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# Social network site usage, privacy concerns, and disclosure of autobiographical memories

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Running head: SOCIAL NETWORK SITE USAGE AND PRIVACY CONCERNS

Social network site usage, privacy concerns, and disclosure of autobiographical memories

An Honors Thesis submitted in partial fulfillment of the requirements for Honors Studies

in Psychology

By

Zachary Mensch

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Psychology

J. William Fulbright College of Arts and Sciences

The University of Arkansas

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## Table of Contents

Abstract	5
Privacy	6
Trust	7
Control	7
Self-disclosure	8
Previous Research	8
Current Studies	13
Study 1	14
Participants and Procedure	14
Materials	14
Results	16
Scale analysis	16
Data analysis	17
Discussion	18
Study 2	19
Participants and Procedure	19
Results	21
Scale and coding analysis	21
Self-report data analysis	22
Behavioral data analysis	22
Mediation Analysis	25
Discussion	26
General Discussion	27
Implications	30

Future Directions	31
References	34
Table 1	36
Table 2	37
Table 3	38
Table 4	39
Table 5	40
Table 6	41
Table 7	42
Appendix A	43
Appendix B	48

### Abstract

Internet usage has become a big part of many people's lives, and among the many uses Social Networking Sites (SNS) have become very prevalent. How privacy concerns, trust and control are affecting SNS usage and self-disclosure has become an important question for many people. I compiled a questionnaire and analyzed it for reliability. Then it was used to determine the relationship between these constructs and compared to the behavioral data that was collected from participant's Facebook pages. The results showed that privacy concerns do not affect SNS usage or self-disclosure. Trust and control were significantly correlated with specific autobiographical memories, but trust was negatively correlated. Because the behavioral data was different than the self-report data or the expected results more research including a behavioral measure needs to be completed. Based on these results trust and control are linked with SNS usage and self-disclosure, while privacy concerns are not affecting them.

Social network site usage, privacy concerns, and  
disclosure of autobiographical memories

Internet usage has become an integral part of many people's daily lives. The uses are abundant: jobs, research, games, starting new relationships, maintaining old relationships, etc. Social networking sites are a prevalent use of the internet. According to a survey conducted by Pew Research Center, roughly 85% of American adults use the internet and of these users about 67% use social networking sites (Pew Research Center, 2012). Social networking sites have many benefits including allowing individuals to maintain contact without having to meet face to face, which allows people to maintain old relationships and start new relationships without having to meet in person with these other people. On the other hand, there are also possible problems associated with social networking sites, such as breaches of privacy. The goal of this study is to determine how privacy concerns, trust, and control affect perceived versus actual social network site usage and self-disclosure.

### **Privacy**

Privacy is an individual's right to maintain editorial control and distributional control over personal information (Westin, 1967). Privacy is the right to determine how personal information is conveyed and who gets to know that information. There are privacy risks associated with disclosing information that are affecting privacy concerns, even online. Privacy risks refer to one's personal information being accessed, used, or shared without permission (Cho, Lee & Chung, 2010). Identity theft and bullying are major online privacy risks. Information or opinions being seen by an unintended party and a misinterpretation of information are also privacy risks (e.g., a potential employer

seeing a photo of you partying in college on Facebook and thinking you would not be a hard worker). Given these risks, the topic of privacy is a crucial aspect of social network sites, too, that needs to be studied.

### **Trust**

When it comes to sharing information on the internet, trust in others plays a central role (Beldad, Jong & Steehouder, 2010). Online trust is the expectation that one's vulnerabilities will not be taken advantage of in an online situation (Beldad, Jong & Steehouder, 2010). Trust, in online settings, appears to be affected by experience; evidence points to a positive relationship between trust and internet experience, so as we have more experience with online settings our trust in them increases (Beldad, Jong & Steehouder, 2010). Concerns regarding our perceived privacy appear to be important in the determination of whether or not one should trust in an online situation, and by trying to alleviate these privacy concerns through a privacy policy people see the website as more trustworthy (Beldad, Jong & Steehouder, 2010).

### **Control**

Control is another important aspect of internet usage. Control refers to one's perception that through one's own actions one is able to cause positive outcomes and avoid negative outcomes (Cho, Lee & Chung, 2010). Perception is very important for this variable. Although actual levels of control are not always increased, most social network sites are trying to increase the perception of control. An increased perception of control has been shown to correlate with decreased estimates of personal risk (Cho, Lee & Chung, 2010). This evidence supports control having an effect on social network site



usage and self-disclosure, because decreased levels of personal risk should correlate with increased social network site usage and self-disclosure.

