Title*:* Are Social Networking Sites information sources? : Informational purposes of high-school students in using SNS

Keywords*:* Social media, Social networking sites, Information seeking, Teenagers, Information literacy, Transliteracy; information grounds

Abstract*: Although social networking sites (SNSs), such as Facebook or Twitter, are widely used by teenagers, to date, research has focused on the social uses of SNSs. This research sought to investigate the ways in which high school students (15-19 years) use SNSs in order to find information. It highlights the importance of considering how young people may use SNSs for everyday life information as well as for academic and school oriented information. Findings from a web-based survey of students from the UK, France, Thailand and Denmark show that SNSs are information sources for most teenagers, especially for information related to social activities. Although academic information seeking were not among the most common reasons for using SNSs, the findings indicate that many students do use SNSs for such purposes, as well as everyday life information seeking.*

Introduction

SNSs (social networking sites) are defined by boyd and Ellison (2007: ??) 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, and (3) view and traverse their list of connections and those made by others within the system”. The expanding growth of SNSs has meant that they have become a daily activity for millions of people and especially for teenagers (Hampton et al2011; CREDOC, 2014; EU kids online, 2014; Lenhart, 2015). While the term ‘social media’ encompasses a wider range of services, such as blogs, collaborative projects and collaborative social worlds (Kaplan and Haenlein, 2010), in everyday discussions the two terms are often used interchangeably. Although Facebook is still the most widely used SNS, teenagers now tend to embrace newer social networks such as Instagram, WhatsApp or Snapchat (Duggan et al, 2015). Many studies describe these teenagers’ uses of SNS, mainly from social sciences and psychology viewpoints. For the most part, such studies focus on communication and social uses of SNS, aiming to describe the nature and processes of a “digital sociability” (Cardon and Delaunay-Teterel, 2006) and then to warn about the potential dangers and the necessity to protect privacy and personal data (Livingstone 2008; Ito et al, 2010).

Apart from individuals, many brands, companies, organizations, public institutions (local national as well as international level), and both traditional and citizen-based media make use of SNSs, having a public Facebook page, a Twitter account, Youtube channel among others. SNSs thereby provide a huge amount of information, as well as different types of information compared to those available from many other sources, and covering a wide range of topics. SNSs can, therefore, be considered as effective hubs through which information flows, as is demonstrated in the recent agreement, called « Instant Articles », between Facebook and nine press publishers to submit articles directly to its members. As information providers, SNS have been shown to play an important role in participation and political engagement. Recent history has demonstrated that these communication platforms allow people to challenge the establishment by publishing and sharing anti-establishment views or opposing debates, and facilitate people gathering to demonstrate commitment, or even for strikes or riots (Shirazi, 2013). Furthermore, recent works point out that SNSs could be used as direct information sources explicitly by students (Kyung-Sun et al, 2011, 2014; Brandtzæg and Heim 2009; Willemse et al 2014). This is not surprising given the availability, and increasingly popularity, of user generated content. Moreover, many young people, and most information searchers in general, rely on sources easily

accessible even though the trustworthiness of information is questionable (Flanagin and Metzger, 2010; Biddix, 2011).

In this paper, we consider whether teenagers (15-19) use SNSs to access and/or seek information. Then we investigate the possible SNS information practices of teenagers and explore what kind of information they might look for on SNS. Information related to everyday life as well as academic works or school life are considered.

These questions highlight important issues: in the first place, specific uses of the Internet and Web 2.0 by teenagers questions the evolution of information practices of future citizens. Furthermore, the capability to search, evaluate and share information in a collaborative setting, is presented as a crucial skill domain in many Information Literacy (IL) curricula (e.g.Advisory Committee on Information Literacy, 2011; ACRL, 2015) and, chiefly, in renewed paradigms and frameworks such as Transliteracy (Thomas et al, 2007) or Metaliteracy (Mackey and Jacobson, 2014). Indeed, while IL guidelines are usually focused on individual skills and individual assessment, the key competencies have an increasingly collective dimension: sharing information with friends and with a large and unknown audience and evaluating information created by multiple participants for example. As Mackey and Jacobson (2014: ??), authors of the Metaliteracy framework, point out, the challenge for teachers and trainers is to define specific competencies for print-based information as well as decentered networks: "*In many ways social media is ideally suited for research if we recognize these collaborative spaces as a means for effectively creating and sharing knowledge in diverse modes, and not just informal social interactions*". However the situation at school is that, broadly speaking, media, and especially web-based media and social networks, are perceived as threats for children and teenagers rather than as resources to support teaching or learning. In an approach that is arguably inconsistent with the reality of teenagers' digital habits, SNSs are often prohibited by school policies and dismissed as games or 'kids' stuff' at best, clearly differentiated from serious work that is done at school. This can contribute to the "participation gap" mentioned by Jenkins and colleagues (2009). And, if SNS may be meaningful information sources for young people, researchers and educators need to better understand these SNS-based information processes in order to design appropriate evaluation guidelines. This research is intended as a first, explorative step that should be extended in order to continue to test and specify the ideas and findings presented here.

SNSs and information seeking

As indicated in introduction, general research about teenagers' information practices seldom includes SNSs as information sources. However, research about the needs that SNSs satisfy for people does include information seeking (Whiting and Williams 2013). Indeed, from a research point of view the different reasons to refer to a SNS need to be better understood because, to date, the social motivations have chiefly been emphasized. Some researchers have investigated SNSs specifically as information sources. In Norway, Petter Bae Brandtzæg and Jan Heim (2009) carried a qualitative survey (1200 responses) in 2007 on social networking site users (aged from 16 to 29). The authors demonstrated that information needs were listed by participants (10%, n=220): « *Users reporting access to information, including about fashion, music, literature, cultural events, current happenings in their neighborhood and access to new and shared knowledge regarding people's opinions related to everything from politics and to more tedious matters. Information updates are related to: a) Friends; b)Neighborhood; c) City events; d) Fashion; e) Music; f) Happenings; g) Help with homework at school f) interests/hobbies; g) other and more customized forms of information than on TV and radio*" (Brandtzæg and Heim, 2009:148). They suggested that the category named "debating" (6.5%, n=143) can be integrate the information category, "*because debating often takes place in order to gain access to new information through a collaborative discussion process*" (Brandtzæg and Heim 2009, p.148). Although this survey did not focus especially on teenagers, participants cited academic homework as a motivation to seek information on SNSs.

