

Can friendships be formed over the internet? A qualitative investigation of young people's experiences of online social interactions

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ABSTRACT

As technology evolves, the internet is increasingly becoming a frequently used medium through which friendships are formed (Amichai-Hamburger et al, 2013), especially in niche communities (McKenna et al, 2002). The research aimed to discover how the internet has shaped the social processes of young people and address the question of whether online contact can lead to 'true' friendships. Five males aged eighteen to twenty-two participated in a semi-structured interview conducted over Skype, discussing their personal experiences of online friendships. The transcribed data was analysed with interpretative phenomenological analysis (Smith and Osborn, 2012) and secondary coding produced the four subordinate themes of initial friendship formation, 'community spirit' and communal activities, social support and interactions between online and offline. Findings suggest that the internet is an acceptable source of social compensation for introverts and that true close friendships can be developed through this medium.

	ERNET SOCIAL IDSHIPS SUPPORT	ONLINE VERSUS 'REALITY'	COMMUNITY	INTROVERSION
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Introduction

The internet's usage has increased exponentially over the past twelve years, with 42.07% of the world population registered as internet users in 2012 as opposed to 9.02% in the year 2000 (International Telecommunications Union, 2013). The internet's role in the formation and maintenance of friendships has also increased with the advent of social media and websites such as Facebook, changing the definition of friendship itself (Amichai-Hamburger et al., 2013).

The motivation for conducting this research was to aid qualitative research into the social uses of the internet as its role in society expands, drawing upon the ideas explored in the autobiographical essays examined by McMillan and Morrison (2006), including the four primary domains of the self, family, 'real' communities and 'virtual' communities. The research aimed to qualitatively investigate the nature of social interactions on the internet in young people, discovering how internet relationships occur (Amichai-Hamburger et al, 2013), and how prolonged contact with people without the issue of physical proximity (de Vos, 2013, Huang et al, 2013) affected the bonding process.

The research also aimed to investigate the ways in which young people felt their life may have been affected by their internet use, considering the extent of reliance on their internet friends for social support (Desjarlais and Willoughby, 2010) and potential consequences of this.

Friendship Formation

The similarity-dissimilarity hypothesis is one of the oldest, yet most relevant explanations of friendship formation (Massen and Koski, 2013). In an environment lacking in factors such as proximity (de Vos, 2013), a similarity in traits, values and beliefs is especially applicable to the internet environment (Huang et al, 2013). Theories of homophily appear in many relevant texts (Amichai-Hamburger et al., 2013) as an explanation for the friendships formed online, as the freedom from social influence allows internet users to actively seek out people of a similar disposition.

An active process within the friendship-building process is social comparison (Festinger, 1954), in which we self-evaluate our own ideas and values in relation to others. According to the self-categorisation theory (Subrahmanyam and Greenfield, 2008), people distinguish between themselves and others through a process of categorisation of their attitudes, values and perceived social groups and actively use this process of categorisation when encountering others to determine whether or not a friendship would be beneficial.

De Klepper et al. (2010) suggest that the individualistic nature of the internet actively encourages this categorisation process due to the emphasis on social selection over social influence, effectively allowing people to choose their own ingroups as demonstrated by the rise of dedicated communities such as forums. This method of friendship-seeking is advocated by McKenna et al (2002) as a way for those with niche interests to use their self-categorisations actively, facilitating

the creation of online friendships due to the ease of discussion arising from shared traits, especially in a synchronous text-based medium such as a chatroom (Greenfield and Subrahmanyam, 2003).

Not all research into this type of discourse has positive implications, as concerns have been raised by Turkle (2012) that frequent use of online communication has a detrimental effect on young people's levels of empathy and socio-emotional growth and inhibiting the bonding process in young people. The media richness theory (Daft and Lengel, 1984) suggests this may be the case, as it is claims that the channels of communication and cues open to us directly influence our affinity towards others.