### **Self-Disclosure**

Self-disclosure is an important topic of research in the area of computer-mediated communication. Self-disclosure is a broad category which includes any self-relevant information which one discloses about themselves, including autobiographical memories and future plans. Autobiographical memories are memories for personal life experiences. Autobiographical memories are especially important for research studies on relationships and the management of privacy online (Taddei & Contena, 2013). There are two main types of autobiographical memories (Klein, Robertson, Gangi, & Loftus, 2008). The first type is general autobiographical memories and these are points of general self-knowledge (e.g. roles, traits, like/dislikes; Conway, 2005). The second type is specific autobiographical memories and these are specific episodes lasting for less than a day (e.g. making one's first goal during a soccer game, Conway, 2005). Previous research has shown that these two types of research are used in differing amounts in different situations. General autobiographical memories can be used to maintain the self and life story while the specific autobiographical memories can be used to learn from past experiences (Conway, 2005). Research has even shown that they are represented differently in the brain, and because of this, mental illness, including amnesia, affects the loss of these two types of memories differently (Conway, 2005). It is the breadth of the social functions of autobiographical memories and how fundamental these uses are to our daily lives that has made autobiographical memories central to different areas of research.

### **Previous Research**

Self-disclosure research is not a new area of research, and there is a lot of research that has been done in this area. The type of and functions of the different types of self-disclosure is a big aspect of self-disclosure research. Among the types of self-disclosure autobiographical memory has been heavily researched for its social and adaptive functions (Alea & Buck, 2003). Beginning new relationships, maintaining old relationships, developing relationships further, teaching and informing others, showing empathy and eliciting empathy are some of the most prominent social functions of autobiographical memory, but they are by no means the only functions (Alea & Buck, 2003). Research has also identified many characteristics of the speaker and listener, which affect autobiographical memory sharing, including age, gender, personality and familiarity. Research concerning how online environments affect the pattern of self-disclosure has shown that online self-disclosure is not the same as face to face self-disclosure (Attrill & Jalil, 2011). Anonymity in online interactions has been shown to enhance self-disclosure (Attrill & Jalil, 2011). The research has suggested that the self-disclosure process is accelerated in online contexts, with people sharing more intimate details faster than they would in face to face communication.

Privacy concerns, trust, and control have all been seen as important constructs when it comes to researching social network site usage and self-disclosure online. Even though they have all been seen as important constructs, the relationships among the constructs have not been consistent across studies.

One study looked at how privacy concerns and trust affected self-disclosure across different communication tools, including instant messengers, public blogs, Myspace, and face to face communication (Frye & Dornisch, 2010). The participants

were recruited via online ads and were directed to the studies website. Then they were given a questionnaire in which they rated their willingness to share different pieces of information on each of the 10 communication tools, rated the perceived privacy of the 10 communication tools, and rated how frequently they had used each communication tool in the last 6 months. Then their overall trust was assessed using ten of the statements, which were reversed coded, from Buss and Durkee's Suspicion subscale of their hostility measure (Frye & Dornisch, 2010). The results showed that people were more comfortable disclosing statements with communication tools they felt were more private and that their overall level of trust was not correlated with their level of comfort disclosing information. These results suggest that privacy concerns are very important in determining whether or not one is going to disclose information, across a wide range of contexts: instant messengers, public blogs, Myspace, email, telephones, face to face communication, and chatrooms (Frye & Dornisch, 2010).

Another study looked at the relationship between privacy concerns, trust, control and self-disclosure on online social network sites and found a different relationship (Taddei & Contena, 2013). The study used snowball sampling starting with their students' Facebook pages. All subjects completed an online questionnaire, which was composed of four scales: Perceived Control over Information, Privacy Concerns, General Trust, and Self-Disclosure. The results showed that Perceived Control over Information, Privacy Concerns, General Trust, and Self-Disclosure have a complicated relationship. Perceived Control over Information correlated positively with General Trust and Self-Disclosure but correlated negatively with Privacy Concerns, so participants with high Perceived Control over Information had high General Trust and Self-Disclosure but low

Privacy Concerns. Privacy Concerns correlated negatively with General trust but positively with Self-Disclosure. General Trust correlated positively with Self-Disclosure. A mediation analysis showed that General Trust was a mediating variable between Perceived Control over Information and Self-Disclosure, and Privacy Concerns was a moderating variable between General Trust and Self-Disclosure. This means that General Trust explains a significant amount of variance in the correlation between Perceived Control over Information and Self-Disclosure, and that the level of Privacy Concerns determines the significance of the relationship between General Trust and Self-Disclosure. These results support the need for more research to be done into this model, since these are the first results showing support for this model.