Other researchers who are also primarily concerned with identifying the main motivations that lead people to use SNSs include Grant (2005) who isolated key motivations that lead teenagers (13-17) in particular to use SNS including information seeking "*(...) to enhance their mood, learn by experience, as a form of passive escapism, as social interaction, and to find or give information and advice*" (cited by Jansen et al, 2011:??).

Some of the most significant studies that demonstrate the use of SNS as direct information source concern undergraduate students such as the several studies conducted by research team led by Kyung-Sun Kim. Kim and colleagues (2011) carried out a first online questionnaire that aimed to investigate what kinds of SNSs are used as information sources and why they are used by undergraduate students from a public university (446 participants). This study also examined what kinds of actions users take in order to evaluate the trustworthiness of information provided by social sources. The study found that Wikipedia was the most widely used source (98%) while

SNSs such as Facebook, MySpace and LinkedIn were also used as information sources (97%), followed by online user reviews (72%), YouTube (53%) and Q&A sites (e.g. Yahoo! Answers) (53%), blogs (32%) and microblogs such as Twitter (24%). The authors concluded that a range of SNSs and social media are used for everyday life information seeking while some are used for both everyday life information and academic purposes (Wikipedia, YouTube, Q&A sites). Furthermore, this study shows that different sites are used for different purposes: Wikipedia was used mainly for getting background/introductory information and a quick overview, while sites like Facebook were used mainly for keeping in touch with others, getting updates/news and for getting others' opinions. User review sites were used for getting others' opinions/comments on products and help with purchase decisions. YouTube was used for recreational information and for finding solutions to a problem or how-to instructions, while for problem-solving, QandA sites were also used often (Kim et al, 2011:.2).

Kyung-Sun Kim and other colleagues conducted additional studies (Kim et al, 2013; Kim et al, 2014; Kim and Sin, 2014). The 2013 study involved 1286 students from a public university filling out a web based survey. Findings showed that sources used by students for information seeking related to academic purposes were, firstly, wikis, followed by blogs, social Q&A, media-sharing sites, and forums. In 2014, two further surveys were launched to collect data *via* a web-based survey with 809 undergraduate students (Kim et al, 2014) and web-based survey plus focus groups from 1355 students in US and 194 in Singapore (Kim and Sin, 2014). Findings of the first study showed that most of the SNSs and social media platforms are used as information sources, and wikis, user reviews, and media-sharing sites emerged as the top platforms. Results also revealed differences in the frequency of information seeking and in the purpose of use depending on gender, class level, academic discipline and Big Five personality traits (McCrae and Costa, 1987). In the second study, little difference was found between the two countries, while different platforms seemed to be used depending on different contexts. Q&A sites and forums tended to be used in the academic context. SNSs, user reviews, and microblogs were used in the everyday life situations, while wikis and media-sharing services were most often used in both contexts. Recently, the JAMES (Jeunes Activités Médias) study shed light on teenagers' information seeking on SNSs (Willemse et al, 2014). Since 2010, this representative study has examined the use of media by young people in Switzerland every two years. In 2014, 1086 young people (age from 12 to 19) were interviewed. This study showed that SNS are an important information channel for them: SNSs were in third position, after videos sharing websites and search engines, with 78% (n = 854) consulting them every day or several times a week. Indeed, for the 2014 session, video sharing websites such as Youtube have been included in the survey as an

information channel. The participants declared that this kind of sites is not useful for leisure exclusively but for information seeking as well. This study also demonstrated a greater tendency for girls to seek information through SNSs.

These findings are disputed slightly by other results however. For instance, Williamson and colleagues (2012) interviewed 34 Australian students (age 18 to 25) about their topics and sources when seeking information in everyday life information seeking situations. This study did not focus especially on SNSs. These results suggest that print media such as books and newspapers still played an important role for young people while SNSs were perceived as important for interaction with friends rather than for news gathering. Although Facebook, could be used to get some types of news e.g. about friends or sport, it was still mostly used for communication. To explain this reluctance to use SNS as an information source, participants described their skeptical feelings about privacy issues and quality of information provided on line and especially *via* SNSs. Nevertheless, this study emphasized the wide range of media that young people use to meet their information needs.

and

Research questions

As this literature review demonstrates, relatively few studies exist on our topic: teenagers' information seeking on SNS. Furthermore, all the cited studies point to a lack of research on this theme and at the same time emphasize the issues that this raises. *a*. As Kim and Sin (2014: ??) argue:: "*An empirical study is urgently needed to better understand how users evaluate and use the information from these social media, and to provide help for the effective use of such sources*". Based on the insights gained from the above discussion of the literature, the following research questions will be investigated in this paper:

In the context of "Web 2.0", what does the information landscape of teenagers now look like? More specifically, do they use SNSs as information sources? What are their motivations for using SNSs specifically as information sources? Do they use SNSs as information sources for everyday life topics alone, or do they use SNSs as information sources for academic purposes as well?

Theoretical background

- **Everyday life information seeking**

The uses of SNSs by teenagers are directly concerned with the sphere of everyday life. As we have emphasized in the introduction, these uses are little studied by the research into formal settings such as the

school and workplace, but as incursions, disturbances, untimely emergence of intimacy. This subdivision between “formal” settings of information seeking (work and school) and “informal” settings of information seeking (everyday life and leisure) reinforces the traditional partition of the information seeking research into two spheres of life experience: work or job (or study) related on one hand; non-work or everyday life on the other. This distinction was evident in both theoretical and methodological claims against the lack of scientific studies about everyday life information seeking compared to studies about information seeking for work purposes in the 1980s. This led several authors to propose models of ELIS (everyday life information seeking). The model proposed by Reijo Savolainen (1995) from the Finnish university of Tampere is perhaps the best known. This founding publication revealed the place of information in daily life and the diversity of relations people have with the media, which is an appropriate basis for a study focused on SNSs.

