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Does the use of social networking sites increase children's risk of harm?

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ABSTRACT

Although research findings have been equivocal as to whether the use of social networking sites (SNSs) increases experiences of online risk among children, the affordances of SNS lend support to this possibility, attracting much policy and public concern. The present article examines whether the use of such services increases the risks that children and young people encounter by analyzing data from a random stratified sample of approximately 1000 internet-using children aged 9–16 years in each of 25 European countries. Four hypotheses were formulated and tested. The first hypothesis, namely that children who use social networking sites will encounter more risks online than those who do not, is supported by the data. The second hypothesis stated that SNS users with more digital competence will encounter more online risk than those with less competence; this was also supported, despite being counter to common assumptions. Thirdly, we hypothesized that SNS users with more risky SNS practices (e.g. a public profile, displaying identifying information, with a very large number of contacts) will encounter more online risk than those with fewer risky practices: this too was supported by the data; thus what matters for risk is how SNS are used, a useful point for awareness-raising initiatives. The fourth hypothesis stated that SNS users with more digital competence in using the internet will experience less harm associated with online risk. The data did not support this hypothesis, since digital competence did not reduce the probability of children saying that they have been bothered or upset by something on the internet. Finally, the study found that, although this had not been predicted, whether or not risks are experienced as harmful depends on the specific relation between risks and platforms (website, instant messaging, gaming or social networking). We call on future research to explore how particular affordances sustain particular communicative conditions and, in turn, are responded to differently by children. The research and policy implications of the findings are discussed.

1. Introduction

Social networking sites on the internet (SNS) have rapidly become one of the most used online services. Following their explosive development from the mid noughties, they have become firmly embedded in the everyday lives of many citizens in the world's wealthier countries. SNS integrate impersonal communication (e.g. coordinating meetings, events, schedules and other task oriented activities), mass communication (music, news, movie clips and websites) and, most significantly, interpersonal communication (direct personal messages, sharing of daily thoughts, ideas, observations and images), While acknowledging the many benefits that social networking sites afford most of their users most of the time (boyd, 2006; Clarke, 2009; Kalmus, Runnel, & Siibak, 2009), the present paper examines the evidence underpinning one area of particular public anxiety, namely whether the use of such services – precisely because of this integration of different communicative forms, each with their own norms – increases the risks that children and young people encounter.

Fifty nine percent of European 9–16 year olds who use the internet have their own SNS profile – 38% of 9–12 year olds and 77% of 13–16 year olds (Livingstone, Ólafsson, & Staksrud, in press). Four in five American 12–17 year old internet users also have profiles (Lenhart et al., 2011). Indeed, among all online activities, social networking is one of the most popular, after using the internet for school work – 85%, playing games – 83% and watching video clips – 76% (Livingstone, Haddon, Görzig, & Ólafsson, 2011). What is the significance of such rapid adoption? And, since any all types of content, contact and conduct, risky or otherwise, can potentially be reached through SNS, is the consequence more harm to children?

The specific design of widely used SNS contributes to the nature and consequences of use. boyd (2008) identifies the features of

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persistence (the fact of recording textual/visual messages permitting asynchronous communication), searchability (the availability of tools easing the establishment of extended and/or niche relationships), replicability (digital recording enables the generation of multiple versions of messages with no distinction between the original and the copy) and invisible audiences (the lack of certainty about who receives any communication exacerbating the sense of anonymity). In terms of user practices, young people especially have appropriated social networking sites to greatly extend their networks of contacts ('friends') and find new spaces of intimacy through the opportunity to construct and display particular aspects of the self and to tailor the conditions of publicity and privacy (Lange, 2008; Livingstone, 2008a; Taraszow, Aristodemou, Shitta, Laouris, & Arsoy, 2010; Tufekci, 2008). Clarke's (2009) ethnography of 28 English 10–14 year olds found that social networking was deeply embedded in the social fabric of their lives, and that in the associated processes of identity construction, informal online peer support played a constructive role, as it does for encouraging online pro-social behavior (Wright & Li, 2011).

The interaction between design and usage is complex, and both play a part in understanding social networking practices online. This interaction is very evident, and often fraught, in relation to privacy. On the one hand, affordances (Hutchby, 2003) shape practices (via privacy settings that distinguish public, private or partially private communications) and interpersonal relations (via settings that specify 'top friends' or wider 'circles' of acquaintance or those that distinguish friends from relatives). On the other hand, users shape affordances, including protesting when providers fail to provide desired privacy settings, for instance (boyd, 2006), and they more routinely appropriate services for their own purposes (e.g. setting up multiple profiles to project different selves to parents and peers, or giving a false age to access sites not designed for them (Livingstone et al., 2011). The design/usage interaction is also important to the contemporary discussion of digital skills and literacies – the more complex or opaque the affordances, the greater demand is placed on users' skills, and vice versa. Inequalities in digital skills, therefore, matter more for more complex interfaces, since here the less skilled face greater misuse or misunderstanding (boyd & Hargittai, 2010; Hargittai, 2010; Livingstone & Helsper, 2010).