However, the media richness theory itself is open to criticism due to its outdated nature, with much contradictory research being published to suggest its conclusions are not necessary applicable to an online environment (McMillan and Morrison, 2006, Subrahmanyam et al, 2008). Perhaps a better exploration of the formation of online friendships is the theory of social information processing (Walther, 1992), where the lack of visual cues is overcome through the individual adapting their social behaviours to connect more effectively through the medium, suggesting that bonding via the internet is not impaired by the absence of visual aids.

Social Networking and Social Capital

Through their analysis of adolescents' usage of various networks, Subrahmanyam and Greenfield (2008) discovered a looping effect in the use of social media and the reinforcement of offline relationships, suggesting a use of the internet as a means of reinforcing existing friendships. Corroborating research has discovered that instant messaging (Valkenburg and Peter, 2009) and social network sites (Subrahmanyam et al., 2008) are often used as a means of reinforcing offline relationships through the online environment.

A possible explanation for the internet's use in this manner is that its closed and discreet nature allows for more honesty and the discretion of more personal information (Oprea and Stan, 2012). This openness could be expressed as an example of the online disinhibition effect (Suler, 2004), relieving social burdens due to the dissociation from offline personalities and a lack of perceived authority, allowing individuals to be more open on the internet without being withheld by the social pressures that may be present in a real-life group situation.

Subrahmanyam and Greenfield (2008) and their supporting studies can come under criticism for their methodological approach due to drawing their conclusions from quantitative survey data (Subrahmanyam et al., 2008, Valkenburg and Peter, 2009), merely finding correlations between internet use an social networking and providing little detail of the participants' social networking processes. The issue of a lack of personal accounts could be addressed through the use of more qualitative means, such as the open-ended questions provided by Oprea and Stan (2012), providing richer data on the use of social networks to reinforce offline relationships.

Bourdieau (1985) describes the concept of social capital as follows:

The aggregate of the actual or potential resources which are linked to the possession of a durable network of more or less institutionalized relationships of mutual acquaintances or recognition. (Bourdieau, 1985 pp.248)

According to Bourdieau's definition, social capital is a resource to be harnessed through networking, an appropriate metaphor when dealing with the internet. The increased opportunities for contact with peers through the internet would theoretically allow for a greater accumulation of social capital, and this does seem to be the case according to Ellison et al. (2007), with supporting evidence positively correlating Facebook use and young people's social capital (Steinfeld et al, 2008, Jiang and De Bruijn, 2013).

There lies a distinction between the process of resource-building, bonding social capital, as described by Ellison et al (2007) and the expansion of one's social realm through bridging social capital (Woolcock and Narayan, 2000). The social brain model (Sutcliffe et al, 2012), can be seen as a more hermeneutic measurement of social capital, claiming a hierarchy of self-interpreting and self-regulating social networks exists within the brain, sorting each network according to the perceived significance of relationships within the network and resources spent, including time. While it appears that larger social networks and higher social capital lead to more satisfaction (Manago et al, 2012), this model would suggest that bonding social capital is costly and thus insufficient in shaping these inner hierarchies.

In terms of internet-based support for the social brain theory, Dunbar (2012a) has found that the internet does not significantly increase the size of people's social networks, corroborated by neuroimaging related to complex social networks (Dunbar, 2012b). On this evidence, it seems that the innate neurological number of one hundred and fifty (Dunbar, 2010) is a fixed point that no amount of technological advances can change.

Theories of social capital are not without their critics. Not only did Valenzuela et al. (2009) find contradictory evidence regarding the effect of Facebook on social capital compared to other contemporary sources (Steinfeld et al, 2008, Jiang and De Bruijn, 2013), the very concept of social capital has been criticised for its reductionism.

Cleaver (2005) takes issue with the preconceived notion that social capital can be used as a solution to all socioeconomic problems, as her empirical evidence from within poverty-stricken communities finds that poor families are trapped regardless of their close social ties, supporting the rich-get-richer hypothesis and questioning the validity of social capital as a means of progression within society, while Hargiatti and Hinnant (2008) observe a correlation between resourcefulness and social capital gain, therefore the concept of social capital is not universally applicable.