Savolainen (1995: 266) stressed that the concept of ELIS is "*residual by nature*", meaning that it is difficult to separate completely the two contexts (professional on one side, and daily life on the other), and that the different contexts in which an individual life takes place are not fully separated from the individual’s point of view. Moreover, in the 20 years since its publication, features enabled by connected devices, such as mobile phones, have substantially evolved. It could therefore seem useful to reread the concept of ELIS in light of recent research, on mobility. Indeed, Stefana Broadbent (2015) showed how much information and communication technology transforms public and institutional spaces as a consequence of the extension of the personal and intimate sphere outside of private spaces. What were clearly distinct contexts at earlier points in history are today geographically and temporally mixed.

Savolainen (1995) highlights the potential passive nature of the informational practice. This finding echoes the practice of social networks based on a connection and constant attention to the notification system and continuous scrolling of updates. Moreover, Savoilanen’s model, as well as the other ELIS models, identify people (personal networks, family and friends) as the most easily accessible sources of information, even for information acquired by chance (Williamson, 1998; McKenzie, 2003), and mass media and institutional sources as less accessible sources of information. In line with the ELIS perspective, Agosto and Hughes-Hassell (2006) carried out a qualitative survey in order to determine the sources or channels US urban teenagers consult when engaging in everyday life information seeking and their most frequent everyday life information needs. As a result of this survey, authors found that the participants indicated a preference for friends and family as information sources for their everyday life information seeking*and*). This is an appropriatebasis for research on SNSs as information sources for teenagers because SNSs are typically human sources as they are maintained by individuals.

- **Information grounds**

The concept of « information grounds » developed by Karen Fisher (formerly Pettigrew) is relevant to understand the information environment of people. She conceived the notion as “an environment temporarily created by the behavior of people who have come together to perform a given task, but from

which emerges a social atmosphere that fosters the spontaneous and serendipitous sharing of information" (Pettigrew: 1999: 801). We choose to refer to this concept as it highlights the crucial role of human relationship and social interactions in the informational process (Fisher, Durrance and Hinton, 2004). Information grounds theory focuses on informal social settings "*ranging from book clubs, gyms, folk festivals and bus stops to hair salons and supermarket queues*" (Counts and Fisher, 2010: ??). But information grounds research points out that the main information grounds that people have are the workplace, the activity groups (linked to leisure or sport, playgrounds, clubs etc.) and places of worship. It is noteworthy that for these authors, the information needs are determined by tasks directly deducted from the professional roles. This raises questions about the role of academic setting and associated tasks in the information processes of teenagers. While the concept of information grounds does not initially include the formal context of school, it seems relevant to think that this context plays a significant role in the information sharing processes.

- **Transliteracy**

Nowadays people have to deal with a wide range of existing information sources (websites, blogs, human sources, books and magazines, booklets, media, TV, radio etc.). The concept of information literacy itself is being redefined in the light of the developing "mediascape" (Appadurai 1990) as well as its uses. A strong theoretical and methodological paradigm is hence emerging that features a "meta skill" relevant to the presented study: "Transliteracy". A definition of this concept is given by Sue Thomas and colleagues (2007:??): "*Transliteracy is the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and film, to digital social networks"*. Transliteracy emphasizes the need to work at a global level of expertise that takes into account the various media and all kind of literacies (Ipri 2010) rather than limiting activities to specific literacies, especially digital ones. In addition, the concept and research programme of Transliteracy oblige us to encompass multiple kind of motivations to use SNSs rather than the only one: the socialization aspect. As a part of the current information landscape, SNSsshould be taken into account when information culture is being defined. Furthermore, as is the case with SNSs, the concept of Transliteracy attaches great importance to the human interaction within informationseeking and sharing processes.

Methodology

In order to collect data on users' characteristics and their possible use of SNS as information sources, a study was conducted using a short online questionnaire (10 questions) developed using Google Forms. This was developed in French and translated into English and Danish. The initial questions aimed to gather basic demographic information (age, gender, course studied). Participants were then asked about their general use of SNS (number of accounts, type of SNS) andtheir information

uses of SNS (type of SNS used to seek information, frequency, topics sought, content shared or published on SNS). Regarding the topics sought, we predefined 13 categories from the literature review and from two pretest interviews of the questionnaire.

Data were collected between December 2014 and April 2015. A link to the survey was sent to librarians and teachers via email lists (e.g. CDI-DOC mailing list, School-Library-Research and LIS-Info-Skills JISCMAIL lists); professional associations (e.g. the UK School Library Association (SLA); and personal contacts of the authors). Those interested in participating were asked to send the survey link to any students they taught aged between 15 and 19. The data were downloaded from Google Forms as an Excel spreadsheet, and then imported into SPSS where the responses were analyzed. Descriptive statistics were generated for all the questions and chi-squared analysis conducted for investigated differences between gender categories of respondents.

In total, 473 responses were received: 64.5% were from female students and 35.5% from male students. The majority of students (94.3%) were aged between 15 and 18.

65.8% of responses were from students in the UK, 22.0% from France; 5.7% from Thailand; and 5.1% from Denmark. There were also a non-significant number of responses from students in other non-European countries (Namibia, Netherlands, Philippines, Qatar, Singapore and Russia).

A companion survey was also conducted in Chile for which results will be published separately (forthcoming).

Findings

Setting the scene: respondents' general uses of SNSs

Social networks high-school students have accounts for

As Table 1 shows, the most common SNSs students had accounts for were Facebook (92.9% had an account), YouTube (76.0%) and Snapchat (75.1%). Students were least likely to have accounts for Flickr (2.3%), Ask.fm (15.4%) and Vine (17.7%).

SNS	Number	%
Facebook	441	93.2
YouTube	358	75.7
Snapchat	351	74.2
Instagram	255	53.9
Twitter	249	52.6
Google+	250	52.9
WhatsApp	164	34.7
Tumblr	149	31.5
Vine	85	18.0
Ask.fm	71	15.0
Flickr	12	2.5

Table 1: Which SNSs do you have an account for? (n=473)

Other sites mentioned by small numbers of students include Pinterest, WeChat, DeviantArt, BuzzFeed, Reddit, StumbleUpon, Instapray, Meow Chat, Viber, Twitch, 9GAG and Skype.

