Chapter 5. Online and offline relationships

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Youth social circles used to be restricted to friends met in the neighbourhood, at school or through extracurricular activities. The rise of the Internet has made geographical proximity and social similarity less crucial in making friends, and digital means have facilitated youth broadening their social circles. However, the proliferation of online relationship formation has led to concerns that they replace "higher quality" offline relationships. On the other hand, online means can expand and diversify children's friendship networks and can empower disadvantaged groups by enhancing weak ties. Online ties supplement, rather than replace, face-to-face connection, and online communication can reinforce offline friendships. Furthermore, whether a friendship forms online or offline is less important than if these newly formed friendships move to communication modalities such as telephone and face-to-face contact with richer verbal and non-verbal cues.

Introduction

Online sociability is an integral part of an individual's digital literacy and cultural consumption of technological artifacts (e.g. desktops, laptops, smartphones). The capacity of the Internet to facilitate online contact, especially between geographically remote people, has caught the popular imagination and the empirical attention of researchers studying online relationship formation.

Prior to the Information Age (characterised by the Digital Revolution in the 21st century), adolescents' social choices were greatly restricted by time and place. Their lack of geographical mobility and their belonging to an age group expected to go to school structurally reduced their social circle to friends who they met in the neighbourhood, at school and through extracurricular activities. In this sense, proximity was a central social constraint for relationship formation. Living in the same neighbourhood and attending the same school often resulted in a high level of social similarity.

Internet and mobile access and communication have produced a number of changes in social communication patterns. Relationship formation has expanded from geographical spaces of interaction (i.e. neighbourhood, school) to digital spaces (i.e. Social Networking Sites (SNS), such as Facebook). Friendships that were in the past based on social groups with clear boundaries and social expectations of mutual interaction have become diverse and dispersed personalised peer networks that lack clear boundaries and norms of social behaviour (Rainie and Wellman, 2012_[1]). Channels of interpersonal communication are multiplex, including mobile applications and diverse platforms of social media interaction, in addition to face-to-face and phone. As a result, the limits of interpersonal communication have become blurred. This includes perpetual contact with the social networks from anywhere and at any time, personalised communication relying on ego networks¹ rather than social groups, content that is not necessarily private and can be forwarded without knowledge of the original sender/curator, and activities that are coordinated through online and mobile social networks.

These major changes in the patterns, frequency, content and quality in interpersonal friendship formation, maintenance and communication have been highlighted by a large number of studies that focus on different aspects of this major social change. This chapter focuses on one important aspect, namely the similarities, differences and overlap between youth online and offline social relationships.

Evolving perceptions of online and offline relationships

With the growing popularity and ubiquity of social media, the public, and the research to some extent, has been concerned with the proliferation of online relationships and the concern that these are replacing higher quality offline relationships. Studies conducted in the early 90's found that adolescents in Western countries were reporting that they maintained interpersonal communication with others they met online as well as with friends they met face-to-face. For example, in a U.S. study, 14% of American teenagers reported they had formed close online friendships (Wolak, Mitchell and Finkelhor, 2003_[2]). A study in the United Kingdom found that 11% of the adolescents reported meeting new acquaintances online (Livingstone and Bovill, 2001_[3]). In Israel, 12% reported having at least one close tie that was met online (Mesch and Talmud, 2006_[4]).

At that time, online/offline relationships were defined according to the origin of the relationships and the space of interaction where the respondent indicated having met his/her

friends. Online relationships were those formed on SNSs including forums, chat rooms, gaming spaces and messenger platforms. Offline relationships were usually defined as those initiated in the neighbourhood, school or any other face-to-face space of social interaction.