Looking beyond the nature of use to its possible consequences, adverse or otherwise, research is less advanced. Valkenburg and Peter (2009) propose a 'rich get richer' hypothesis, namely that those with already wide networks gain disproportionally by extending these online, building on earlier theories of knowledge gaps, technology diffusion and the digital divide. Others are investigating the converse, namely that those already disadvantaged offline (whether lonely or dissatisfied or with psychological problems) are becoming newly vulnerable online also (Mitchell, Finkelhor, & Wolak, 2007; Wells & Mitchell, 2008). These parallel research literatures are thus exploring the emerging opportunities – for education, expression and civic participation (Kalmus et al., 2009; Livingstone & Helsper, 2010; Valkenburg & Peter, 2009) and the emerging risks – for cyberbullying, sexual harassment and stranger contact (Brandtzæg, Staksrud, Hagen, & Wold, 2009; Erdur-Baker, 2010) of SNS use.

The *EU Kids Online* project, a pan-European network funded by the European Commission's Safer Internet Programme to research use, risk and safety issues regarding children's internet use in 25 countries, argues that an account of everyday internet use must recognize both opportunities and risks online and also the interrelations between them (Livingstone & Haddon, 2009). Empirically, the two are positively correlated, with those encountering more opportunities also reporting more risks, and vice versa (Livingstone & Helsper, 2010). Analytically, too, they are connected, for while some online activities can be classified relatively uncontroversially as either opportunities (e.g. using educational websites) or risks (e.g. cyberbullying), others are more ambiguous. For example, making a new friend online may expand one's social circle or put one at risk from an abusive stranger; seeing sexual content online may enable exploration of one's sexuality or expose one to misogynistic pornography. Such ambiguity is especially characteristic of social networking services, for these may be beneficial, harmful or, as in the case of "risky opportunities" (Livingstone, 2008a; see also Marwick and boyd (2011)), something in between, depending on the particular interaction of online affordances and user practices.

Complicating matters further, the *EU Kids Online* project also argues that exposure to risk (e.g. encountering sexual content or getting in touch with a new contact) indicates the probability but not the certainty of harm (defined as 'physical or mental damage' by Merriam-Webster Dictionary). Risk may, therefore, be safely encountered by many, and only in a proportion of cases (depending on the action of both protective and risk factors) does it result in harm. In parallel, it may be surmised that opportunities are associated with the probability but not the certainty of benefit. Recognizing, therefore, that the opportunities of social networking are related to the risks, and that risks may or may not result in actual harm, the present article analyses the *EU Kids Online* survey findings, based on 9–16 year olds in 25 countries, to ask whether SNS use increases children's online risk of harm, for which children and under which circumstances.

2. From computer-mediated communication to social networking

New media technologies have often occasioned media panics about their supposedly adverse effects, especially on children (Drotner, 1999). Early research on computer-mediated communication (CMC), with its sometimes inconsistent or later overturned conclusions, also generated some panicky media coverage (McKenna & Bargh, 2000), adding to public anxieties regarding youth online. However, as internet usage has becomes an integral part of people's daily lives, CMC research has matured. One change is recognition that the online–offline separation is increasingly artificial, and so talk of 'the virtual' as if it were not part of children's real lives is inappropriate. As a result, scholars are extending the scope of CMC theories from their origins in organizational communication so as to encompass ever more aspects of communication, identity formation and social relations (Wright & Li, 2011).

But this does not mean online and offline forms of communication are now identical (Rice & Love, 1987). Following early studies showing that group interaction differs for face-to-face (F2F) and computer-linked meetings (Kiesler, Siegel, & McGuire, 1984, p. 1124), researchers have examined how CMC alters not only workplace status relations and decision making but also dimensions of interpersonal behavior. The difference made by CMC has been variously attributed to time and information processing pressures, absence of regulating feedback, dramaturgical weakness, few status and position cures, social anonymity, computing norms and immature etiquette. The importance of reduced social context information and shared usage norms (Kiesler et al., 1984) also applies to newer technological innovations such as mobile text messages (Hutchby & Tanna, 2008).

Traditionally, CMC research has examined anonymity in online interactions, since this is often claimed to enhance intimacy in information exchange. Combined with feelings of close group unity, this can produce deindividuation – "a weakened ability for an individual to regulate his or her own behavior educed ability to engage in rational, long-term planning, and a tendency to react to immediate cues based largely on his or her current emotional state" (McKenna & Bargh, 2000, p. 61). Sustaining intimate inter-