

## Association for Information Systems AIS Electronic Library (AISeL)

---

ECIS 2015 Completed Research Papers

ECIS 2015 Proceedings

---

Spring 5-29-2015

# "Unsociability" as Boundary Regulation on Social Network Sites

Sanna Malinen

University of Tampere, [sanna.malinen@uta.fi](mailto:sanna.malinen@uta.fi)

Follow this and additional works at: [http://aisel.aisnet.org/ecis2015\\_cr](http://aisel.aisnet.org/ecis2015_cr)

---

### Recommended Citation

Malinen, Sanna, ""Unsociability" as Boundary Regulation on Social Network Sites" (2015). *ECIS 2015 Completed Research Papers*. Paper 128.

ISBN 978-3-00-050284-2

[http://aisel.aisnet.org/ecis2015\\_cr/128](http://aisel.aisnet.org/ecis2015_cr/128)

This material is brought to you by the ECIS 2015 Proceedings at AIS Electronic Library (AISeL). It has been accepted for inclusion in ECIS 2015 Completed Research Papers by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# 'UNSOCIABILITY' AS BOUNDARY REGULATION ON SOCIAL NETWORK SITES

*Complete Research*

Malinen, Sanna, University of Tampere, Tampere, Finland, sanna.malinen@uta.fi

## Abstract

*This study approaches online social networking from the opposite direction, focusing on unsociability, in an attempt to find out how friendships are negotiated and terminated online. The research data was obtained via an online survey (N=107) targeted to SNS users. The findings show that Facebook is closely connected to offline social life, and the fading of offline relationship was the most common reason for cutting ties on Facebook. Usually, the people who were unfriended represented weak ties. Even though unfriending can be considered as the hardest form of unsociability, it was more commonly used than restricting content from certain people. On Twitter and other SNSs, the relationships were less personal. Therefore, 'unfollow', 'block' and other unsocial features were used to filter and regulate the content subscribed to. Particularly on Facebook, attention should be paid to developing affordances that would enable the system to better match the dynamic and complex nature of social relationships.*

*Keywords: Social network sites, SNS, Privacy, Self-presentation.*

## 1 Introduction

With millions of registered members worldwide, social network sites (SNSs) have become the number one online activity in terms of popularity. Inspired by their success, research on SNSs has investigated how friendships are formed and sustained online. There is evidence that online social networking can increase people's social capital and improve their well-being (Ellison et al., 2007). Even though the majority of research has focused on the forging of social ties, SNSs also enable behavior that can be seen as the opposite of this by providing users with various technological tools intended for filtering and restricting content. These tools can be used, for instance, to prevent certain people from seeing the content posted or to remove contacts from one's social networks. By using these features, people can select who they share personal content with, and, at the same time, limit the content accessible to the others. So far, only a few studies have discussed these behaviors, referred to as unsociability (Gutierrez Lopez & Ovaska, 2013). Investigating the reverse side of sociability is important, as it can shed light on how online relationships are constantly negotiated and managed. Identifying how and why these features are used can also reveal what kinds of social tensions exist on SNSs regarding self-disclosure and privacy, and how these tensions are actually resolved.

In this study, the term 'unsociability' is applied to describe behavior that appears as the opposite of creating ties, forming new relationships and sharing personal content with others. It refers to the use of features intended to limit, control and remove social contacts and content on SNSs. It can also refer to situation in which a person is not enjoying the company of someone and thus withdraws from social interaction with this person. However, in the context of this study, unsociability is not considered as negative behavior but understood as regulation of personal boundaries on SNSs. By making social practices and acts related to unsocial behavior visible, this study attempts to understand the conventions and tensions of relationships on social network sites. Furthermore, the findings regarding users' current boundary regulation practices also reveal how well their needs are met in the design of privacy tools.

## 2 Background

### 2.1 Sociability on SNSs

According to a definition given by boyd and Ellison (2007), social network sites allow individuals to construct a public or a semi-public profile, to create a list of other users with whom they share a connection, and to view and navigate their list of connections and those made by others within the system. However, this definition does not specify the quality of the connections established, only that the participants are linked in some way (Lange, 2008). The linking of profiles through friendship requests and the acceptance of such requests, and the ability to view the resulting connections on others' profiles are tangible mechanisms that reflect the state of the individuals' social networks (Donath & boyd, 2004). They also indicate change, as the relationships can be constantly formed or abandoned (Ellison et al., 2007).

One way to categorize SNSs is through the importance they place on content and sociability. There are friendship-oriented SNSs, where the main purpose is social networking, and content-oriented SNSs, where content is the main reason for participation. One major difference between SNSs can be found in the symmetry of relationships: in 'purely social' SNSs, the relationships usually constitute symmetrical and mutual friendships, whereas in content-based SNSs they are asymmetrical and the aim is to follow or subscribe to desirable content (Laine et al., 2011). In an asymmetrical SNS, any individual can choose to follow any account without the need for them to follow the person 'back'. Because following does not require invitation or acceptance, people can freely and easily follow others (Kwak et

al., 2011). On Twitter, this means that connections depend less on in-person contact, as a user may have more followers than he or she personally knows (Gruzd et al., 2011).