It is important to recognise that a comparison between relationships designated as either online or offline may imply that they are mutually exclusive or opposed to each other. Yet over time, it has become clear that interpersonal relationships are created, developed and sustained through integrated online and offline interaction. The entire range of offline relationships, from family through school and work to social relations in the wider neighbourhood, may also be present online in a manner that is rarely distinguished from one's offline life. Furthermore, some relationships created online eventually migrate to face-to-face settings. The popular perception of online relationships as relationships that can be contrasted with those in the 'real world' – inhabited by one's real or "more authentic" offline relationships – seems therefore simplistic and misleading. This corresponds to an earlier critique of the concept of 'virtual', a term prominent during the early years of Internet use. It is, however, essential for us as researchers to recognise these reservations and to acknowledge that the contrast between online/offline remains a primary mode by which people around the world understand and experience digital media.

Because of this perception of online/offline contrast, this paper starts with a summary of the perspectives that deal with the motivations and outcomes of online relationships formation.

Motivations for online relationship formation

The "*Rich-Get-Richer*" hypothesis proposes that individuals with higher extraversion, or who are more comfortable in social situations, would be more likely to use social media for online relationship formation, extending their social networks and enhancing the quality of their friendships (Kraut et al., 2002_[5]; Desjarlais and Willoughby, 2010_[6]). According to this hypothesis, individuals who are extraverted and who already have strong social skills would do better in sharing their views and asking for help online, thereby attaining additional social support and higher life satisfaction through cyberspace (Khan et al., 2016_[7]).

Conversely, the "*Poor Get Poorer*" hypothesis argues that individuals who are introverted, have higher levels of social anxiety, and have poorer social skills and self-confidence, would be more likely to use the Internet to escape from and avoid problems in real life, potentially reinforcing negative outcomes (Armstrong, Phillips and Saling, 2000_{[81}).

On the contrary, the "Social Compensation" hypothesis proposes that individuals with higher levels of social anxiety or lower levels of social support use social media to create online relationships to compensate for their lack of social ties, as social anxiety is a barrier for offline relationship creation (Van Ingen and Wright, $2016_{[9]}$). According to this hypothesis, the relative anonymity of social media and the process of self-disclosure online render the social situation more comfortable for these individuals. This is due to a perceived lower risk for self-disclosure because of the lack of non-verbal cues (Schouten, Valkenburg and Peter, $2007_{[10]}$). Furthermore, the Internet may provide more opportunities for some people to get social support, explore their social and self-identities and improve their social skills, as well as a greater opportunity to utilise online coping resources (Van Ingen and Wright, $2016_{[9]}$). Additionally, Ellison and colleagues ($2007_{[11]}$) argue that online activities are beneficial for individuals to form weak ties in SNSs, which would be very useful for

those with lower self-esteem to improve their social capital. On the other hand, they can be harmful for those with higher self-esteem since it would reduce their opportunities to maintain their strong offline ties. In other words, the "poor get richer" and the "rich get poorer."

Most of the previous perspectives focus on personality characteristics as motivations for online relationship formation. The "Social Diversification" hypothesis relies on social network and social capital assumptions to explain variations in these motivations for disadvantaged groups in society.

The social diversification hypothesis deals specifically with the motivations that create differences in the use of information and communications technology (ICT) among racial and ethnic minorities (Mesch and Talmud, 2010[12]; Gonzales, 2017[13]). Relying on the literature demonstrating the stratification of multicultural societies along ethnic and socioeconomic lines, the social diversification hypothesis argues that network-based social closure, the exclusion of others by a group seeking to maintain its resources, affects the ability to obtain social capital and is more likely to benefit the dominant group's members (Mesch, Mano and Tsamir, 2012^[14]). Based on this perspective, social media platforms might support the expansion of social relationships, including improving the access to information, knowledge and skills that are unavailable locally, and provide opportunities for the diversification of social relationships (Mesch and Talmud, $2010_{[12]}$). As Mazur and Kozarian (2010[15]) found in their study of older adolescents, despite the partial overlap of online and offline ties, online communication tends to diversify the structure of peer networks and expose youngsters to others who share their interests regardless of their age, gender or location. In this sense, the social diversification hypothesis argues that social media provides a platform for overcoming some of the existing segregation in society. Therefore, this perspective maintains that disadvantaged groups will have greater incentives to use SNSs to expand their social circle and overcome existing physical and social barriers to information and association. At the same time, majority groups will use the Internet to keep their existing relationships and maintain the closure of their network. In addition, they will be less likely than disadvantaged minorities to use SNSs like Facebook to expand their social ties.