Partially contradictory to the previous study is another study that also looked at control, trust, and privacy concerns (Krasnova, Kolesnikova & Günther, 2010). The purpose was to develop a model that would allow online social network sites to help with privacy concerns. They developed a scale that examined privacy concerns, trust, awareness, control, distributive justice and proactive warning. Participants were recruited using Facebook posts and mailing lists. The results for the scale showed the scale to be very reliable and valid. The results for the study showed that control correlated with trust and privacy concerns. Higher ratings of perceived control were correlated with more trust and lower privacy concerns. These results are similar to the other (Taddei & Contena, 2013) because both show control and trust to be linked, but they differ in the relationship between control and privacy concerns.

Inconsistent results are major problem in this area of research. The three studies mentioned all show that privacy concerns, trust and control are important variables, but

they also have conflicting conclusions. One study found that control correlated with trust and privacy concerns, and concluded that in order to increase trust and decrease privacy concerns social network sites need only increase perceived control (Krasnova, Kolesnikova & Günther, 2010). Another study found that privacy concerns but not trust were important in determining whether or not someone is going to disclose information (Frye & Dornisch, 2010). Then the other study found a complicated relationship between control, self-disclosure, trust and privacy concerns (Taddei & Contena, 2013). These inconsistencies in the results are a major problem, because this area of research cannot develop further without a clearer understanding of what is going on between these constructs, which is why I decided to do another study that looked at the relationships between these constructs.

The area of online social network site research is new enough that inconsistent results are not the only problem. There is also no established questionnaire for this area of research. This could be one of the reasons for the inconsistency in the results. All three of the studies mentioned above used different questionnaires, but Taddei and Contena (2013) used a modified version of Krasnova, Kolesnikova and Günther's (2010) questionnaire over Privacy concerns, trust and control. The original as well as the modified questionnaire had very high reliability (Krasnova, Kolesnikova & Günther, 2010; Taddei & Contena, 2013). I decided to incorporate the scales from the original questionnaire into the questionnaire I was creating, so that I would be able to compare my results to these studies, and hopefully help establish a common questionnaire.

The other problem I attempted to address with these studies was the complete reliance on self-report data. The previous research has also not included any behavioral

measures. This type of measure is very important for the study of self-disclosure on social network sites (Moll, Pieschl & Bromme, 2014). Research has shown that people do not have an accurate understanding of Facebook's privacy controls or the audience that is receiving their information. This lack of knowledge makes the use of only self-reports ill-advised because people are not able to accurately report what they do not know. I included a behavioral measure in Study 2 so that I could compare the self-report and behavioral data. I wanted to be able to determine how accurate the self-report data was compared to behavioral data. I also wanted to determine whether our beliefs are affecting our actions online or if we just think our beliefs are affecting our actions online.

### **Current Studies**

The current studies addressed these two major problems in the current literature. A broad questionnaire was compiled, to be able to look at the relationship between control, trust, privacy concerns, social network site usage, and self-disclosure. With this broad questionnaire these studies were able to test the hypothesis already proposed by prior research. Also a behavioral observation was included in Study 2. This observation allowed for participants actions and beliefs to be compared, which has not been done in accordance with these constructs. My first hypothesis was the basic assumption that social network site usage would correlate with self-disclosure. I hypothesized that privacy concerns would negatively correlate with control, trust, SNS usage, and self-disclosure. I also hypothesized that privacy concerns would have a mediating effect on the amount and the type of autobiographical memories we share online because of the difference in the amount we use social networking sites. My prediction was that higher

usage of social networking sites leads to greater specific memory sharing when privacy concerns are low.