Content sharing and self-disclosure are essential for the success of SNSs, and sites like Facebook can only exist as long as their users are willing to share personal information (Brandtzaeg et al., 2011; Blatterer, 2010). According to Acquisti and Gross (2006), the requirement of self-presentation is built into SNSs: for example, it is not possible to create an account on Facebook without the creation of a personal profile. Blatterer (2010) argues that on SNSs the pursuit of visibility is in tension with the need for privacy, and therefore users need to give up some of their privacy in order to socially interact with others. As there is a constant negotiation between publicity and privacy within SNSs, questions of how and why people limit the visibility of content or withdraw from interactions with others become important.

## 2.2 Unsociability on SNSs

Friendships on social network sites are often described as weak-tie type of relationships, meaning that they are people we have met briefly and do not share long history with. However, weak ties can be beneficial as they can serve as an information source and broaden our resources in terms with social capital (Baym, 2010). It is important to keep in mind that an SNS friend is not necessarily an actual friend, and that people may add various types of connections to their friends list, including persons who they have a complicated social relationship with (boyd, 2006). Therefore, when we want to share personal and confidential information, we may need to limit access of those not perceived as reliable or close. Obeying the logic of computer functions, unsociability here refers to the fact of undoing something, to reversing an act of sociability (Zimmer, 2009; Gutierrez Lopez & Ovaska, 2013). According to Zimmer (2009) functions such as unfriend and unfollow are metaphors for undo in computer programs, as they allow people to return to a previous state. However, Gutierrez Lopez and Ovaska (2013) emphasize that the terms 'unsocial' and 'antisocial' are not synonymous: unsocial behavior should by no means be deemed harmful or extreme; to the contrary, unsocial behavior is not hostile, but indicates personal preferences thus enabling users to avoid negative or awkward social situations. Unsociability can therefore be seen as an attempt to save face in potentially embarrassing and face-threatening situations and as necessary for the purpose of managing self-disclosure and privacy concerns online (Gutierrez Lopez & Ovaska, 2013; Bryant & Marmo, 2012).

Gutierrez Lopez and Ovaska (2013) have divided unsocial activities into 'soft' and 'hard' based on the awareness cues they send to the target of the act. According to them, the most visible act of unsociability on Facebook is unfriending, which can be seen as the tip of the iceberg in relation to a variety of more subtle and invisible unsocial acts (Gutierrez Lopez & Ovaska, 2013). For example, unresponsiveness, i.e. not reacting to a request, is invisible and therefore the softest form of unsociability, as it leaves no awareness cues for its target and is easily reversed. Several features of the user interface of Facebook also include unsocial elements, as they allow users to undo their actions or limit and prevent the visibility of content posted by them on the site. These features include: restrict, hide from newsfeed, unlike, block, reject, untag and unfriend. Unsociability as a whole can be considered rather subtle, as in its hardest forms the target is not notified what has taken place. Previous research has identified a behavioral norm requiring that unsociability be kept discreet, and that people did not confront others regarding possible tensions; people also tend not to take unfriending personally (Gutierrez Lopez & Ovaska, 2013). However, when they knew who unfriended them and particularly if they were unfriended by a close friend they were found to respond more negatively (Bevan et al., 2012).

Previous research on the use of unsocial features has focused largely on relationship-ending on SNSs (Bevan et al., 2013; Sibona & Walczak, 2011; Sibona 2013 & 2014; Kwak et al., 2011; Quercia et al., 2012). Sibona and Walczak (2011) identified several online and offline reasons for unfriending someone on Facebook. Among the most common online reasons were too frequent, unimportant or and polarizing posts, whereas among the offline reasons were disliked behavior and changes in the relation-

ship (Sibona & Walczak, 2011). Unfriending is more likely to happen if the connection is a weak-tie type of relationship, which explains why most often Facebook friendships were ended with high school friends with whom there has been no contact for years (Sibona & Walczak, 2011; Sibona, 2014). There seems to be significant differences in the reasons for unsociability depending on the site. On Twitter, people value content over social matters and use unsocial features to limit unwanted content, whereas on Facebook the reasons for unsociability are mostly related to social relationships (Gutierrez Lopez & Ovaska, 2013; Kwak et al., 2011). Previous research indicates that unfollowing on Twitter is a frequent occurrence and that people unfollow others because they tweet too much, or about uninteresting topics (Kwak et al., 2011).

### 2.3 Unsociability as boundary regulation

Self-disclosure is essential to the processes of relationship formation and maintenance, as greater disclosures between relational partners contribute to their closeness (Altman & Taylor, 1973). However, privacy concerns have been found to prevent users from sharing and disclosing matters online (Brandtzaeg et al., 2010; Stutzman et al., 2013; Vitak & Kim, 2014). Privacy is maintained through a regulation process, in which the individual controls the limits of disclosure in different ways. Altman (1975) has defined boundary regulation as a co-operative and social process of people attempting to achieve an optimal social situation in which they attain the degree of privacy that they desire.