There were some differences between SNSs male and female students had accounts for. There was strong evidence that female students surveyed were more likely to have an account for Instagram (F=63.3%; M=36.9%; $p<0.01$), WhatsApp (F=39.7%; M=25.6%; $p<0.05$) and Tumblr (F=38.7%; M=18.5%; $p<0.01$) and there was also some evidence that they were more likely to have an account for Snapchat (F=78.0%; M=67.3%; $p<0.05$). However, there was greater use of Google+ (F=47.2%; M=63.1%; $p<0.01$) and YouTube (F=71.5%; M=83.3%; $p<0.01$) amongst male students.

Social networking sites students use most regularly in general

Facebook was, overwhelmingly, the most commonly used SNS (77.4% said they used it regularly), as shown in Table 2. Snapchat (33.2%) and Instagram (29.2%) were next, followed by YouTube (27.3%) and Twitter (22.6%). The proportion of account holders who considered themselves regular users ranged between 83.0% for Facebook to 2.4% for Google+. However, only 1.9% of students surveyed did not use any SNSs regularly.

SNS	Number	%
Facebook	366	77.4%
Snapchat	157	33.2%
Instagram	138	29.2%
YouTube	129	27.3%
Twitter	107	22.6%
Tumblr	71	15.0%
What's App	36	7.6%
Google+	6	1.3%
None	9	1.9%

Table 2: What social networking sites do you use most regularly in general? (n=473)

Other SNSs mentioned by less than five students included Skype, Reddit, Pinterest, Vine and Soundcloud.

Do the participants use SNSs as information sources?

How often students use social networking sites are used to seek information

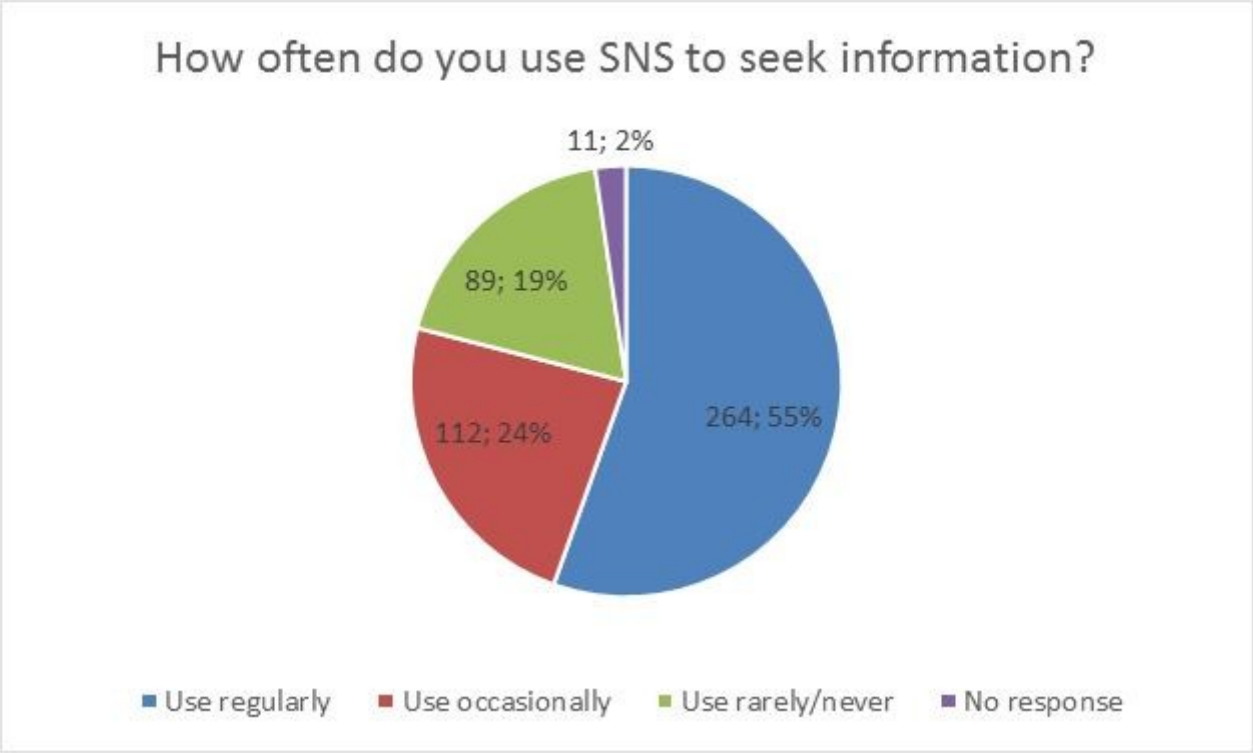

Figure 1: How often do you use these social networking sites to seek information? (n=473)

More than half the students (55.8%) used SNS to seek information regularly and almost a further quarter (23.7%) did so occasionally. Just less than a fifth (18.8 %) rarely or never used SNS to seek information (see Figure 1). A few indicated in their responses that they felt the idea of doing so was ridiculous.

Social networking sites students use most regularly to search for information

When students were asked about SNSs used to search for information, again, Facebook was the site used most regularly (39.1%), as shown in Table 3. YouTube was used regularly to search for information by 30.2% of students and Twitter by 20.0%. All other SNSs were used regularly to search for information by less than 10% of students. The popular general sites, Instagram and Snapchat were used by just 3.8% and 0.8% respectively for information purposes.

SNS	Number	%
Facebook	185	39.1%
YouTube	143	30.2%
Twitter	95	20.0%
Google+	44	9.3%
Tumblr	31	6.6%
Instagram	18	3.8%
WhatsApp	7	1.5%
Reddit	7	1.5%
Pinterest	5	1.1%
Snapchat	4	0.8%
None	103	21.8%

Table 3: What social networking sites do you use most regularly to search for information? (n=473)

The number of students regularly using specific SNSs to search for information was less than the number using the same SNSs for general purposes, with the exception of Google+, Reddit and Pinterest which were mentioned more frequency as sites used regularly for information purposes. A little over half the number of students who used Facebook regularly in general used it regularly specifically to search for information, but more than four-fifths of the number using Twitter and YouTube in general used them specifically to search for information.