### **Study 1**

Study 1 involved the creation of a self-report questionnaire and testing the questionnaire for reliability and validity. Despite a large amount of anecdotal evidence and media coverage, this area of research is underdeveloped and offers conflicting evidence. There is no well-established questionnaire for this area of research because of the lack in the literature, which is why I made my own questionnaire.

#### **Participants and Procedure**

I recruited 107 participants from Amazon Mechanical Turk, which is a crowdsourcing Internet marketplace commonly used to get participants of all ages for online compatible studies compensating them with small amounts of money. Four participants were excluded, three due to non-completion of questionnaire and one due to implausible responses (i.e. 30 hours of SNS usage in one day). Thus, 103 participants (45.1% female, 81.6% Caucasian,  $M_{age} = 34.24$  years,  $SD = 11.91$ , age range: 18-72) were included in the subsequent analysis. They were given an informed consent form before starting the questionnaire and the questionnaire took less than 30 minutes to complete. They were debriefed upon completion of the questionnaire and compensated with 50 cents for their time and participation.

#### **Materials**

The questionnaire was intended to measure participant's self-reported behaviors (SNS usage and self-disclosure) and self-reported beliefs (privacy, trust, and control). The questionnaire included self-report questions assessing general social networking site

usage (e.g. How many hours a week do you use a social networking site?), as well as Facebook specific social network site usage through private communication (e.g. How many private groups are you apart of?) and public communication (e.g. looking at others' status updates, writing comments, updating my own status, keeping track of events, etc.). These questions were compiled into the SNS usage scale. Participants rated these self-report questions on a Likert-type scale from 1 to 5 (never to always or strongly disagree to strongly agree). This was created by exploring all the possible actions someone can do on Facebook. The questionnaire also included self-report questions assessing general and specific autobiographical memory disclosures online (e.g. When online, I often say a lot of specific memories.) also using a Likert-type scale from 1 to 5 (strongly disagree to strongly agree). These questions were compiled into the self-disclosure scale.

The second part of the questionnaire assessed participant's beliefs on privacy, trust, and control. I compiled a scale to investigate privacy concerns. I included questions from another privacy concern questionnaire created by Krasnova, Kolenikova, and Günther (2010) (e.g. How much are you concerned that the information submitted on Facebook can be used in a way you did not foresee?). I also included questions that I created (e.g. I tailor my online writing/comments to protect against privacy threats.) because the original scale included questions about beliefs but not actions in regards to privacy concerns and both are important aspects in my opinion. The Trust scale and the Control scale were taken from the questionnaire partly created and partly compiled by Krasnova, Kolenikova, and Günther (2010). The original authors of each scale analyzed their scales for reliability and validity, and I made sure their findings also generalized to the sample.



## Results

**Scale analyses.** The SNS usage scale and self-disclosure scale both had strong reliability. The SNS usage scale was analyzed by using a principal component factor analysis on its 23 items. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis,  $KMO = .927$ , and 20 of the KMO values for individual items were greater than .5, which is the acceptable limit so 3 items were eliminated (Field, 2013). An initial analysis was run to obtain eigenvalues for each factor in the data. Four factors had eigenvalues over Kaiser's criterion of 1. The scree plot only justified retaining 1 factor, which explained 55.3% of the variance. I retained 1 factor because of the convergence of the scree plot, all items loaded onto factor 1, and because of how little variance the additional factors explained. Reliability of the scale was very strong [20 items,  $\alpha = .967$ ]. The Self-Disclosure scale had only two items so only a reliability analyses was performed [2 items,  $\alpha = .857$ ].

The Privacy scale was analyzed by using a principal component factor analysis on its 16 items. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis,  $KMO = .894$ , and 13 of the KMO values for individual items were greater than .5, which is the acceptable limit so 3 items were eliminated (Field, 2013). An initial analysis was run to obtain eigenvalues for each factor in the data. Three factors had eigenvalues over Kaiser's criterion of 1. The scree plot only justified retaining 2 factors and factor 1 explained 47% of the variance. I retained 1 factor because of the convergence of the scree plot, all items loaded onto factor 1, and because of how little variance the additional factors explained. Reliability of the scale was very strong [13 items,  $\alpha = .937$ ].