Social Support

While the ways in which extraverted young people use the internet to further reinforce their offline relationships and build on social ties (Subrahmanyam et al, 2008, Valkenburg and Peter, 2009), others must resort to using the internet as a

means of compensating for a lack of a real life social circle (Desjarlais and Willoughby, 2010). Early research suggested that the amount of time spent on the internet was responsible for a lack of social connectedness and that an online relationship could be described as at best superficial (Kraut et al, 1998), but Valkenburg and Peter (2009) suggest that the direction of causation is, in fact, the opposite way around.

Peter et al (2005) identified that extraverts tended to express themselves more openly and honestly through the internet than in an offline situation while individuals that are more insular used it for compensation for the lack of 'real' relationships they had, a phenomenon referred to as the 'social compensation hypothesis' and explained by Zywica and Danowski (2008) as these introverted individuals perceiving their offline social networks to be undesirable, thus they compensate by expanding their online social connections instead.

Another competing theory of the use of the internet for social support is the stimulation hypothesis (Valkenburg and Peter, 2009), which suggests that the internet affords young people more opportunities to communicate than the outside world, allowing those without external social networks to bond with others online. However, this hypothesis comes under direct criticism from Blais et al (2008) whose empirical findings suggested an actual decrease in internet friendship quality over a longitudinal period, thus it may be the case that the stimulation hypothesis is not applicable to all social interactions online.

Methods

Design

A criticism of the many quantitative studies on the topic of the internet (Subrahmanyam et al, 2008, Valkenburg and Peter, 2009) is the lack of valuable data regarding the actual nature of friendship itself, merely identifying possible influential factors from participants' responses with very little detail. In order to correct this, a more qualitative design was chosen for this study, taking previous research into account (McMillan and Morrison, 2006, Oprea and Stan, 2012) to inform the design process.

In order to increase richness of available data for analysis, a semi-structured interview was considered the most appropriate approach to quantitative epistemology. Newton (2010) described the semi-structured interview as an indication of the importance of meaning and context to the researcher, which is certainly applicable to a study investigating experiences of online social interactions.

Due to the focus on technology and its social role, it was thought appropriate to utilise said technologies in a psychological environment in order to somewhat replicate participants' experiences of their interactions and to allow access to a wider geographical pool of participants (Deakin and Wakefield, 2013). An immediate decision was to use synchronous technologies (Salmons, 2009) due to the issues of time inherent with asynchronous technologies such as e-mail (King and Horrocks, 2010).

The interviews themselves were conducted via Skype (Bertrand and Bourdaeu, 2010), a VoIP (Voice over Internet Protocol) communication app commonly used to communicate with others through either audio or video calls. The development of Skype has been useful for allowing a greater level of communication between strangers (Sherman et al, 2013) while also keeping distant relatives close (McMillan and Morrison, 2006), leading to current research into its usefulness and applicability as an alternative to the traditional face-to-face interview (Deakin and Wakefield, 2013).

Skype is likely to be seen as an increasingly viable method of conducting qualitative research in the future as it combines the long-distance flexibility of the telephone interview (Holt, 2010) and the traditional face-to-face interview due to its video integration (Hanna, 2012). Transcription of a Skype interview is also made much easier by the ability to freely record calls through the use of external software such as Audacity, overcoming the issue of unreliable recording devices entirely. As Skype is a relatively new tool, only a small number of studies have been published to provide evidence of its applicability, but Deakin and Wakefield (2013) keenly promoted the use of Skype as a tool of qualitative psychology, finding that PhD students interviewed through this method applauded it for its flexibility and the ease of building rapport over Skype, a key consideration for a phenomenological interview where compassion for the subject is necessary (Smith et al, 2009).