The social diversification perspective emphasises the potential of social media platforms for empowering disadvantaged groups through affiliation with weak ties (Mazur and Kozarian, $2010_{[15]}$). Indeed, a study of the online practices of young adolescents in a large rural area in California planning for their vocational future determined that the youngsters relied on computer-mediated communication and the establishment of contacts with weak ties to access information unavailable to them locally (Robinson, $2011_{[16]}$). Similarly, the use of social media has been associated with the diversification of core networks of discussion (Hampton, Sessions and Her, $2011_{[17]}$). A study of a large sample of college students in the United States established that access to the Internet was still higher among white students than Latinos and African-Americans. However, when it comes to the use of social media platforms for content creation (e.g. blogs, video clips), a social capital enhancing activity, African-Americans and Hispanics reported higher average online content creation than white students, even after controlling for socio-economic status, gender and age, as well as Internet experience and psychological predictors (Correa and Jeong, $2011_{[18]}$)

Since online relationships are generally created around a specific topic of mutual interest, they are considered weak ties, as they do not initially expand to all the spheres of concern and activity of the participants. Over time, online ties tend to include more personal and

intimate topics as they move toward becoming more holistic relationships (Mesch and Talmud, 2006_[4]).

For young adolescents, SNSs may provide an opportunity to expand the size and composition of their social networks especially in disadvantaged or minority groups. Indeed, a study of Internet use in a representative sample of Greek and Turkish youth in Cyprus suggests the existence of a reverse digital divide, as the more disadvantaged community engaged more often in Internet use for self-expression and association with weak ties (Milioni, Doudaki and Demertzis, 2014[19]). Mesch (2018[20]) tested this hypothesis and investigated the role of race and ethnicity in the self-reported strength of the social ties of young adolescents on Facebook. Based on the social diversification hypothesis, which argues that in multicultural societies, race and ethnicity are key factors that shape the nature of associations, the study investigated whether there were ethnic and racial differences in the size and strength of the ties of adolescent Facebook users and the role of the strength of these ties in several positive outcomes. Using data from the Teens, Social Media, and Privacy Survey conducted by the Pew Research Center's Internet and American Life Project of 802 U.S. teenagers aged 12-17, Mesch concluded there were no differences in the total number of ties that adolescents from different ethnic and racial groups reported. However, African-Americans reported a significantly higher number of online weak ties, while white Americans had a significantly higher number of online strong ties. These results are consistent with the social diversification hypothesis.

Online ties and the structure of youth social networks

An important dimension of social networks often highlighted in the literature is the extent to which creating online social ties reduces, enlarges or does not change one's number of friends. Studies have warned that excessive Internet use may isolate adolescents from their friends (e.g. Šmahel and Blinka $(2012_{[21]})$). Available data indicate that online relationship formation does not affect the size of a social network. A temporary decrease may be expected as more energy and time are invested in the creation of online ties; but over time, as online associations become integrated, the size of the network even slightly increases as new associations are included amongst existing ones (Valkenburg and Peter, $2007_{[22]}$).

In comparison to SNSs, mobile phones have had a similar effect on friendship formation in the Information Age. Igarashi, Takai and Yoshida $(2005_{[23]})$, analysing text messages over cellular phones in Japan, found general support for the claim that mobile phones can change social networks among young people by increasing the number of possible contacts and promoting selective relationship formation. Mobile phones increase the frequency of communication, and allow for opportunities to expand interpersonal relationships (Igarashi, Takai and Yoshida, $2005_{[23]}$).

The effect of the expansion of social networks seems more pronounced on extroverts than on introverts. Overall, however, online relationship formation enlarges the social network for the majority of adolescents who choose to become involved in this activity (Mesch and Talmud, 2010_[12]).