A feature typical of SNSs is that they enable users to create individually-constructed networks bringing people they are familiar with from different contexts together in a single location. This phenomenon is referred to as context collapse (Marwick & boyd, 2011). Even though large networks of friends from different social contexts can provide users with a great deal of social capital, challenges are also present in the form of simultaneously ensuring privacy and promoting content-sharing and sociability. Unlike in traditional online communities, on SNSs a person can belong to multiple networks, which can make it more difficult to grasp the boundaries of the 'community' (Ellison & boyd, 2013). As the composition of Facebook networks is known to change over time, situations can arise in which a person's conception of the actual size and composition of the audience do not match reality (Acquisti & Gross, 2006). Facebook friends also represent different types of relationships with regard to closeness. In their study on Facebook, Bryant and Marmo (2010) divided the respondents' contacts into close friends, casual friends, and acquaintances, and found that a different set of rules for relationship maintenance were applied to each of these friend groups. Because the structure of SNSs does not allow different self-presentation strategies for different audiences, tensions arise particularly when a person attempts to create a continual presentation of self (Marwick & boyd, 2011).

The privacy settings of the user interface of Facebook are considered rather simple when it comes to hiding content from people outside of one's friend network (Johnson et al., 2012). However, users raised concerns about certain people on their friends list being able to view content not intended for them and these situations being more difficult to resolve (Johnson et al., 2012). According to Johnson et al. (2012), people were less prepared to deal with problems that arise from their Facebook friends coming from different social contexts and they had to apply a variety of ad hoc strategies to address the situation. Particularly younger people have been found to experience social surveillance and social control which forces them to adjust their behaviour by, for example, using conformity as a strategy when sharing content with connections from various contexts (Brandtzaeg et al., 2010). Also the boundaries between professional and personal lives have been found to cause concerns among Facebook users and people have developed several strategies for keeping their professional and personal lives separate, including reserving Facebook for 'real friends' only, creating multiple accounts, and limiting content to material appropriate for all friends (Vitak & Kim, 2014). Other popular strategies identified for mitigating and avoiding socially awkward situations on Facebook are curating the friends list, control via deletion, deleting pics or untagging them (Johnson et al., 2012). According to Wisniewski et al. (2012), ineffective boundary regulation can cause stress, which can be relieved with

various coping mechanisms. They found that in addition to employing technology-supported mechanisms (behaviors supported by SNS interface controls), people have also developed various coping mechanisms (responses to the situation not based on the utilization of technological functions) to mitigate social interactions that cause emotional stress (Wisniewski et al., 2012). They also identified several situations in which the boundary regulation mechanisms were not adequate but created potential for negative consequences. For instance, hiding someone means that person still has access to one's network, and, conversely, unfriending someone who is a real friend removes the possibility of future interactions that could strengthen the relationship and could even harm the relationship by emotionally hurting the other person (Wisniewski et al., 2012).

Acquisti and Gross (2006) argue that on SNSs security, access controls and privacy are weak by design. The reason for this lies in the utility of posted content for the service: the easier it is for people to join and connect with other users, the higher the utility of the content to the users themselves and the higher its commercial value to the network's owners and managers (Acquisti & Gross, 2006; Blatterer, 2010). Previous research shows that in order to maintain the desired level of privacy, people need to regulate how much and for whom they self-disclose on SNSs, and unsocial features have an important role in the regulation of personal boundaries between the contradicting requirements of privacy and visibility.

This study explores situations that cause tensions in online social relations and how users cope with these tensions by using various technical features on SNSs. However, not only technology-supported features are needed for successful boundary regulation but people need to apply behavioral strategies as well. Even though unfriending and relationship dissolution often carry negative associations, in this study they are viewed as a non-negative and necessary mechanism of privacy regulation and impression management. Unsociability can thus be understood as availability management, that is, behavior that allows us to control when and how we interact with others in services that support awareness cues (Birnholtz et al., 2012).

The following three research questions are addressed:

- What kinds of unsocial situations do users engage in on SNSs?
- Why do people use unsocial features on SNSs?
- Are the current unsocial features sufficient for users' needs for boundary regulation?

### **3 Method and data**

Data was collected using an online questionnaire aiming to find out which unsocial SNS features people used, how they used them and what were their reasons for using them. The questionnaire was targeted at SNS users, and it was distributed via Facebook groups and mailing lists. In the invitation, people were encouraged to share the link in their own social networks. The data collection was thus conducted in accordance with the snowball sampling technique (Morgan, 2008). The online questionnaire was provided in Finnish language and it was available for three weeks in March 2014.

First, the respondents were asked about background demographics, such as age, gender and occupational status. Background questions also included questions on SNSs use in general. The second part of the questionnaire contained questions charting the use of three different SNSs. Because Facebook is the most popular and best-known of social network sites, questions concerning Facebook were asked first. Second, there were questions intended for the users of Twitter, which was chosen as a target of this study because, along with Facebook, it is one of the most popular SNSs globally. Because we assumed that in addition to Facebook and Twitter there would be a great deal of dispersion regarding the different social network sites used by the respondents, in the third section of the questionnaire the respondents had the opportunity to themselves choose the SNS they wished to answer the questions on. This provided us with more diverse data on SNS use.

The online questionnaire also included several qualitative open-ended questions in which the respondents were asked to provide detailed descriptions of unsocial situations they had engaged in and to explain their reasons for using unsocial features. The respondents were also asked to describe with their own words the situations in which they had been an object of unsociable actions by others. The qualitative data was analyzed by producing classifications and generalizations with the aim of identifying recurring patterns and themes in unsocial situations and acts that they give rise to. The quantitative data was analyzed statistically.