For data analysis, interpretative phenomenological analysis (IPA) was considered the most appropriate method of analysis due to the emphasis on the experiences of the participants' online experiences. Lester (1999:1) describes the phenomenological methodology as:

particularly effective at bringing to the fore the experiences and perceptions of individuals from their own perspectives, and therefore at challenging structural or normative assumptions.

Through the discussion of their experiences, participants were able to reflect upon the past, their feelings during these experiences and the significance of the event in changing their lives, both positively and negatively (Smith et al, 2009), in this case their online social interactions. Phenomenology follows the hermeneutic path of psychology (Packer and Addison, 1989), going beyond the understanding of the participant's situation into the various possible interpretations of their experience, at all times conscious of their views and perceptions and how this affects the data and the self.

The decision to attempt a phenomenological approach was influenced by a lack of available IPA studies in this specific area of social psychology, justifying its use in this study in order to further the knowledge of formation and maintenance of internet social relationships from the viewpoint of the younger generation growing up with regularly available technology. Precedent for this method has already been set by Rodham et al (2009), although in their case instead of directly interviewing internet users, online forum posts were used. This study offers somewhat of a unique perspective in this respect, gathering the direct views of young people rather than gleaning information from online sources. The interview schedule (Appendix 1) was constructed with the intention of allowing a free-flowing conversation between the interviewer and the participant, asking questions based on a series of central concepts derived from previous literature. Open questions were used, gathered under a series of headings, to allow for elaboration from the participants (Smith and Osborn, 2007) to facilitate data richness and allow for a greater degree of interpretation during the analysis stages.

An initial pilot study was conducted to test the validity of the initial interview schedule, and in its original form the schedule was found to be too rigid, restricting the participant's answers and barely reaching a length of thirty minutes. Concerns were raised about the richness of potential data gathered using this iteration of the schedule, so appropriate alterations were made before data gathering for the report began.

Following the interview process, all interviews were transcribed by the researcher, and upon completion of the transcription process, analysis could begin. During the initial coding, points of interest were identified where the participants' discourse may reflect a significant interpretation or experience of the event in question, related back to the research aims. This process was to ensure a thorough investigation of all data, and after a sufficient amount of coding had been conducted on all transcripts, the second stage of coding began, which ultimately determined the core super-ordinate themes presented (Smith and Osborn, 2007).

Participants

For IPA to be at its most effective, only a small sample is needed, as larger samples would consume too much time and provide little more than the smaller sample. A total of five male students, aged between 18 and 21, were gathered for interviews, the only significant difference being geographical location, with two located in the USA, one in Spain and two in the UK, further justifying the use of Skype in the interview process. As recommended by Salmons (2009), all participants were selected through a purposive sample method from within the researcher's own social circles, due to the ease of facilitation of engagement with, and interest in, the personal stories of the participants.

Selecting participants from existing social circles also increased reliability due to the ease of initial contact and a higher guarantee of willingness, although there were prospective participants located within the same social circles who withdrew from the study due to unforeseen circumstances.

Procedure

Initial contact with participants was made through the instant messaging client built into Skype, accompanied by the sending of a written invitation within a Word document (Appendix 2), also sent through Skype. After receiving the initial agreement to participate, prospective participants were sent a consent form (Appendix 4) through the same medium informing them of the basic aims of the research and their ethical rights as a participant, which they were required to sign either electronically or physically and send back to the researcher before any interview was conducted. Accompanying the consent for was a full information sheet (Appendix 2) providing more details as to the exact aims and procedure of the study. Once consent was given, participants were subject to a semi-structured interview (Appendix 1) through a Skype call, with the average length being roughly 54 minutes. All audio was recorded through Pamela Skype recording software, which natively records the call, with Audacity used as a backup, for the purpose of transcription later. Once the interview concluded, participants were sent a debrief document (Appendix 5) detailing the aims of the research in full, thanking them for their participation in the study and informing them again of their right to withdraw should they decide they no longer wish for their data to be involved in the study. No participants withdrew after this stage.