Associating with similar people is another social network dimension influenced by online relationship formation. One of the most significant and consistent findings reported in the literature is that social relationships are characterised by social similarity, or homophily. Studies on the formation of close social relationships have emphasised the importance of social similarity in friendship and attraction in intimate social relationships (McPherson, Smith-Lovin and Cook, 2001_[24]; Mazur and Richards, 2011_[25]). Similarity moulds network

ties and results in homogeneous social networks in terms of socio-demographic, behavioural and interpersonal characteristics. This tendency of individuals to associate with others who are similar to them has important social consequences. For example, similar individuals exchange information that suits their personal characteristics and social style. Contact with similar individuals limits personal social horizons and restricts the exposure to different others which can lead to the reproduction of social stereotypes (Mazur and Richards, 2011_[25]).

Nevertheless, research has found that adolescents who create online social ties report a higher heterogeneity of their social network by age, gender and location. Mesch and Talmud $(2010_{[12]})$ compared youngsters with online friends and with face-to-face friends for the respective average age difference between those friends and themselves. The former reported that their online friends were on average older than they were; the latter did not report this. The difference was small, with online friends being on average one and a half years older. To some extent, it can thus be argued that online friendship formation breaks through the barriers of age-grade segregation imposed by the social structure of schools.

Studies that compare the percentage of friends of the opposite sex as reported by youth with and without online friends have found less sex segregation for the former than for the latter (Mesch and Talmud, $2006_{[4]}$). Adolescents whose offline friends were similar in age, ethnic background and place of residence were more likely to report forming friendships online (Mesch and Talmud, $2006_{[4]}$).

Another component of the shared opportunity for mutual exposure is residential proximity. Proximity facilitates the likelihood of friendship formation and communication by increasing the probability that individuals will meet and interact. Proximity is of particular importance for adolescents limited in their geographic mobility, as they must rely on public transportation, which is not always reliable. For adolescents who are restricted in their physical mobility, and for whom the main arenas of social interaction are the school, the neighbourhood and extracurricular activities, the Internet represents a new focus of common activities. Adolescents connect to the Internet, chat and exchange email with friends, with friends of friends and with unknown individuals. In these activities, they encounter a new space that facilitates joint activities and social interaction. For adults, as well as for a large majority of adolescents, the Internet is an innovative place for social interaction, different from the phone and television.

An important consideration for youth online social networks is the perceived closeness of youth to their online ties, and the possible effect of these ties on their perceived closeness to their face-to-face ties. Online relationship formation is a dynamic process, and accordingly calls for longitudinal studies. The perception of being less close to online friends seems to depend on the developmental stage of the relationship. Forming online ties is a relatively newer phenomenon than forming face-to-face ties, and is based on narrow shared interests (Mesch and Talmud, $2006_{[4]}$). Relationships take time to develop and the process of moving towards being perceived as closer requires more investigation. Regarding their effect on existing ties, there is no evidence that youth are exchanging close friendships for distant and narrow ones. Online ties, then, seem not to replace but to supplement face-to-face connections.

Quality of offline and online ties

One of the key features of friendships is their quality, which refers to the experienced closeness, trust and understanding between friends. Over a decade ago, several studies

investigated and compared the quality of online versus offline friendships (Mesch and Talmud, $2006_{[4]}$). These studies consistently demonstrated that online friendships are perceived to be lower in quality than offline friendships (Mesch and Talmud, $2006_{[4]}$). Furthermore, although the quality of both online and offline friendships increased over time, the quality of online friendships improved significantly more than for offline relationships. Specifically, the researchers found that when online friendships lasted for more than a year, their quality became comparable to offline friendships. Yet this study was cross-sectional, and the effect over time is critical to understand the longer-term effects of online relationships.