## 4 Results

### 4.1 Participant demographics

A total of 107 responses were obtained. The majority (79%) of the respondents were female. As their socio-economic status, 59% stated student, whereas 27% were working full time. The age range was 17–54 years, average age being 30 years. As was expected due to the sampling technique, 100% of respondents were registered on Facebook. They were rather experienced Facebook users, as 71% reported having been registered on Facebook for five years or longer. Their number of Facebook friends ranged from 30 to 743 (median 208). When asked who their Facebook friends are, the most frequently mentioned friend types were 'family members and relatives' (97%) and 'close friends' (96%). Only 14% had added people whom they had never met face-to-face as their Facebook friends.

Twitter was significantly less popular among the respondents as only 37% of the participants reported being a registered member. The respondents were also rather new to Twitter, with the majority having used it for 1 to 2 years (47%) or 3 to 4 years (24%). The average number of followers on Twitter was 14 and followings 63. As for their use of other SNSs, the most popular other SNSs were YouTube (60% of the participants were registered members), Google+ (46%), and IRC-Galleria (39%).

### 4.2 Unsociability on Facebook

In the questionnaire, the respondents were asked to state which of the unsocial features of Facebook they had used. As shown in Figure 1 below, the most commonly used unsocial features were 'reject' (86%), 'unfriend' (79%) and 'hide from newsfeed' (77%), whereas 'blocking' someone (40%) or 'un-tagging' oneself from pictures (40%) were the least common among respondents.

Against expectations, using the hardest form of unsociability, unfriending, seems to be rather common on Facebook: the majority of the respondents had unfriended someone. When asked for a reason, 82 respondents (77%) provided an explanation for unfriending. The most commonly cited reasons were related to offline context; the reasons are categorized and presented in Table 1 below. The most popular explanation for unfriending was having lost connection with the person in the course of time, or not having known the person very well in the first place. These contacts were described as persons that 'I wouldn't say hi to if I came across them on the street' or 'next to whom I wouldn't sit on a bus'. Usually, these contacts were added after meeting them at parties or through mutual friends, and when the friendship did not evolve as expected they were removed later on. The results show that friendship dissolution on Facebook was usually not described as a dramatic event but rather, people just found that they did not actually have anything in common in real-life with this person, which made the reading and sharing of personal updates inconvenient.

*'I have removed people because I don't want people that are essentially strangers to me keeping track of my life.'*

*'I have removed people who I'm never likely to see again and who I wouldn't say hi to if I came across them on the street.'*

*‘I have accepted a friend request a couple of times after a night out for reasons of politeness, but removed those people pretty soon after.’*

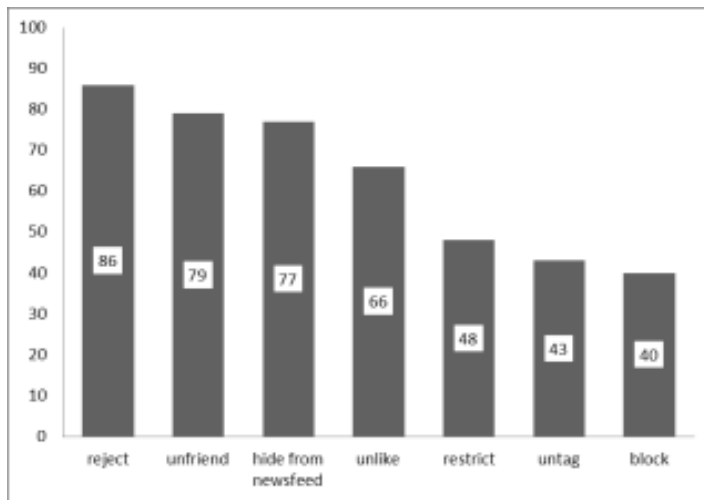


Figure 1. Popularity of unsocial features on Facebook as percentages (N=107)

There were some examples of more dramatic friendship endings such as arguments and rifts. Most common of these were the breakups of romantic relationships. The breakups had often resulted in unfriending the ex-partner but sometimes the friends and family of the said partner as well.

*‘I have removed partners who have left me or flirted with other people in their profile.’*

Among the online-related unfriending reasons, number one was inappropriate or annoying online behavior, e.g. making stupid jokes, racist remarks or rude comments. Also posting too much content or not posting content at all were mentioned as reasons for unfollowing. The unfriending reasons as categorized in the analysis are presented in Table 1.

*‘I would remove people whose racist comments or rants were too irritating.’*

*‘The contacts who themselves never update anything but just go on there to read about other people’s lives.’*

Reasons for unfriending on Facebook	number of mentions
<b>Offline reasons</b>	<b>79</b>
having lost the connection with the person	34
not really knowing the person	32
end of a relationship, quarrel	13
<b>Online reasons</b>	<b>13</b>
abusive content	5
impolite or annoying behavior (i.e. making rude comments, harassing others)	3
posting too much or non-interesting content	3
not posting any content	2

Table 1. Reasons for unfriending on Facebook as categorized.