Ethics

In order to comply with the BPS's ethical guidelines, an electronic copy of a consent form was sent to all participants, containing details of the study's aims to ensure participants were fully informed of the researcher's intentions. The consent form also served to remind participants of their right to withdraw from the study at any time before analysis began if they wished to do so, in which case their data would be removed from the study. With regards to anonymity, participants were given pseudonyms based off online usernames, and any information that ma disclose their identity was anonymised or removed from the data.

E-mail and Skype accounts containing personal data were documented alongside interview data for the purposes of identification, but this information was made completely private and was removed after transcription. To ensure maximum security, documents containing these details were password-protected and kept on an external storage device carried by the researcher.

Another ethical issue that could have arisen due to the use of Skype is the video call feature revealing the participants' faces, however, the only data necessary for the study was audio, thus the video feed was not used by the researcher afterwards. This issue was addressed on the consent form to reassure participants that their identities are protected. Participants were also informed that the call was being recorded, and if they objected to this, they had the right to withdraw from the study immediately. (Appendix 6)

Analysis/Discussion

The process of secondary coding, once complete, produced four super-ordinate themes covering various important aspects of internet-based social interactions. Initial friendship formation discusses aspects of personality interviewees looked for in others and circumstances surrounding forming friends online, 'community spirit' and collaborative activities explores the importance of communities and the role of group-based activities in bonding, social support covers social compensation and various types of online-based support, and interactions between online and offline debates the extent to which the two dimensions remain different entities. Within these themes, there is a sense of chronological progression, from beginning friendships to creating communities, progressing to reliance and culminating in affecting participants' realities.

Initial friendship formation

An intriguing development arising from the interviews is that in many cases, friendships were not actively sought, rather arose through other circumstances. These findings appear to be rather unique, as little existing research documents friendships arising as a by-product of collaboration and exposure instead of as the primary objective (Trepte et al, 2012). This is prominent in Yoshi's case:

well for me when it comes to friendships online, like coming across them, I don't genuinely look em up, or I just don't go like y'know, I think I should make friends today (interview 4, Lines 6-9)

Yoshi explicitly expresses the process of friendship formation as an unplanned process, focusing more on the activities than the building of social capital (Bourdieau, 1985). This example presents friendship as a passive rather than an active process, the only common necessity being interpersonal similarity to allow similar people to cross paths (Huang et al, 2013).

A common indicator of future friends was a similar sense of humour, reported by all participants as a factor in the formation of at least one close friendship. Humour is seen as a tool to ease initial social interactions (Treger et al, 2013) and sharing jokes among friends further increases the bonding social capital as the friendship develops. In many cases, the humour was also seen as a good indicator of interpersonal similarity:

I knew that if I wasn't going to be taking it seriously, Edd wasn't going to be taking it seriously, things like that, so you know, we'd end up having like a game within a game, where we'd both try and you know, like, out-troll the other (interview 3, lines 187-191)

This behaviour was cited as one of the conduits for this particular friendship, indicating a mutual recognition of their shared humour and interpersonal similarity (Amichai-Hamburger et al, 2013) while increasing social capital. Met's amusement with the situation that arose encouraged the bonding process, eventually leading to a true close friendship with Edd.

However, due to the largely anonymised nature of the internet, sometimes a false initial impression can be made:

our writing style was a lot different then from Fatman, cause he would just... force jokes and like, they wouldn't really be funny, like Day 1, I dunno if this is just like a thing of his, but like, you meet him for the first time, he's hilarious, every day after that he's just, it's like the funny guy just goes away (Interview 4, lines 198-203)

In this case, expectations based upon initial contact led to feelings of disappointment, which led to the swift abandonment of Fatman after repeated exposure uncovered a very different personality to the one initially presented, one of the perceived negatives of online interactions (Oprea and Stan, 2012).

