia	Facebook	1-100	Every couple of days	Year 5	Computers at home	Asian
ALF Isabelle	Facebook, Twitter & Tumblr	400-500	Everyday	Year 7	Phone	European/Polish
ANM Bradley	Facebook & Twitter	100-200	Everyday	Year 6	Phone Computers at home	Afro-Caribbean
BAM Samuel	Facebook & Tumblr	500+	Every other day	Year 6	Phone	White
BBF Evie	Facebook & Twitter	500	Everyday	Year 6	Phone, computers at home	White/British
BCM Aiden	Facebook & Twitter	500+	Everyday	Year 6	Phone	Afro-Caribbean
BDF Chloe	Facebook & Twitter (Previously Bebo)	500+	Every couple of days	Year 7	Computers at home, phone	White/British
BIM Lucas	Facebook & Twitter	300 – 400	Everyday	Year 6	Phone	White/British
BLF Kayla	Facebook & Twitter	400	Everyday	Year 5	Phone	Mixed-Race
BMM Kian	Facebook	300-400	Every other day.	Year 8	Phone	Afro/Caribbean
BPF Ava	Facebook	200-300	Everyday	Year 5	Phone	Afro-Caribbean

Appendix 6.5. Supplementary quotes for thematic analysis themes.

Theme 1: Advantages of using SNSs

***4.4.1.* Increased availability of social information**

"You can keep up with everything that is going on and so you never miss out on stuff. When you come back to school, you have more to talk about" [Samuel, BAM]

"If you don't know somebody you could always just find information out about somebody and then just check. If they have the same interests as you, you could talk to them about it too". [Ava, BPF]

4.4.2. Increased social expansion opportunities

"I have a fashion blog and I can use it to contact people through. It is nice to be able to talk to people all at once, rather than just e-mails. New SNSs like Tumblr and Instagram and stuff like that, they are really good as well. I think it is moving more away from just using it to contact friends, it is about being able to contact everybody and anybody". [Chloe, BDF]

"I met a friend who I had not seen for ages, a girl from Year 3 that I had not seen since. We got back in contact through Facebook which was really nice" [Chloe, BDF]

"We have a Tumbleblog where the band members can post stuff up there. We have put up a few songs and a couple of videos that kind of thing. We put all that kind of stuff up. That way anyone who likes us can follow us easily and we can get in touch with other people if we want to. You know people in other bands or other like-minded people". [Samuel, BAM]

4.4.3. Opportunities for self-expression

"Facebook is all about expressing who you are. People older than me, say like 40 or 50, they don't really like technology – like my grandpa – he hates technology. He is a

technophobe. We have been brought up with it. It is who we are. Technology is only going to grow as we get older so it will only become a more important part of life". [Daniel, AFM]

4.4.4. Overcoming 'real-world' barriers

"I mainly started using SNSs in primary school because in Year 6 we suddenly realised we were all leaving school soon and I wanted to keep being friends with the friends that I was with. So when I moved school, I opened a Facebook account and made friends with them that way. I still talk with them now. I was able to maintain my friendships, even though I moved schools". [Mia, AHF]

"I used to see other people using Facebook and think it was really dumb because you will see them tomorrow. In Year 6, just before we left the school, I suddenly realised that it would be really hard to catch up with my friends. My friend told me to use Facebook so I can continue to talk to my friends". [Bradley, ANM]

"Facebook is targeted at teenagers. It is what we use. It does not cost anything. People can have it on their phones now. You can inbox them as well as text them. It is so much better. It is just a quick and easy way. If I did not have Facebook, my social life would just go downhill completely". [Evie, BBF]

4.4.5. Increased social organisation

"Everyone was tagging and tweeting. We all decided together what we were going to do, where and when we would go, who would share taxis with who and stuff. It is good because in texts you can't have those group conversations and see what other people are putting. Whereas on twitter, everyone can be involved in a conversation together" [Sophia, AAF]

4.4.6. A source of entertainment

"Yeah there was this video we took together of us just being silly and dancing about in the kitchen. We posted on Facebook and people started commenting and liking it, it was pretty cool". [Evie, BBF]

4.5. Theme 2: Disadvantages of using SNSs

5.4.1. Lack of control over the posting of information (by other SNS users)

"A lot of people get into your business and because there are so many people, maybe they know people that you don't get on with and because you are not close to them, you don't have that relationship and they just carry your business somewhere else and it just causes more trouble". [Kayla, BLF]

"Once before I was going out with my current girlfriend, people were saying that I liked another person. Spreading rumours over Facebook. If they were'nt on SNS they would have done it word of mouth, but it was made a lot easier to do this on SNSS". [George, AEM].

"I mean that you never know who might be talking about you behind your back. Facebook makes it so easier to talk to people. If I have not logged onto Facebook for a while, I get the urge just to check it, just to check that nothing crazy has happened." [Samuel, BAM]

"When you are pictures on Facebook, if they upload 50 pictures, what about if somebody hacked in and took the pictures and used them for something you don't want them to use it for". [Bradley, ANM]

4.5.2. Privacy issues

"I feel like Facebook is the gateway for people to see things about me. Sometimes they can take your pictures and use it for anything. With Twitter, if you put your phone number out there, it is you typing your details for the rest of the world to see". [Amelia, AGF]

"I think the more people you have, the more danger you have of somebody seeing something that you do not want them to see. It is hard to control". [Kayla, BLF]

"She wanted to message me constantly, looking at my profile page all the time, checking what I was up to. She is still on Facebook but I deleted her". [Aiden, BCM]