The Trust scale was analyzed by using a principal component factor analysis on its 5 items. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis,  $KMO = .867$ , and 5 of the KMO values for individual items were greater than .5, which is the acceptable limit so no items were eliminated (Field, 2013). An initial analysis was run to obtain eigenvalues for each factor in the data. One factor had eigenvalues over Kaiser's criterion of 1. The scree plot only justified retaining 1 factor, which explained 80.81% of the variance. I retained 1 factor because of the convergence of the scree plot, Kaiser's criterion and because all items loaded onto factor 1. Reliability of the scale was very strong [5 items,  $\alpha = .939$ ].

The Control scale was analyzed by using a principal component factor analysis on its 3 items. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis,  $KMO = .716$ , and 3 of the KMO values for individual items were greater than .5, which is the acceptable limit so no items were eliminated (Field, 2013). An initial analysis was run to obtain eigenvalues for each factor in the data. One factor had eigenvalues over Kaiser's criterion of 1. The scree plot only justified retaining 1 factor, which explained 81.03% of the variance. I retained 1 factor because of the convergence of the scree plot, Kaiser's criterion and because all items loaded onto factor 1. Reliability of the scale was very strong [3 items,  $\alpha = .883$ ].

**Data analyses.** A multiple regression analysis was performed with the privacy scale, trust scale and control scale as predictors and the SNS usage scale as the dependent variable (see Table 1). The control scale was not significantly correlated with SNS usage. The trust scale was significantly correlated with SNS usage. The privacy scale was not significantly correlated with SNS usage.

A multiple regression analysis was performed with the privacy scale, trust scale and control scale as predictors and the self-disclosure scale as the dependent variable (see Table 2). The trust scale was significantly correlated with self-disclosure. The privacy scale was not significantly correlated with self-disclosure.

A regression analysis showed SNS usage and self-disclosure were highly correlated,  $R^2 = .636$ ,  $b = .798$ ,  $t = 13.292$ ,  $p < .0001$ . Mediation analysis was used to see if there was an indirect effect of SNS usage on self-disclosure through privacy, trust, or control. SNS usage and self-disclosure had a strong direct effect,  $b = .7594$ ,  $p < .0001$ . There were no indirect effects of SNS usage on self-disclosure through privacy or trust. There was a marginal indirect effect of SNS usage on self-disclosure through control,  $b = -.0529$ ,  $z = -1.95$ ,  $p = .051$ .

## **Discussion**

All the scales were found to be very reliable, so all the items on each scale were gathering data for the same construct and since these items are looking at people's beliefs they have face validity. The results of the data analysis were not as expected. The trust scale was the only scale to be significantly correlated with SNS usage or self-disclosure. Also no significant indirect effects of SNS usage on self-disclosure were found, but control did have a marginal indirect effect.

There are some reasons for this lack of significant findings. The population had a lot of variance in age, with there being a marginal moderation for age. Also the population was taken from Amazon Mechanical Turk, which consists of users who are filling up free time by doing surveys for meager amounts of money. These users are usually bored and are not always motivated to effectively fill out the questionnaires. The

final possible reason for the lack of significant findings was the lack of a salient manipulation. The questionnaire only asked for people's privacy concerns but did not actually prime any privacy concerns.

## **Study 2**

Study 2 was an adaption on and improvement of Study 1. I used the questionnaire created in Study 1 on and added a behavioral component. Other changes were also made. The population was restricted by only using University of Arkansas students, which restricts the age range of the participants and takes out the variance that a large age range provided in Study 1. Also by adding the behavioral component privacy concerns were made more salient than in Study 1, which should cause participants to provide a more accurate self-report of their privacy concerns. Participants should also have provided more accurate self-reported data because the scale was divided into two sections, which decreased the chance of participants being exhausted by the length of the survey. Since the participants were all University of Arkansas students and were getting credit for their participation, the participants had more incentive to pay attention while filling out the survey, so they should have provided more accurate self-reported data.

### **Participants and Procedure**

Participants were 96 University of Arkansas students who were enrolled in a General Psychology course at the time of the study, and were compensated with credit hours required for their general psychology course. Two participants were excluded because they didn't complete the questionnaire and 22 participants were excluded because they were not active on Facebook (they had no posts, likes, etc.) during our observation, so whether or not they actually used Facebook could not be determined. This

leaves an  $N$  of 72 participants (55.6% female). The mean age was 19.42 years ( $SD = 1.148$ , age range: 18-25) and 87.5% of participants were Caucasian.