What are participants' motivations for using SNSs specifically as information sources?**to**

Kinds of information students sought on social networking sites

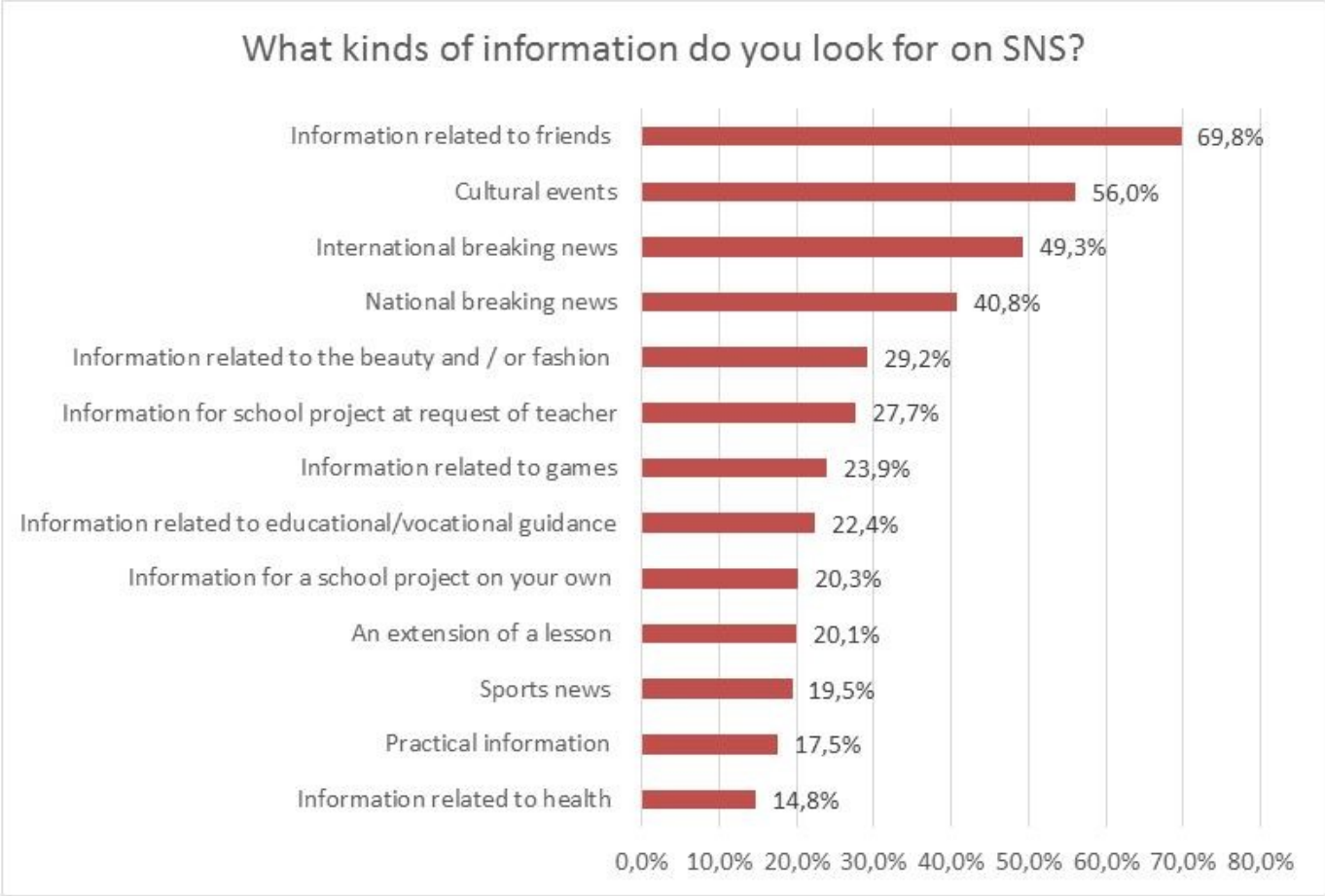

Figure 2: What kinds of information do you look for on these SNSs? (n=473)

Information related to friends was the most common type of information students looked for on SNSs (69.8%). This was followed by information about cultural events (56.0%) and international news (49.3%)[1]. Information related to health (14.8%) and practical information (17.5%) were the least commonly sought types of information (see Figure 2). There were some, mostly not unexpected, gender differences in the types of information sought via SNSs. Male students were more likely to look for sports news (F=11.8%; M=33.3%; $p<0.01$) and games-related information (F=10.8%; M=47.6%; $p<0.01$), while female students were more likely to use SNSs for information about fashion and beauty (F=42.3%; M=5.4%; $p<0.01$).

1 The percentage searching for national news may be slightly lower than expected as international responses to the English version were not anticipated at the survey launch, so mention of the UK in the description of this item may have been misleading for overseas students.

Female students were also most likely to uses SNSs to find information about friends (F=77.4%; M=56.0%; $p<0.01$) and cultural events (F=60.0%; M=48.8%; $p<0.05$).

While tasks directly related to education and school were not amongst the most common reasons for using SNSs for information purposes, neither were they at the bottom of the list. More than one-quarter of students (27.7%) said they used SNSs to find information for a task at the direction of a teacher and one-fifth (20.3%) used SNSs to find information for a school project independently (i.e. not explicitly directed teacher). Around the same percentage (20.1%) said they had used SNSs to find additional information about topics taught in class. In addition, just over one-fifth (22.4%) used SNSs to search for information related to educational and vocational guidance. There were no significant gender differences in the use of SNSs for obviously school-related tasks.

Other types of information mentioned by small numbers of students included travel and geography; cookery; 'how to' videos; information about music and films; political and activist information; and information about hobbies.

Satisfaction with the quality and reliability of information found on SNSs

When asked how often they were satisfied with the quality and reliability of information they found on SNSs, students' responses were skewed towards the positive end of the scale, although just 5.1% said they were always satisfied (Figure 3). The information on SNS clearly has some value for most students, although they are conscious it needs to be treated with caution. There was a gender difference between the levels of satisfaction expressed by male and female students ($p<0.01$), with boys more likely to express more extreme opinions while girls were more moderate and more likely to select the middle option.