Using a large sample of Dutch youth aged 12 to 17, Valkenburg and Peter ($2007_{[26]}$) investigated whether online communication stimulated or reduced closeness between friends, and whether intimate disclosure of personal information online affected their closeness to online ties. The authors found that only 30% of the adolescents perceived online communication as a more effective means for disclosing personal information. Furthermore, online communication with strangers met online proved to have no effect on the adolescents' perceived closeness to friends, while communicating with existing friends increased closeness to friends (Valkenburg and Peter, $2007_{[26]}$).

One possible explanation for the perception of a smaller degree of relational closeness with online ties is provided by an Israeli study with a large representative sample of adolescents. The perception of less relational closeness was found to result from length of the relationship. Since online ties have generally been acquainted for less time than face-to-face ties, they are still in the phase of relationship development and are therefore perceived to be of lesser depth and breadth (Mesch and Talmud, 2006_[4]). Yet as time goes by, and as the topics of conversation expand from a small number of shared interests to a wider range, the perceived connection is assumed to grow closer.

Recent studies

In the early days of online communication, the main distinction was between online and offline ties. The definition of these ties was based on the origin of the relationship that often shaped the communication channels and content. With the increase in Internet access, and the proliferation of online communication platforms and SNSs (e.g. instant messenger, WhatsApp, Facebook etc.), the distinction has become more difficult to make. Today, it is more reasonable to understand the social world of young people and adults as being composed of online, offline and mixed-mode friendships. Mixed-mode friendships refers to the integration of online and offline ties and their interaction in people's lives. Thus mixed-mode friendships are those that originate online and extend to offline settings (Antheunis, Valkenburg and Peter, 2012_[27]).

The notion of online relationship formation requires conceptual clarification. Most research has not clearly defined what is meant by online ties. To date, research has largely been conducted to elucidate the effects of channel characteristics on interpersonal communication, emphasising the lack of social presence, lack of richness and lack of social cues in Internet communication, as well as to determine the conditions under which this communication is non-personal or becomes hyper-personal (Walther, 1996_[28]).

How do online, offline and mixed-mode friendships differ? Antheunis, Valkenburg and Peter $(2012_{[27]})$ conducted a study in which they compared the quality of online, offline and mixed-mode friendships, as well as the relative contribution of proximity and perceived similarity, to the quality of friendship. The study was based on data gathered from a large

sample of members of a Dutch social networking site (n=2188). An important finding was that there were differences in quality between online and offline friendships and these remained significant over time. However, these quality differences between mixed-mode and offline friendships disappeared over time. As has been mentioned in the literature, moving from online to offline communication channels such as face-to-face and phone with someone who one met online is an important step towards increasing the closeness in relationships (Mesch and Talmud, $2006_{[4]}$).

The authors also addressed the question of the extent to which residential proximity and perceived similarity differ among online, mixed-mode and offline friendships. Significant differences were found in the degree of proximity between the types of friendship, the actual distance between offline friends being the lowest, followed by mixed-mode and online friends (Antheunis, Valkenburg and Peter, $2012_{[27]}$). Concerning perceived similarity between online, mixed-mode and offline friendships, there is a significant difference between online and mixed-mode friendships, and between online and offline friendships, and between online and offline friendships, and between online friendships and offline friendships, and lowest in online friendships (Antheunis, Valkenburg and Peter, $2012_{[27]}$).

Consistent with earlier studies, the researchers found that respondents perceived offline friendships as being of higher quality than online friendships. However, the study found that mixed-mode friendships, which, as mentioned previously, originate online but then migrate to offline communication modalities (i.e. telephone, face-to-face communication), were rated similar in quality to offline friendships. Thus, it seems not to be important whether a friendship forms online or offline, but rather whether these newly formed friendships also migrate to cue-richer communication modalities, such as telephone and face-to-face contact friendships (Antheunis, Valkenburg and Peter, 2012_[27]).

Consistent with the findings of earlier studies (e.g. Mesch and Talmud $(2006_{[4]})$), this study found that the quality of all three types of friendship improved as the friendship developed over time. Nevertheless, the quality of online friendships remained significantly lower than that of offline friendships and mixed relationships even after two years of follow-up.