Participants came into the lab room, were given an informed consent form and more information on the study. They completed the first half of the questionnaire (see Appendix A) online through Survey Monkey in the lab room. Then they logged onto Facebook and searched for a Facebook page, which was created for the purpose of the study. Then they added the lab created Facebook page as their friend for the duration of the study. At the end of each day I accepted the friend requests and created a log of who was accepted on each day, so I could keep track of how long they had been friends on Facebook. The information that they allowed us to see was observed for one week. Information from their Facebook profile page, their personal information page, and the lab's Facebook timeline was gathered through screen shots during that week of observation. After one week the participants were unfriended and were emailed a link to the second half of the questionnaire (see Appendix B). After completing the second half of the questionnaire they received their class credit for their participation. After the last group of participants' one week of Facebook friendship was concluded, Facebook activity of each participant was transcribed so that all names were removed from the data. Self-posts were identified and separated from the rest of the data. Independent paired coders were trained to recognize specific autobiographical memories, general autobiographical memories, future plans, general self-disclosure, and other posts. They were also trained to code for emotionality on a -3 to +3 scale (extremely negative to extremely positive). Then they coded the lists of self-posts for the type of memory that it was and for the emotionality of the post.

## Results

**Scale and coding analysis.** The modified scales from Study 1 were analyzed for reliability. The SNS scale [20 items,  $\alpha = .936$ ], trust scale [5 items,  $\alpha = .847$ ], control scale [3 items,  $\alpha = .810$ ], and self-disclosure scale [2 items,  $\alpha = .847$ ] had very high reliability and no changes in the factor analyses. The privacy scale did have changes in the factor analysis. A principal axis factor analysis was conducted on the 13 items in the privacy scale. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis,  $KMO = .845$ , and 13 of the KMO values for individual items were greater than .5, which is the acceptable limit (Field, 2013). An initial analysis was run to obtain eigenvalues for each factor in the data. Four factors had eigenvalues over Kaiser's criterion of 1. The scree plot only justified retaining two factors and factor 1 explained 47% of the variance and factor 2 explained 17.3% of the variance for a total of 58% of the variance. The two factors seemed to be different based on cognitive and behavioral aspect; however both factors get at the holistic idea of privacy. I retained factor one and factor 2 but combined them into one scale. Reliability of the scale was very strong [13 items,  $\alpha = .892$ ].

A reliability analysis was performed to check for inter-rater reliability on the coding of the behavioral data. The specific autobiographical memory, general autobiographical memory, future plans, general self-disclosure, and other posts all fell within an acceptable reliability range ( $\alpha = .666$  to  $.991$ ). The emotionality coding also had an acceptable reliability ( $\alpha = .501$ ).

**Self-report data analysis.** Overall the participants indicated above moderate levels of trust and control, moderate levels of privacy concerns, below moderate levels of SNS usage and limited self-disclosure online (see Table 3).

A multiple regression analyses was performed with the privacy scale, trust scale, and control scale as predictors and the SNS usage scale as the dependent variable (see Table 4). The trust scale was significantly correlated with SNS usage. The privacy scale was significantly correlated with SNS usage.

Another multiple regression analyses was performed with the privacy scale, trust scale, and control scale as predictors and the self-disclosure scale as the dependent variable (see Table 5). None of the variables were significantly correlated with the self-disclosure scale.

To see how closely correlated the SNS usage scale and the self-disclosure scale were a regression analyses was performed with the self-disclosure scale as the predictor and the SNS usage scale as the dependent variable,  $R^2 = .200$ . The self-disclosure scale was significantly correlated with SNS usage,  $b = .447$ ,  $t = 4.180$ ,  $p < .001$ .

**Behavioral data analyses.** Next I performed many multiple regressions to determine the relationships between the self-report scale measures and the behavioral data.

**Self-posts.** A regression analyses was performed with the privacy scale, trust scale, and control scale as predictors and the number of self-posts on Facebook as the dependent variable,  $R^2 = .054$ . The control scale was not significantly correlated with the number of self-posts,  $b = .223$ ,  $t = 1.783$ ,  $p = .079$ . The trust scale was not significantly correlated with the number of self-posts,  $b = -.106$ ,  $t = -.833$ ,  $p = .408$ . The privacy scale

was not significantly correlated with the number of self-posts,  $b = .089$ ,  $t = .743$ ,  $p = .460$ .