The unfriended persons represented various types of connections, most commonly friends from elementary or high school, friends of friends, former dating partners, friends from hobbies or ex-



colleagues from work. Because of the dyadic nature of Facebook relationships, reasons for unfriending included not wanting to see updates from someone who is not a real friend, but also the desire to prevent the people from viewing content posted by the respondent. The reasons given for unfriending someone contained more mentions of not wanting to see content posted by uninteresting people than not wanting to share content with them. It thus seems that people seem to be less tolerant of non-interesting content than concerned about sharing with less familiar people.

In order to find out if participants' demographics have an impact on Facebook unfriending, Pearson Chi-Square tests were conducted. The results indicate no statistically significant gender differences regarding Facebook unfriending ( $\chi^2 = 0.548$ ,  $df = 1$ ,  $p = 0.459$ ). In order to investigate age differences, the respondents were divided into three age groups (25 and younger; 26-35 years; 36 years and older). With regard to Facebook unfriending, the oldest age group (36 years and older) was found to be using the unfriend feature significantly less than the two younger age groups ( $\chi^2 = 6.672$ ,  $df = 2$ ,  $p < 0.05$ ). Also a negative correlation at the 0.05 level was detected between age and the number of Facebook friends, indicating that younger respondents had more Facebook friends than older ones ( $r = -.223$ ,  $p = 0.022$ ). Younger participants thus have more friends and have also unfriended people more often.

When the respondents were asked about being a target of unfriending, 64% reported having noticed that they had been removed from friends by someone else. The analysis of open-ended responses given by 66 respondents (62%) reveals that the unfriending was carried out in a subtle manner, as they only found out about it later on by accident, and none of the respondents were informed about the fact of unfriending or the reasons behind it. In their open responses, there were no mentions of being hurt, and most of respondents had some idea about the reason for the act. Only one person stated having asked about the reason, and only a couple of respondents reported having felt confused about the unfriending. The reasons given for being unfriended by someone were similar to the reasons for their own unfriending behavior, with losing connection over years, not being close with the person, breaking up or having a quarrel as the most commonly cited reasons.

*'I noticed I'd been removed by visiting the person's profile. It has probably happened a lot more times, but if you don't even notice it's probably not anyone very close to you. I've never taken it personally.'*

Statistical analysis found no significant gender differences regarding having been a target of unfriending on Facebook ( $\chi^2 = 3.970$ ,  $df = 2$ ,  $p = 0.137$ ). However, age comparisons reveal some statistical differences. The respondents from the middle group (26-35 years) reported having being a target of unfriending significantly more frequently than those in the youngest and the oldest age groups ( $\chi^2 = 13.210$ ,  $df = 4$ ,  $p < 0.05$ ).

The respondents were also asked about the use of other unsocial features than unfriending (see Figure 1). 93 respondents (87%) gave more specific reasons for using these features in open-ended questions. According to the results, reject is the most frequently used unsocial feature. It was used when unknown or non-interesting people sent friend requests or when people did not want to be available for chat. However, some mentioned that they found rejecting a friend request socially difficult and, because of this, just left the requests in the inbox without responding to them at all. When asked about socially awkward friends, they mentioned especially relatives and former dating partners, whom they did not want to be able to keep tabs on their life through Facebook. In such situations, the friend requests were thus often rejected. Hide from newsfeed was used for hiding content updates from non-interesting people or from people who were considered annoying, for example when a friend was posting too frequent updates or playing Facebook games that posted content on the feed. Other examples of annoying content were religious updates and training results. Also commercial content and content posted by pages liked was often hidden. Unlike was used after the user had liked something accidentally or had liked a public post and did not want friends to see it. According to the responses, accidental likes were quite common when browsing Facebook with a touch-screen phone. Restrict was mainly used to prevent certain people, usually acquaintances not belonging to the closest friendship

circle, from seeing posts. For example, restrict was useful when the respondents had new Facebook friends whom they did not want to see old content on their wall. Some mentioned that they felt obliged to keep not-so-important people on their friends list, and hiding updates from such people was common. There was also a mention of having disabled someone from posting annoying content on one's personal Facebook wall. Untag was employed particularly when a friend was posting old, unflattering or embarrassing pictures, for example from occasions where the respondent was 'super-drunk', pictures with people the respondent did not want to be associated with, or pictures that had nothing to do with the tagged person. Some respondents mentioned that they had a rule between friends that people are not tagged into pictures without their approval, making untagging unnecessary in their case. According to results, block was the least commonly used of the unsocial features mentioned in the survey. It was mainly used for muting postings and requests from Facebook games or other applications. People were blocked when they were constantly sending invitations to events, or when a person unknown to the respondent contacts them via Facebook without a particular reason, or when a profile is suspected to be fake.

Almost everyone (95%) reported having changed their privacy settings, indicating that they were not satisfied with default settings and wanted to have better control over who is able to view their content. Most often, the setting for who is able to view content posted by the respondent was adjusted to 'friends only', and the respondents had prevented others from finding them through the 'search' function. In addition to this, a wide variety of individual privacy-setting tailoring was present in the qualitative data. Commonly, people had banned certain persons from seeing their posts. These were most often the boss, ex-partner or parents. Particularly, restricting the visibility of pictures seemed to be common, as photo albums were often shared with the closest friends only. There were also a few mentions of having created or belonged to closed groups, in which members could talk only with a select group of people. According to responses to the open-ended questions, a common case of context collapse took place between student life and relatives that were considered 'too nosy'.