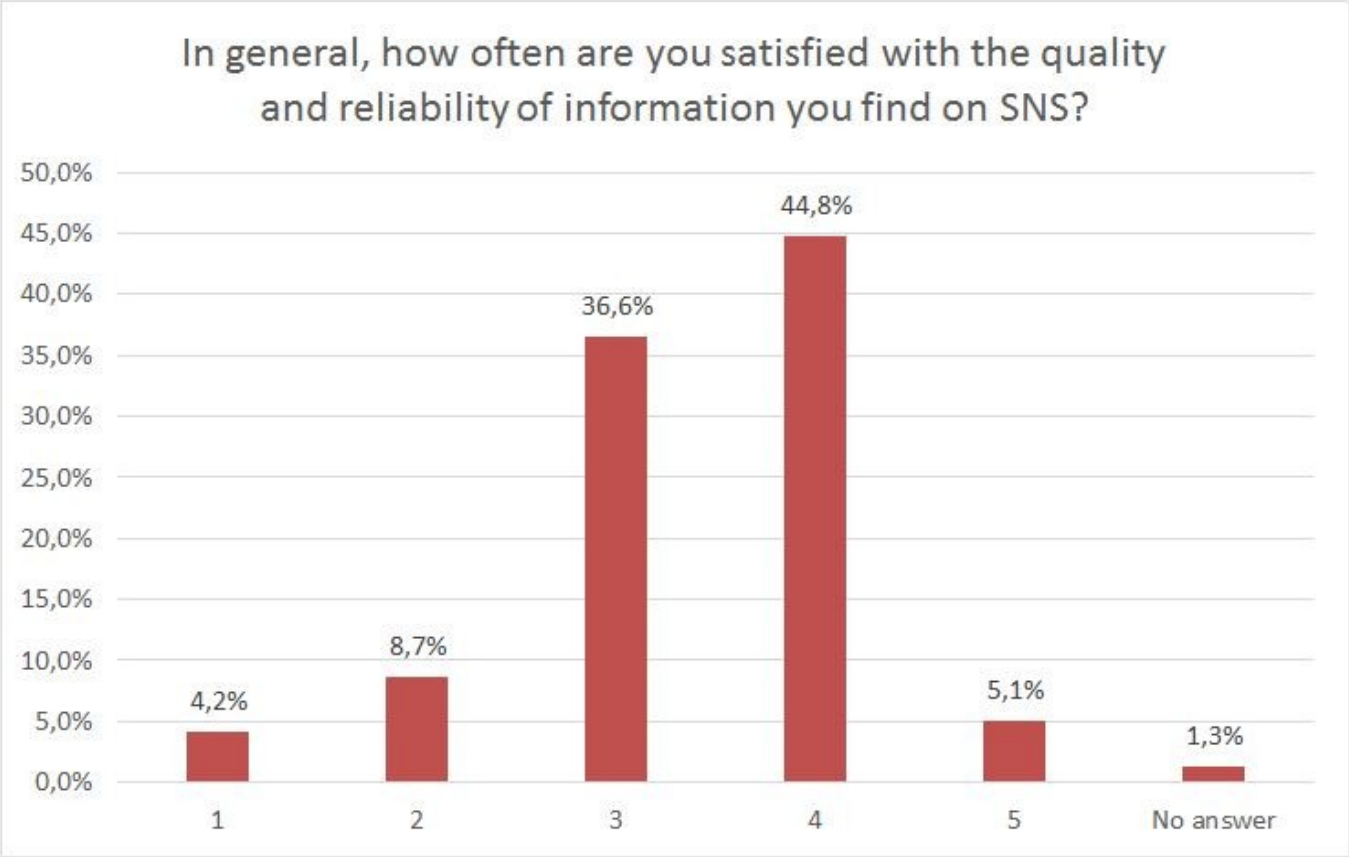

Figure 3: In general, how often are you satisfied with the quality and reliability of information you find on these SNSs? (n=473)

Do you publish information on SNSs?

Only 16.5% of students said they did not publish any information on SNSs. There was a statistically significant difference between boys and girls in response to this question with boys being less likely to publish information on SNSs (F=11.1%; M=26.2%; $p<0.01$). Personal photos or videos were the most common form of publishing information on SNS (67.2%), especially amongst female students (F=75.7%; M=51.8%; $p<0.01$). This was followed by publishing comments and opinions (63.6%). Around one-quarter of students said they published academic information such as class Facebook groups (27.7%) and similar proportions republished information found elsewhere (24.3%) and personal texts (23.7%) (see Figure 4).