The next multiple regression analyses was performed with the self-disclosure scale and SNS usage scale as predictors and the number of self-posts as the dependent variable,  $R^2 = .037$ . The self-disclosure scale was not significantly correlated with number of self-posts,  $b = .176$ ,  $t = 1.332$ ,  $p = .187$ . The SNS usage scale was not significantly correlated with the number of self-posts,  $b = .030$ ,  $t = .229$ ,  $p = .820$ .

***Specific autobiographical memories.*** A multiple regression analyses was performed with the privacy scale, trust scale, and control scale as predictors and the number of specific autobiographical memories as the dependent variable (see Table 6). The control scale was significantly correlated with number of specific autobiographical memories. The trust scale was significantly correlated with the number of specific autobiographical memories. The privacy scale was not significantly correlated with the number of specific autobiographical memories.

The next multiple regression analyses was performed with the self-disclosure scale and SNS usage scale as predictors and the number of specific autobiographical memories as the dependent variable,  $R^2 = .018$ . The self-disclosure scale was not significantly correlated with number of specific autobiographical memories,  $b = .125$ ,  $t = .936$ ,  $p = .352$ . The SNS usage scale was not significantly correlated with the number of specific autobiographical memories,  $b = .020$ ,  $t = .147$ ,  $p = .883$ .

***General autobiographical memories.*** A multiple regression analyses was performed with the privacy scale, trust scale, and control scale as predictors and the number of general autobiographical memories as the dependent variable,  $R^2 = .025$ . The



control scale was not significantly correlated with number of general autobiographical memories,  $b = .033$ ,  $t = .258$ ,  $p = .797$ . The trust scale was not significantly correlated with the number of general autobiographical memories,  $b = -.137$ ,  $t = -1.064$ ,  $p = .291$ . The privacy scale was not significantly correlated with the number of general autobiographical memories,  $b = .068$ ,  $t = .558$ ,  $p = .579$ .

The next multiple regression analyses was performed with the self-disclosure scale and SNS usage scale as predictors and the number of general autobiographical memories as the dependent variable,  $R^2 = .076$ . The self-disclosure scale was not significantly correlated with number of general autobiographical memories,  $b = .105$ ,  $t = .811$ ,  $p = .420$ . The SNS usage scale was not significantly correlated with the number of general autobiographical memories,  $b = .213$ ,  $t = 1.646$ ,  $p = .104$ .

**Future plans.** A multiple regression analyses was performed with the privacy scale, trust scale, and control scale as predictors and the number of future plans as the dependent variable,  $R^2 = .026$ . The control scale was not significantly correlated with number of future plans,  $b = -.019$ ,  $t = -.154$ ,  $p = .878$ . The trust scale was not significantly correlated with the number of future plans,  $b = -.127$ ,  $t = -.987$ ,  $p = .327$ . The privacy scale was not significantly correlated with the number of future plans,  $b = -.119$ ,  $t = -.974$ ,  $p = .334$ .

The next multiple regression analyses was performed with the self-disclosure scale and SNS usage scale as predictors and the number of future plans as the dependent variable,  $R^2 = .031$ . The self-disclosure scale was not significantly correlated with number of future plans,  $b = .197$ ,  $t = 1.486$ ,  $p = .142$ . The SNS usage scale was not significantly correlated with the number of future plans,  $b = -.094$ ,  $t = -.708$ ,  $p = .482$ .

**Other self-disclosures.** A multiple regression analyses was performed with the privacy scale, trust scale, and control scale as predictors and the number of other self-disclosures, which did not fit the criterion for general or specific autobiographical memories, as the dependent variable,  $R^2 = .049$ . The control scale was not significantly correlated with number of other self-disclosures,  $b = .192$ ,  $t = 1.535$ ,  $p = .129$ . The trust scale was not significantly correlated with the number of other self-disclosures,  $b = -.144$ ,  $t = -1.131$ ,  $p = .262$ . The privacy scale was not significantly correlated with the number of other self-disclosures,  $b = .084$ ,  $t = .696$ ,  $p = .489$ .