The use of unsocial features other than unfriend was compared with age and gender, and no differences were detected between males and females. Statistically significant age differences were found only in the use of untag: it was used the most by the youngest group and the least by the oldest ( $\chi^2 = 11.420$ ,  $df = 2$ ,  $p < 0.005$ ).

### 4.3 Unsociability on other SNSs

Twitter's role in the lives of its users is clearly different to that of Facebook, as, unlike Facebook, it is not used for relationship maintenance. Instead of following people they are familiar with from an offline context, the respondents followed celebrities, politicians, media and organizations related to their work or interests. As expected, unfollowing was not considered as anything personal, as only one person reported having unfollowed someone because there was no friendship connection anymore. Mostly unfollowing on Twitter was perceived as a means to filter the content and regulate the amount of content. The most important reasons for unfollowing were posting non-interesting or annoying content (8 mentions), and posting too much content (6 mentions).

*'I unfollowed accounts that filled up my feed. On Twitter, you have to keep adjusting things until you find a good balance.'*

*'If someone posts too mundane information of their whereabouts, like where they are or what they should have to eat, I am not interested unless it's a good friend.'*

Due to the small amount of Twitter users in the sample (N=40), no statistical analysis was conducted. As the Twitter users of this study were rather new to the service and, in general, did not have many contacts, they perhaps lacked embeddedness and reciprocal interaction with others, which might have resulted in Twitter appearing mostly as a one-sided channel for following others.

The use of unsocial features on SNSs other than Facebook and Twitter was investigated with an open-ended question, in which 40% of the respondents replied to. Altogether, they mentioned 14 other social network sites. The most popular of them were: LinkedIn (13 mentions), YouTube (7 mentions), Google+ (7 mentions) and Instagram (4 mentions). According to the results, removing contacts was not common on these 'other sites', as only 12 respondents mentioned having unfollowed or removed someone from their networks. Similarly to Twitter, the most frequently cited reason for removing someone was uninteresting content. Unfollowing also took place because the respondents' personal topics of interest had changed over years or the quality of content posted by the accounts they had followed sometimes for several years had weakened. Another important reason mentioned for unfollowing was that the accounts were considered suspicious or annoying, and therefore were blocked and reported. Annoying behavior in this context was, for instance, posting inappropriate content, using a fake identity or sending dating requests. The analysis of the open-ended questions reveals that ending subscriptions to content posted by others by unfollowing was equally common as increasing the level of privacy by restricting access to personal information. 12 respondents mentioned having limited the visibility of their profile or content posted by them in some way. Most frequently, people were concerned about sharing their personal information and used a pseudonym and avoided sharing any personal details, such as email addresses, particularly on YouTube. Some respondents also liked to share their pictures and videos with their friends only. All in all, the results show that the category 'social network sites' contains a great variety of services enabling people to present themselves in very different ways to different audiences. In each case, boundary regulation mechanisms are required for the purpose of managing both self-disclosures in the eyes of others and content received from those followed.

## **5 Discussion**

Unsociability is a complex phenomenon and needs to be investigated for the purpose of enabling the design of user interface features that reflect the dynamic nature of human relations more effectively than the functions offered by present sites. This study has focused on boundary regulation mechanisms enabled by the user interfaces of SNSs. As a result of this chosen approach, no knowledge has been gained on the use of purely behavioral strategies. For instance, the results do not provide information on how often the participants used self-censorship or unresponsiveness as strategies for avoiding socially awkward situations, as this was not explicitly asked in the questionnaire. In analyzing the more discrete behaviors and strategies that are currently not supported by interface design, qualitative interviews would have provided more detailed information. Therefore, future research on boundary regulation needs to take a closer look at the situations when the functions provided by a user interface are not sufficient for people's needs.

With regard to the design of unsocial features, this study confirms that unsociability is performed silently and there is no need to send awareness cues to the target of unsocial activity. On the contrary, people did not feel they needed to know about the reasons for unfriending and did not mind remaining unaware of the act of unfriending, especially if the contact was not perceived as a close friend. Moreover, people did not feel the need to tell the target why he or she was being unfollowed or blocked. Unexpectedly, unfriending, the hardest form of unsociability, was quite common among the respondents, and as a function was used more frequently than restricting the visibility of content to certain friends. One reason for this may be that people find the individual selection of people who will be able see posts too laborious, as updating friendship categories and constantly reflecting the current state of relationships requires work. According to the results, relationships that were no longer relevant and persons the respondents were not likely to meet again face-to-face were the most likely to be removed.

Unfriending is a straightforward and easy-to-use functionality, but the findings suggest that the division into friends and non-friends may sometimes be too strict and permanent. As social relationships

are very flexible and might involve sudden changes due to disputes and arguments, a softer version of unfriending might be useful. In situations when someone is unfriended due to a lost connection, an option to 'take back' an old Facebook friend without sending a new request in case a reconnecting occurs could be socially convenient. This would be possible if relationships could be put aside without breaking a tie completely. The symmetry of Facebook connections may cause problems if one of the partners is still interested in remaining in touch while the other is not, as unfriending removes access from both parties.