4.5.3. Diminished social cues

"Like the other day, it was not a really big misunderstanding. But we were talking about these tickets to go to a concert and basically the band that we were going to see there is a line that says meet me on Tame Street. So I said, what does Tame Street have do to with anything. I was being sarcastic, but she could not see that. She said, don't you know, it is in their song and I was like of course I know that, I was being sarcastic. That is how easily things are misunderstood". [Daniel, AFM]

4.5.4. Relationship footprints

"Actually on Twitter there was a massive argument in my friendship group in school, which still has not been resolved and I don't think it will. Quite a lot of people unfollowed each other. A lot of people took great offence to it. Some people don't realise how much offense people can take if you un-follow them on Twitter or de-friend them on Facebook". [Sophia, AAF]

4.5.5. Popularity pressure

"I used to be like, when I go on another person's profile and I see how many followers they have and I think to myself, I want to have that many people. Then I realised how stupid that is". [Amelia, AGF]

4.5.6. Differing perceptions of SNS friends

"You may not necessarily want that, but you do not want to be rude by declining either. So you don't mind talking to them on a hi and bye level but because you don't have that relationship it can be quite hard. But some people take it the wrong way and think that because we are friends I think this and say this, it causes friction". [Kayla, BLF]

4.5.7. Impersonation risks

"Yeah that has happened quite a few times like when you leave your phone about. Just something, it is a bit of fun really. Not a serious thing". [Lucas, BIM]

4.5.8. Increased stranger danger

"There was this guy or girl. I can't remember. We were talking and they were like hi, how are you? Decent, polite conversation. Then I followed them, then they sent me a private inbox. Then they tried to find out more private information about me, like what I had done, but I would not tell them. I just blocked them after that". [Amelia, AGF]

4.5.9. Spending too much time online

"It is possible that you could get addicted because it is the internet. You have to have enough will power to not be constantly on it". [Amelia, AGF]

"A lot of people get too wrapped up in it. They spend too much time on it and don't realise there is a whole actual other world out there". [Sophia, AAF]

Theme 3: Acting differently online

Positive online behaviour changes
4.6.1. Behaving more confidently (over-coming shyness)

"If somebody is at school I might first talk to them on a SNSs and then afterwards I might start talking to them. We become good friends. Had we not had SNSs then I might never have started talking to them in the first place." [Ava, BPF]

4.6.2. Behaving more diplomatically

"I am shy to talk to people about saying I am sorry and that, so afterwards we just had a fight with somebody, it is easy to say sorry over Facebook than talk to them face-to-face". [Kian, BMM]

Negative online behaviour changes
4.6.3. Behaving more confrontationally

"I think some people feel that over a phone or computer they are safe. So they decide to say, maybe they are saying how they feel, but they are saying it in a way that is getting

the person angry or upset. People change when they are using their phones or on SNSs because they are not face-to-face with you so they are not going to get the confrontation or the hit that you give them if they are face-to-face. So I think people like to change and act in a different way, they think they are going to get away with it". [Kayla, BLF]

4.6.4. Behaving more two-faced

"Maybe just in the things they say face-to-face is really different to things they might write. Like someone saying they don't like me and then when we see each other face-to-face we want to be friends. Then when they are on SNSs they are writing all horrible things about me". [Mia, AHF]

Section 3: Adolescent *non-SNS user* Perceptions

RQ4). How do adolescents *who do not use* SNSs perceive that this has influenced their peers relationships?

4.7.1. Avoiding trouble

"I think that a lot of like complications can go on on SNSs like Twitter. For example, if you have Twitter and you are putting up a status, people might think that you are in-directing it at them when you are not. So I kind of think that it stops conflict". [Madison, BEM]

"I guess I just decided that I was getting more hassle than it was worth. I mean there are loads of ways you can find yourself in trouble when you use them" [Thomas, ADM]

4.7.2. Maintaining privacy

"Yes, without SNSs it would be easier to keep yourself to yourself. People would not be so nasty to each other and feel let down. It would just be nice" [Jasmine, BBM]

4.7.3. Saving time

"Like it can get a bit sad I think if people do it too much. You have people on there that you don't really know. I think you should spend time with your real friends". [Lilly, AJF]

"You would go on it to spend 5 minutes on it and you would spend two hours and I had to do my coursework and other things". [Jasmine, BBM]

4.8. Disadvantages
4.8.1. Missing out

"If there is any buzz going round I might not catch up with it, because Facebook is usually the first place it will be flagged up and maybe I might have missed out" [Grace, ABF]

"Sometimes it can be did you speak to so and so on Twitter last night or did you see so and so's picture or status. You have to ask someone else, you are kind of late with things, you don't hear about them so quickly". [Madison, BEM]

4.8.2. Peer pressure

"Because they use it a lot and they think that I don't use it because I am stupid and scared of being bullied". [Jasmine, BBM]

"Sometimes they ask me 'why are you not on Facebook' and I have to explain to them everytime'. It can be really annoying". [Thomas, ADM]

Cyber-bullying references

"Year 7 and 8s would come to me, they get it a lot more than older year groups like ours. Lots of people complain about images being put up and they are being cyber-bullied but I know you can just remove the images and you can report the things to the website". [Daniel, AMF]

"Recently it did happen. They were just saying stupid names and stuff and I got added into the conversation. He was saying all these things. I was just thinking... what is going on. I told the person who was being bullied to delete him. She did in the end". [Mia, AHF]

If you know what people are using it for, it is fine. If there is cyber-bullying going on, you should stop people doing that. [Isabelle, ALF]

"I had one situation where my friend was being bullied by someone on Facebook and it was in school but the school could not do anything about it". [Kian, BMF]