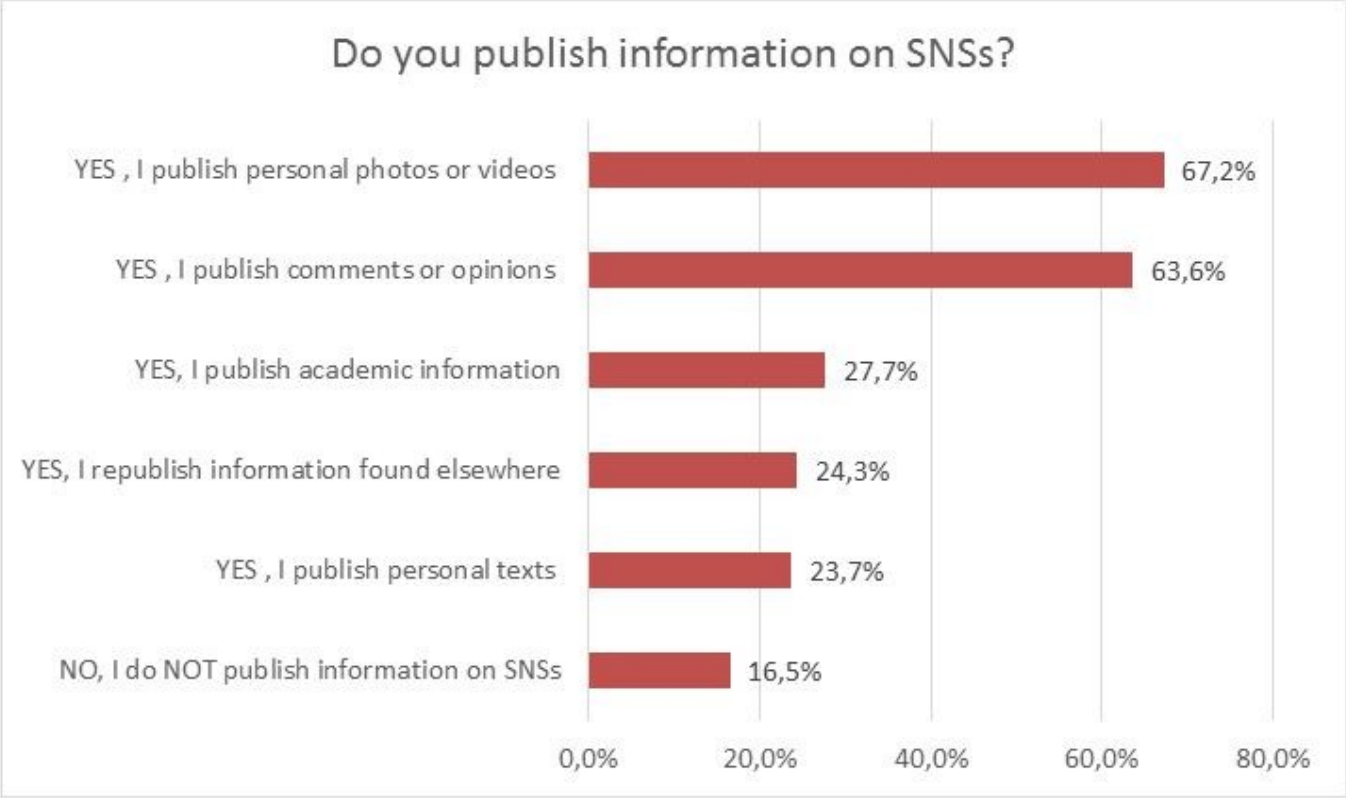

Figure 4: Do you publish information on SNSs? (n=473)

Discussion

We will not dwell on the results of our survey concerning general SNSs use because our results are in line with other quantitative data and show that teenagers are great users of SNSs. The questions regarding the respondents' general uses of SNS (e.g. « What social networks do you have an account for? », « What social networking sites do you use most regularly IN GENERAL? »), were there, primarily, in order to define as clearly as possible the subject of the survey to the respondents, that is specifically social networking sites (as listed in our survey) and not some other web based tools such as search engines. Some responses to the later open questions show indeed that the label "Social Networking Sites" is not particularly clear for some participants. For instance, some answered Google, Yahoo, Bing, Gmail, Mozilla or Hotmail. It is a limitation of the web-based questionnaire methodology that some respondents could misunderstand the exact subject of the survey, even though a short and as clearer as possible definition was provided. With hindsight, this is unsurprisingly: as mentioned in the introduction, SNSs is a term that is often used imprecisely in everyday situations and teenagers are likely to have approached the survey with their own pre-formed understandings of the term. A better knowledge of teenagers' understanding of SNSs is necessary and could be achieved through face-to-face interviews. Furthermore, this would allow teenagers' understanding of the concept of information itself and information seeking to be addressed. This is thus why we have considered our study to be explorative. That being said, we want to focus here explicitly on information practices with SNSs.

Around 20% of young people said they never used SNSs for information seeking and a number indicated that they felt that to do so would not be appropriate: "I don't search for information on social networking

sites", "I don't use these sites to find out information, I use the BBC news app for news and google for other purposes", "None, why would I, stupid question". Here again, it's quite impossible to say whether the respondent never uses SNSs to seek information or if he or she thinks what they search for on SNSs is not really "information". However our results demonstrate that, as stated by our first research question, SNSs are, indeed, information sources for most of these teenagers. Approximately four-fifths of the respondents said they use SNSs to seek information occasionally or regularly. Although some SNSs were primarily used for general purposes, others such as Google+ were more likely to be used for information seeking.

Even SNSs with a strong social element such as Facebook were regarded as information sources by large proportions of those surveyed. These results suggest it is important to look deeper into the question of the multiple motivations for using SNSs. They demonstrate that social motivations, such as maintaining the links with friends and following conversations, are definitely not the only motivation for teenagers to make use of social networking sites. These results thus confirm the data presented into the literature review as to the informational motivation to make use of SNSs, especially among teenagers. Moreover, this research has provided specific data regarding teenagers at high school level, in contrast to older university students on whom the majority of research to date has been focused. Our findings suggest that, like their older peers, 15-19 year olds make use of a wide range of possible information sources, including those sources where social interaction plays a decisive role

With regard to the second research question, our research found that the kinds of information teenagers most commonly looked for on SNS were related to social activities: information about friends and social events. This in itself is a quite predictable result. But we also found that information about wider issues was important too as SNSs were commonly used to find out about national or international news. Our results here complement those from the JAMES study (Willemse et al, 2014) about the information topics sought by the teenagers via SNSs. Indeed, as mentioned in our literature review, the JAMES study reports the key rank occupied by SNSs within digital information practices of young people, but JAMES gives no indication about the specific areas of life or themes covered by these information seeking uses. Our study and the categories we have identified bring to light the variety of areas covered by these informational uses of SNS, from cultural events to health. Here again face-to-face interviews might be helpful to find out more categories or also to refine those we suggested.

At this stage, one of the most interesting results is that although academic purposes for information seeking were not among the most common reasons for using SNSs for information purposes, the study indicates that many students do use SNSs for academic purposes as well as for everyday life information seeking. So, while respondents say they use SNS in order to find information related to the national and international news, culture, beauty or fashion, they also report using SNSs to find

information linked to the school setting and academic tasks. Searching for information on SNS following the request of a teacher comes in sixth place (27.7%) of the 13 predefined categories in our questionnaire. It is also worth noting that, unlike information seeking for some everyday purposes, there were no significant differences between male and female students in their use of SNS for academic-related information seeking. Within our questionnaire, two other categories are related to information seeking based on academic tasks: “information for a school project on your own” (20.3%), “an extension of a lesson” (20.1%). Another category is closely linked to academic concerns: “information related to educational/vocational guidance” (22.4%). The information use of SNS for academic purposes among high school students is therefore far from insignificant despite the dismissive attitudes often in evidence, as mentioned in the introduction. In follow up interviews it would be interesting to explore whether independent use of SNSs for academic tasks is encouraged (or accepted) only by certain teachers or in particular subjects, or whether it is something that students engage in across the curriculum. It would also be valuable to consider exactly how teenagers make use of such resources for academic purposes, and whether they receive any guidance or training from teachers or librarians in doing so.