Facebook currently provides effective tools for managing context collapse, as users are able to categorize people according to their importance. Contrary to previous research (Brandtzaeg et al., 2010; Johnson et al., 2012; Vitak & Kim, 2014), tensions between groups of people coming from different social contexts, for instance professional and personal life, were not perceived as a major problem. People often add new friends after meeting new people, and not all these contacts evolve into friendships. However, sharing and reading personal updates by people with whom the respondents were not close was experienced as awkward, and for this reason unfriending, hiding and restricting were mostly directed to these contacts. This finding is in line with previous research (Sibona, 2014), which suggests that there is a life-cycle to relationships that are held online, some of them being maintained or strengthened while others will be dissolved through unfriending. Similarly to previous research (Madden & Smith, 2012), age was also found to have some impact on the likelihood of a friendship being terminated on Facebook as the age group of 36 years and older was more reluctant to unfriend others than the two younger groups. They also had a smaller number of Facebook friends, indicating that their friends might be more carefully chosen.

The main limitation of this study arises from the sampling method. Since the majority of respondents were female, the sample may be biased and thus the generalizability of findings for the whole population can be questioned. Furthermore, as the questionnaire was only provided in Finnish, and therefore the respondents were of Finnish nationality, a larger sample including more variety in respondents' national backgrounds would have brought out more generalizable results. However, applying a purposeful sampling can be useful in selecting cases that are information rich and illuminative, offering thus useful manifestations of the phenomenon of the interest (Patton, 2002). Another major limitation of this study is the small number of respondents using other social network sites than Facebook, and therefore, better data is needed to explore unsociability on these sites.

## **6 Conclusion**

The present work has explored which unsocial features are used on social network sites, particularly on Facebook, and identified situations that result in their use. The results show that using both 'soft' and 'hard' forms of unsociability is common and the majority of participants had employed at least some of them. Most commonly, people unfriended others because of offline reasons, especially when a weak-tie relationship had gradually faded away. This study thus indicates that people want to use Facebook for communicating and sharing content with people with whom they are familiar and friendly with offline. As Facebook has existed for almost a decade and continues to enjoy great popularity, users will, perhaps increasingly, encounter socially awkward situations pertaining to relationship maintenance and boundary regulation that come along with changing life situations and social network memberships. The challenge for SNS design is how to reflect these dynamics with successful interface design.

The reasons for using the unsocial features were very different on content-oriented and friendship-oriented sites: on Twitter, unfollowing or blocking a person was done in order to render the quantity and quality content, particularly regarding its informativeness, in the timeline as optimal as possible, whereas on Facebook, the reasons for unsociability were mostly related to socially awkward situations

or changes in the status of the offline relationships. Regarding other SNSs, unsociability took the forms of limiting access to personal information or avoiding annoying behavior or content, such as fake profiles or spamming.

Based on the findings, it is not just the clashing of professional and personal lives that is causing concerns regarding self-disclosure. Most often, it was old connections that had become obsolete that were considered awkward with respect to self-disclosure. Even though weak ties are well represented among SNS friends, these friendships are most often cut off. All in all, the results show that SNSs are deeply intertwined with offline life and reflect changes in relationships in the context of the physical world. The majority of relationship fallouts reported in this study took place in offline life, and unfollowing on SNSs was just a final act in a chain of events. This study illustrates how social relationships are dynamic and must be managed over time. While SNS have become an established practice in our everyday-life communication, there are many important issues regarding the life-span of social relationships to be considered in future research.

## References

- Acquisti, A., and Gross, R. (2006). "Imagined communities: Awareness, information sharing, and privacy on the Facebook." *Privacy enhancing technologies*, Springer, Berlin Heidelberg. pp. 36-58.
- Altman, I. and Taylor, D. (1973). *Social Penetration: The Development of Interpersonal Relationships*. New York: Holt.
- Altman, I. (1975). *The environment and social behavior: Privacy, personal space, territory, crowding*. Monterey, CA: Brooks/Cole Pub. Co.
- Baym, N. K. (2010). *Personal connections in the digital age*, Cambridge: Polity.
- Bevan, J. L., Pfyl, J., and Barclay, B. (2012). "Negative emotional and cognitive responses to being unfriended on Facebook: An exploratory study." *Computers in Human Behavior*, 28(4), pp. 1458-1464.
- Birnholtz, J., Hancock, J., Smith, M., and Reynolds, L. (2012). "Understanding unavailability in a world of constant connection." *ACM interactions* 19(5), pp. 32-35.
- Blatterer, H. (2010). "Social networking, Privacy, and the Pursuit of Visibility." In Blatterer, H., Johnson P. & Markus M. (eds.) *Modern Privacy. Shifting Boundaries, new forms*. Palgrave, Houndmills, pp. 73-87.
- boyd, d. m. (2006). "Friends, friendsters, and MySpace top 8: Writing community into being on social network sites." *First Monday*, 11(12). URL: <http://journals.uic.edu/ojs/index.php/fm/article/view/1418/1336> (visited on 11/26/2014).
- boyd, d. m. and Ellison, N. B. (2007). "Social Network Sites: Definition, History, and Scholarship." *Journal of Computer-Mediated Communication*, 13, pp. 210-230.
- Brandtzaeg, P. B., Lüders, M., and Skjetne, J. H. (2010). "Too many Facebook "friends"? Content sharing and sociability versus the need for privacy in social network sites." *International Journal of Human-Computer Interaction*, 26(11-12), pp. 1006-1030.
- Bryant, E. M. and Marmo, J. (2010). "Relational Maintenance Strategies on Facebook." *Kentucky Journal of Communication*. URL: <http://comm.louisville.edu/~bill/KCA/jenniferpdf/Bryant.pdf> (visited on 11/26/2014).
- Bryant, E.M. and Marmo, J. (2012). "The rules of Facebook friendship: A two-stage examination of interaction rules in close, casual, and acquaintance friendships." *Journal of Social and Personal Relationships* 29(8), pp. 1013-1035.
- Donath, J. and boyd, d. (2004). "Public displays of connection." *BT Technology Journal*, 22(4), pp. 71-82.
- Ellison, N. B., Steinfield, C. and Lampe, C. (2007). "The benefits of Facebook "friends": Social capital and college students' use of online social network sites." *Journal of Computer Mediated Communication*, 12(4), pp. 1143-1168.