None of the participants considered geographical proximity as a barrier to forming online friendships despite the presence of timezones (Amichai-Hamburger et al., 2013), in fact, many expressed pride in the diversity of their social networks:

I consider people like Jenova, Lui, Joe, quite close friends even though I've never actually met any of them[...] because y'know America, Spain and... Kent are quite far away... America, Spain, Kent, that's an interesting combination isn't it? (Interview 5, Line 57-63)

In this way, the internet is seen as a meeting point, and the ability to meet people from different geographical locations is viewed as an attractive prospect as it allows the formation of otherwise impossible friendships, serving the purpose of individualising the process of friendship and encouraging social selection (De Klepper et al., 2010).

In a similar vein, geographical displacement was seen as a conducive factor in the case of Omega:

I was living in Spain, and I couldn't always express myself as well as I could, so uh, yeah, I missed that, I missed just people able to talk with someone in English without having to worry about my pronunciation or people not understanding me (Interview 2, lines 41-46)

Having access to English-speaking people online was seen as a way to alleviate his frustration at being displaced from a familiar environment where adaptation was a struggle, presenting a different application of the similarity-dissimilarity hypothesis (Massen and Koski, 2013).

'Community spirit' and collaborative activities

Many of the interviewees expressed their internet friendships not in terms of individuality, but through identification as a part of a community, seen as a key factor in creating long-lasting internet friendships:

we did get on because there was just this whole community spirit (Interview 5, lines 272-273)

Communities are often driven by their core similarities and tend to be built around a specific niche interest (Amichai-Hamburger et al., 2013), but even when interest in the core component wanes, the friendships persist:

we're on a forum almost specifically for a certain game, the Pokémon game, everyone, everyone there, well not so much now, but back in the heyday, everyone was like a big fan of it (Interview 3, lines 584-587)

Met's use of the past tense 'was' when describing Pokémon as a common interest suggests that over time, as community bonds have grown stronger, the community has grown independent of its original intentions, thus while a niche interest may be useful to start the community, its importance may wane in the later stages (Ellison et al, 2011). Such is the bond shared by the community that even those who leave find themselves unable to permanently stay away:

Um but yeah, we've all had extended leaves and things but we've all ended up coming back and y'know, we're all just good friends (Interview 5, lines 47-49)

Aren expresses feelings of security and satisfaction within the community he has been a part of for five years. The length of time said community has remained active despite many of its members losing interest in Pokémon would indicate that a true group identity has been developed (Sutcliffe et al, 2012), with users defining themselves through their allegiance to this in-group.

Online games and other activities are a large part of the online community experience. Through these community-based activities, both individual and communal bonds are forged and made stronger due to their collaborative nature, often requiring a degree of teamwork (Kaplan and Haenlein, 2011):

Um, well we certainly do bond more, cause after we uh, we, y'know when we get together and we write something y'know, we're trying to make each other laugh (Interview 4, lines 336-338)

Although the processes of creating a comedy series and playing competitive Pokémon online are very different in principle, both produce the same bonding effects due to the shared idea of teamwork and reaching a common goal, whether that be producing an episode or ensuring victory (McMillan and Morrison, 2006).

For those with the fortune to be followed by a legion of fans, this can also be counted as a form of community, albeit one that the individual interacts with from the outside providing an amount of social capital. Perceptions of this out-group vary:

[H]ow do you interact with the fans?

THORN: I try not to actually. (Interview 1, lines 311-313)

I'm very happy that I have fans, I'm shocked that I get people who come up to me and say 'hey I was having a bad day but then I saw your show and it just changed it, thanks a lot' or 'I started voice acting because of you,'(Interview 4, line 461-465)

Thorn's perception of his fans is one of negativity, outwardly expressing his annoyance at certain people's sense of entitlement, while Yoshi presents a more positive image of fandom, discussing his gratitude for their support and embracing the social capital they bring by befriending several of them (Subrahmanyam et al, 2008). However, these are rather atypical examples of internet social interaction and do not reflect the majority of online relationships, thus the applicability for this type of capital is restricted.