In terms of proximity, the study found that offline friends lived closer to each other than mixed-mode and online friends. This suggests that in online and mixed-mode friendships, actual geographic proximity is less important to becoming friends. Furthermore, this finding indicates that online relationships overcome the barriers imposed by geographical constraints.

In terms of similarity, the study found that the level of perceived similarity was lower in online friendships compared to mixed-mode and offline friendships. However, the effect of similarity on the quality of friendship is higher for online friendships than for mixed-mode and offline friendships. These results indicate that although the level of similarity is low in online friendships, similarity is a more important determinant of friendship quality in online friendships than in the other two friendship categories (Antheunis, Valkenburg and Peter, $2012_{[27]}$).

Conclusion and future research

This chapter discussed how online spaces are used in the context of relationship formation and the creation of friendship ties by means of ICT. It emphasised the role of online communication in providing an alternative and complementary space for relationship formation, given the specific restrictions that youth face. These are mainly geographic, constituting a contextual barrier that motivates some adolescents to turn to the Internet to seek others who share their specific interests or differ in their racial/ethnic background and social characteristics. Beyond structural constraints, it found that individuals with certain personality characteristics, including introversion, self-concept and attachment style, were more drawn to forming relationships online.

Heterogeneity in adolescents' social networks, occurring more often when the origin of the friendship is online, has developmental implications that require further investigation. For example, Stanton-Salazar and Urso-Spina $(2005_{[29]})$ found that non-romantic, cross-gender online relationships between adolescents proved an important source of social support. They afforded emotional support, particularly for males. If the Internet reduces friendship gender segregation for young adolescents, this may have an impact on the process of dating and first time sexual relationships in the future. Another potential effect is in the early exposure to individuals of diverse ethnic and racial groups and of varying political views. If this is confirmed in future research, the Internet is very likely to become a central agent of socialisation, which has to be integrated into our understanding of youth socialisation.

The division in research of the virtual from the real does not accurately capture the lived social experiences and identity negotiations of adolescents in their socialisation process or in their belonging to peer groups, nor does it encompass the complexity in which offline and online spaces are mutually embedded. Examining how these spaces are mutually embedded, and the complex nature of these relationships, will be an important area for future research in order to understand what this means for children in the 21st century.

The emergence of ICT into adolescents' identity management, personal communities and friendship formation seems to have changed the character of "private" and "public" spaces, constituted by adolescents' activities on and around the screen. Nowadays it seems that there is an online and offline integration and interpersonal relationships are constantly moving through social networks between online, offline and mixed communication depending on spatial, psychological and other constraints in everyday life. A recent study of the integration of online, mixed and offline integration have higher life satisfaction, greater extraversion, more positive perceptions of the Internet and less loneliness (Antheunis, Valkenburg and Peter, 2012_[27]). Future research with nationally representative samples from other countries will benefit this field by allowing between-country comparisons, and to confirm if these phenomena affect children in different contexts.

Note

¹ In social network analysis, ego networks are those made up of an individual (called ego) along with all the social ties s/he has with other people (called alters). In egocentric social networks, the person of interest is referred to as the ego. The people s/he is appointing to his/her network – relatives, friends, advisors, etc. – are referred to as alters (Djomba and Zaletel-Kragelj, 2016_[30]).

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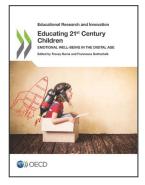
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EDUCATING 21ST CENTURY CHILDREN: EMOTIONAL WELL-BEING IN THE DIGITAL AGE © OECD 2019



From: Educating 21st Century Children Emotional Well-being in the Digital Age

Access the complete publication at: https://doi.org/10.1787/b7f33425-en

Please cite this chapter as:

Mesch, Gustavo S. (2019), "Online and offline relationships", in Tracey Burns and Francesca Gottschalk (eds.), *Educating 21st Century Children: Emotional Well-being in the Digital Age*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/11f6c5b4-en

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