- Ellison, N.B. and boyd, d. (2013) "Sociality through Social Network Sites". In: Dutton, W.H. (Ed.), *The Oxford Handbook of Internet Studies*. Oxford: Oxford University Press, pp. 151-172.
- Gruzd, A., Wellman, B., & Takhteyev, Y. (2011). "Imagining Twitter as an imagined community." *American Behavioral Scientist*, 55(10), pp. 1294-1318.
- Gutierrez Lopez, M. and Ovaska, S. A. (2013). "Look at Unsociability on Facebook". In: *Proceedings of the 27th International BCS Human Computer Interaction Conference*.
- Johnson, M., Egelman, S., and Bellovin, S.M. (2012). "Facebook and privacy: It's complicated." In: *Proceedings of the 8th Symposium on Usable Privacy and Security*, ACM.
- Joinson, A. N. (2008). "Looking at, looking up or keeping up with people?: motives and use of Facebook." In: *Proceedings of the SIGCHI conference on Human Factors in Computing Systems*, ACM, pp. 1027-1036.
- Kivran-Swaine, F., Govindan, P., and Naaman, M. (2011). "The impact of network structure on breaking ties in online social networks: unfollowing on Twitter." In: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, ACM pp. 1101-1104.
- Kwak, H., Chun, H. and Moon, S. (2011). "Fragile online relationship: a first look at unfollow dynamics in Twitter". In: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*. ACM , pp. 1091-1100.
- Laine, M.S.S., Ercal, G. and Bo, Luo (2011). "User Groups in Social Networks: An Experimental Study on YouTube." In: *Proceedings of the 44th Hawaii International Conference on System Sciences*, pp. 1-10.
- Lange, P.G. (2008). "Publicly Private and Privately Public: Social Networking on YouTube." *Journal of Computer-Mediated Communication*, 13(1), pp. 361-380.
- Madden, M. and Smith, A. (2012). *Privacy management on social media sites*. Technical report, Pew Research Center's Internet and American Life Project.
- Marwick, A. E. and boyd, d. (2011). "I tweet honestly, I tweet passionately: Twitter users, context collapse, and the imagined audience." *New media & society*, 13(1), pp. 114-133.
- Morgan, D. (2008). "Snowball Sampling." In: Given, L.M. (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods*. Thousand Oaks: SAGE Publications Inc., pp. 816-817.
- Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods*. Thousand Oaks: SAGE Publications Inc.
- Quercia, D., Bodaghi, M., and Crowcroft, J. (2012). "Loosing "friends" on Facebook." In: *Proceedings of the 4th Annual ACM Web Science Conference*. ACM, pp. 251-254.
- Sibona, C. and Walczak, S. (2011). "Unfriending on Facebook: Friend request and online/offline behavior analysis." In: *Proceedings of the 44th Hawaii International Conference on System Sciences*, pp. 1-10.
- Sibona, C. (2013). "Facebook fallout: Future contact avoidance after being unfriended on Facebook." In: *Proceedings of the 46th Hawaii International Conference on System Sciences*, pp. 3272-3281.
- Sibona, C. (2014). "Facebook unfriending: Context collapse and unfriending behaviors." In: *Proceedings of the 47th Hawaii International Conference on System Sciences*, pp. 1676 - 1685.
- Stutzman, F., Gross, R., and Acquisti, A. (2013). "Silent listeners: The evolution of privacy and disclosure on Facebook." *Journal of privacy and confidentiality*, 4(2), 2.
- Vitak, J. and Kim, J. (2014). "You can't block people offline: examining how Facebook's affordances shape the disclosure process." In: *Proceedings of the 17th ACM conference on Computer supported cooperative work & social computing*, ACM, pp. 461-474.
- Wisniewski, P., Lipford, H., and Wilson, D. (2012). "Fighting for my space: coping mechanisms for sns boundary regulation." In: *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, ACM, pp. 609-618.
- Zimmer, B. (2009). *The Age of Undoing*. URL: <http://www.nytimes.com/2009/09/20/magazine/20FOB-onlanguage-t.html> (visited on 11/26/2014).