Social Support

Introversion was identified as a common personality trait amongst interviewees, and most of the interviewees reported experiencing feelings of loneliness in their offline lives as a result (Kraut et al, 1998, Mitchell et al, 2011). In keeping with the social compensation hypothesis, these users turned to the internet due to their unsatisfactory offline social lives (Zywica and Danowski, 2008):

I suppose talking to them does you know, it keeps me interacting with people I suppose so I'm not just sitting here vegetating. (Interview 3, lines 435-437)

This description evokes feelings of apathy and dissatisfaction with offline social connections, thus the logical solution would be to turn to the online community seeking support.

Many of the accounts seem to offer qualitative corroboration for the findings of Selfhout et al (2009), with plentiful accounts of the use of instant messaging or Skype to alleviate depression and anxiety:

we do have moments where you know, one of us is just like feeling down and they say 'I'm gonna go just take a nap because I can't take it right now,' and, and then some of us start like, feeling really bad and we wanna do a call, cause you know we can just like cheer them up (Interview 4, lines 904-909)

I suppose people have supported me in the dark times in my life, sort of just had to rant at people on IRC, just to get all these things out, and people have been supportive (interview 5, lines 747-750)

Differing perspectives are displayed in these two accounts, with Yoshi offering emotional support to those in need while Aren recants his experiences of depression and the feelings of despair that dominated him. In both cases, the availability of instant messaging has been a boon as it allows for a source of venting (Rodham et al, 2009) and other interpersonal behaviours that allow the user to express their feelings to others and help them release these negative emotions in hard times.

The online world also allows for great acts of kindness:

she actually got me a gift certificate for Taco Bell, and she mailed it to me, and uh, I kind of didn't have money to eat on my birthday so because of her I was able to eat dinner that day. (Interview 4, lines 868-871)

Yoshi displays intense gratitude for the helpfulness of people online being willing to aid him due to his financial troubles, becoming a beneficiary of true altruism in the internet era and providing a qualitative example of tangible support (Amichai-Hamburger et al, 2013).

However, there have been concerns about relying on the internet for social support:

internet friends can always console you and say 'yeah yeah, that's such a shame', and maybe just say nice things, but words can't fix a broken bone or whatever, whereas a real life friend is there to put his arm around your shoulder and uh, and take care of you. (Interview 2, lines 192-197)

In this case, when feelings of melancholy are expressed online, the support offered may be deemed insufficient, possibly even superficial, due to the lack of physical cues and contact between Omega and the supporting community (Kraut et al, 1998). This suggests that the internet is not a wholesale replacement for real life friendships, as the support offered by this medium may be insufficient to alleviate truly devastated emotional states.

Interactions between online and offline

As internet use continues to become more ubiquitous and evolve in different ways, the online and offline worlds are more likely to interact with one another in a sort of feedback loop (Bayraktar and Amca, 2012). In the participants, evidence of normalisation of internet use from a young age could be suggested to be a factor in the development of online friends:

[H]ere's the thing, my childhood through, let's see kindergarten to sixth grade, was spent, a lot of the time was spent on a computer (Interview 4, lines 696-698)

In these cases, internet access has formed an integral part of their daily routine for a significant portion of their lives, thus it is logical that they have begun to develop friendships online through sheer exposure to the medium (Crisp et al, 2009).

In spite of the familiarity with the internet and relative normalisation of the use of the internet as a meeting point, the participants seemed keen to keep a distinction between their online and offline connections, invoking the distinction between 'real' and 'virtual' communities (McMillan and Morison, 2006):

I have my own online persona, I don't really wanna go up to them like 'hey I'm Cheeseburgermaster52, what's up man?' And then they're like 'who the hell are you' and I'm like 'dammit that's why I don't wanna talk to you!' (Interview 4, lines 1048-1052)

In this case Yoshi's reluctance to share details of his online exploits with offline contacts reflects the binary opposition between online and real-life social circles, even going so far as to create alternate Skype accounts and eschew social media to avoid the two crossing over due to the awkwardness that may surface if real-life people discovered his online exploits.