Implications for theory building

From the perspective of the « information grounds » theory, the results presented here suggest that SNSs could be considered as online “information grounds”. Based on the seven propositions that define “information grounds”, Scott Counts and Karen Fisher already showed in their study of SLAM, a mobile messaging device, that an online platform can be thought as an information ground (Counts and Fisher 2010). With SNSs, formal and informal social interaction is usually a primary purpose but information sharing can also occur. As our respondents were teenagers, the significant role of academic tasks in these processes should be noted and may be compared with the role of professional tasks for adult groups. The surveyed teenagers reported that they use SNSs to satisfy information needs. From the perspective of the ELIS model, informational uses of SNSs here are clearly associated with everyday life and ordinary socialization, but they are also related to school tasks including those which are prescribed or compulsory. These results also let us see different uses of SNSs uses that may even appear to be seemingly contradictory (friends and socialization on one hand, educational tasks on the other hand) but which are mixed in the reality of these teenagers’ practices. This is a specific illustration of the porosity of contexts which the

works of Stefana Broadbent (2015) highlighted. These results underpinned the necessity for the researchers to take into account the reality of everyday life, ordinary and tiny, information uses but also the theoretical need to re think ELIS models in the light of this interlacing of contexts.

Daily information practices are crucial and particularly for young people's personal development, for example, regarding personality, citizenship and the lifelong learning skills, and these have been shown to be more heterogeneous than different (Livingstone and Helsper, 2007; Hargittai and Hinnant, 2008; Mercklé and Octobre, 2012; Hatlevik and Christophersen, 2013; boyd 2014). Indeed provision or access are not sufficient on their own to create use, and practices can be very different, even discriminating, from an individual to another. As Gil de Zuniga (2009: ??) mentioned regarding information motivations and political participation: "(…) it is not the media per se that can affect individuals' social capital and engagement, but the specific ways individuals use media". Despite many critiques of the concept, the "digital natives" representation is still often used to describe the digital practices of teenagers in a global way and on a generational divide basis. But it seems essential to better understand these practices at a personal level, their evolution through the interaction with others, the multiplicity of information sources and the relations between different settings (Octobre, 2008; Zaffran and Pouchadon, 2010). In the same way, this research could highlight the heterogeneity of young people's uses of SNSs for information purposes. There is clearly not a single model 'digital native'; teenagers differ in their attitudes towards SNSs as information sources; the specific SNSs used; the information purposes for which they used SNSs; and their publishing habits. While some teenagers make use of a wide range of SNSs for both academic and everyday purposes, others restrict their information seeking to non-academic purposes, or do not feel they use SNSs for information seeking at all. A question for further research is whether some teenagers make limited use of SNSs for information purposes because they lack the skills needed to do so. Although they may possess the information literacy skills needed to use more traditional information resources, including online resources, effectively, they may not have the range of literacies required to seek information from SNSs. This appears a likely scenario as comments from some students indicate that they were not even open to the possibility of searching for information using SNS. Heterogeneity can be perceived also in the declared publishing uses of SNSs: only 23.7% of the respondents said that they publish personal texts on SNSs, and 16.5% declared that they never publish content of any kind there. It could

be relevant to better understand the motivations of these publishing habits, as well as the academic uses of SNSs, in the light of work of Lampe et al (2011) who showed that students may use SNSs such as Facebook to perform academic tasks or homework assignments and to discuss about school life or teachers' instructions.

The significant position of SNSs in teenagers' information landscapes, demonstrated through the findings reported above, should encourage educators to consider this type of sources while designing information literacy training programs and especially while developing critical thinking strategies and curricula regarding specifically these social sources. The results of this survey put a different perspective on the training objectives set by the information literacy standards especially those which promote a wider approach, not only focused on digital media, such as Transliteracy. Nowadays, the expert is indeed the one who is able to benefit from different, or even opposing, information sources or media, and to use them equally. While the results have demonstrated that SNSs are used in academic tasks, SNSs are still banned from many schools, associated with teenage life and juvenile socialization, essentially viewed from the perspective of risk and protection of personal data. These results reaffirm the necessity to take into account the important role of social interactions in the information processes that are definitely not merely a simple relationship between an individual and an information system. In line with the paradigm of Transliteracy, our results help to point out educational and social issues at stake in the different types of SNSs uses.

Conclusion

While this study has some limitations as explained above, it suggests promising areas for further research and in particular reflections about the relevance of current IL guidelines and training by highlighting the importance of teenagers' SNS usage. SNSs, in particular Facebook, YouTube, and Twitter, are used by the teenagers who responded the questionnaire to search for information, . Regarding tasks directly related to education and school, SNS are used to find information for a task at the direction of a teacher but also for school projects not explicitly directed by teacher and about topics not taught in class. In addition, SNSs are used to search for information related to educational and vocational guidance. The school oriented searches are, therefore, far from being meaningless in these results and suggest it is possible to investigate school and academic tasks as possible a information ground "lever", engaging people in both formal and informal information sharing. By highlighting the role of SNSs as an information source for teenagers both within school

and beyond, this research has stressed the porosity that exists between the two "opposing" settings: everyday life and school. While SNSs are frequently described as typical tools in teenagers' social lives, we should keep in mind that the same SNSs could equally be used for academic purposes. Although information grounds theory has not traditionally included school contexts, we would argue that this approach offers a potentially fruitful framework within which to explore the ways in which teenagers use SNSs, not only as communication tools, but as information sources.

This research draws attention to the importance of Transliteracy, or more specifically, taking SNSs into account alongside a wide range of information sources, from word of mouth to books, when designing IL guidelines and media awareness programmes. Research considering SNSs as information sources has the potential to enhance the knowledge about human relationships as an information source, which has been shown to be an important means for information seeking and sharing. It could also contribute to better understanding the information seeking activity in a Web 2.0 context, still for the most part overlooked (Hyldegård, 2009; Boubée and Tricot, 2010).

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