Often, it was found that real life meetings strengthened the bonds formed online, with the effect carrying over when the individuals involved moved back to an online environment. One of the reasons that offline meetings were such a great aid for developing friendships is the possibility of activities that could never happen in the online environment:

For me, um, they were pretty much exactly as they were when I'd been talking to them over Skype for example, it was just... now we had more things that we could do while we were interacting, like we would just hang out, go to the food court and eat pizza, talk about whatever, do whatever, and it, it was very natural (interview 1, lines 131-137)

For Thorn, the experience of finally meeting people he had only a mental image of until now began as a daunting experience but ultimately one that was deemed to be fulfilling and the culmination of two year's prior interaction. It is possible to argue that the use of Skype voice chat instead of a text-based client was partially responsible for the 'very natural' first meeting (Sherman et al, 2013) due to an comparatively higher level of richness in voice chat over text (Daft and Lengel, 1984), better preparing Thorn for face-to-face interaction. In contrast, Aren's first meeting with an internet stranger, preceded only by textual interactions: and you came up to me and said 'hi', um, very awkwardly, I didn't recognise you at first, uh, then 'yeah, yes yes' and you know, it was very awkward, it was incredibly awkward (Interview 5, Lines 298-301)

Despite this awkward first encounter, complicated by the lack of social cues inherent with text-based chatrooms (Subrahmanyam and Greenfield, 2008), through repeated real-world exposure combined with frequent online contact as a facilitator between meetings, the relationship has developed to the extent that both would class the other as one of their closest friends.

Ultimately, it seems that friendships can indeed be made through the internet.

Methodological Discussion

To summarise, the findings of this study have indicated that the internet is a source of social support for introverted individuals, and close friendships can be established over time. Real-life meetings with individuals met on the internet often enhance the friendship, allowing for interactions impossible online, but are not deemed totally necessary. Friends are also often spoken of in terms of a community, providing qualitative evidence that internet users tend to build up vast networks of friends instead of deep individual relationships (Subrahmanyam et al, 2008).

As previously discussed, the use of Skype to conduct interviews on internet social interactions is an innovative approach to qualitative psychology, providing valuable data regarding young people's internet use and its value to them. Despite this, in accordance with the media richness theory (Daft and Lengel, 1984), concerns could be raised over the lack of interpersonal cues present during these online interactions, inhibiting the process of rapport and complicating the interview process.

The methodology of IPA itself is criticised for its selectivity (Giorgi, 2011), not only due to selective biases in the analysis process but the singular perspective encouraged by the qualitative interview process preceding it. If one were to directly observe online behaviours as opposed to an interview process (Rodham et al, 2009), data may provide a more accurate portrayal of online social behaviours, although in such cases it may be more difficult to obtain informed consent, thus possibly breaching ethical guidelines.

Further research into this area could also benefit from sampling female participants to address the lack of gender representations in the current study, potentially revealing gender differences in the social use of the internet and perceptions of how genders are treated.

Reflexivity

This project's inception was as a direct result of my own online friendships and the desire to research a topic of interest, as very little research within this area has focussed exclusively on the individual's perspective of online friendship. Having specific participants in mind who could contribute a wealth of rich detailed information on the subject, the decision to conduct qualitative interviews was an

easy decision to make, and the decision to analyse the data through IPA was informed by this wish to understand alternative perspectives on social interaction online.

There were preconceived notions as to the information that would be revealed during these interviews. High levels of introversion and social compensation were anticipated, as was the nullification of the issue of geographical proximity due to vast amounts of distance between interviewer and participant in many cases. As an introvert who finds maintaining offline friendships difficult, admittedly some of these assumptions were self-centred.

Using Skype as a tool to conduct interviews was primarily a decision made for convenience rather than innovation due to the purposive sample being based in otherwise inaccessible locations. This did present issues, having to arrange times for people to come online, and led to the dropout of a prospective participant due to being unable to properly arrange times. There were also slight latency issues during one interview but this was a minor issue.

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