**Emotionality.** A multiple regression analyses was performed with the privacy scale, trust scale, and control scale as predictors and the average emotionality of the participant's self-posts as the dependent variable,  $R^2 = .026$ . The control scale was not significantly correlated with average emotionality,  $b = -.013$ ,  $t = -.100$ ,  $p = .921$ . The trust scale was not significantly correlated with the average emotionality,  $b = .051$ ,  $t = .396$ ,  $p = .693$ . The privacy scale was not significantly correlated with average emotionality,  $b = -.146$ ,  $t = -1.198$ ,  $p = .235$ .

The next multiple regression analyses was performed with the self-disclosure scale and SNS usage scale as predictors and the average emotionality as the dependent variable,  $R^2 = .014$ . The self-disclosure scale was not significantly correlated with the average emotionality,  $b = .131$ ,  $t = .978$ ,  $p = .331$ . The SNS usage scale was not significantly correlated with the average emotionality,  $b = -.070$ ,  $t = -.525$ ,  $p = .601$ .

**Mediation analyses.** A mediation analysis showed that there was a significant indirect effect of trust on specific self-disclosure through control,  $b = -.5409$ , 95% BCa CI [-1.0129, -.0689]. This represents a relatively small effect,  $K2 = .104$ , 95% BCa CI

[.0342, .1993]. Another mediation analysis showed that there was a significant indirect effect of control on specific self-disclosure through trust (see Table 7). This represents a relatively small effect,  $K2 = .95$ , 95% BCa CI [.0136, .2193].

### **Discussion**

The self-report results of this study showed that reported SNS usage was correlated with reported self-disclosure, trust, and privacy concerns, but self-disclosure did not correlate with any variables besides SNS usage. These findings do not support my hypothesis that privacy concerns are a mediating variable between SNS usage and Self-disclosure. The lack of correlations between self-disclosure and the other variables is very interesting. One possibility is that the variables I chose to study are not affecting self-disclosure. Another possibility could be that the relationship is not explained by mediation but rather through moderation. Based on the results SNS usage might be a moderating variable between privacy and self-disclosure.

This study found only two significant correlations between the self-report data and the behavioral data. Control and trust were significantly correlated with the number of specific autobiographical memories posted. A further mediation analysis showed that trust was a mediating factor on the relationship between control and number specific autobiographical memories. These are similar to the results previously found in other studies (Taddie & Contena, 2013). An interesting finding was that trust was negatively correlated with specific autobiographical memory posting, which means that more trust lead to less posting. This is a finding that needs more research to confirm and explain.

Cognitive dissonance could be an explanation for some of the results.

Participants might hold certain views about their privacy concerns, SNS usage, and self-

disclosure, but their actions are not showing these same views. Another explanation could be the coding method that was used. The coding focused on self-posts, which included only written self-posts. There are other forms of posts, including photos and videos, that were not included, and the posts were taken out of context to facilitate coding. These issues could cause the behavioral data to be less generalizable, but does not comprise the data when discussing written self-posts.

### **General Discussion**

In Study 1, I compiled existing questionnaires and created some original questions to be able to adequately capture all the constructs. I used Study 1 to test the reliability of the questionnaire and gather preliminary data concerning my hypothesis. The results of Study 1 showed that trust was correlated with SNS usage and self-disclosure and that SNS usage and self-disclosure were correlated. The results did not support the hypothesis that privacy was a mediating variable between SNS usage and self-disclosure or that SNS usage was a mediating variable between privacy and self-disclosure. Interestingly the results show that trust was on the only variable correlating with SNS usage or self-disclosure, which supports the hypothesis that trust is an important part of SNS usage and online self-disclosure.

Based on the results collected from Study 1 I made appropriate changes to the questionnaire. Then for Study 2 I had participants take half of the questionnaire followed by a week of observation of their Facebook page and after the observation they finished the questionnaire. Behavioral data was collected in Study 2 so that it could be compared to the self-report data and provide a better understanding of people's perceptions compared to their actions when online. The self-report results of this study showed that

reported SNS usage was correlated with reported self-disclosure, trust, and privacy concerns, but self-disclosure did not correlate with any variables besides SNS usage. The behavioral results showed that control and trust were significantly correlated with the number of specific autobiographical memories posted. A further mediation analysis showed that trust was a mediating factor on the relationship between control and the number of specific autobiographical memories.

Looking at these constructs, the most obvious connection was that SNS usage would correlate with self-disclosure. This connection seemed to be the most logical connection because as people become more comfortable they tend to talk more in face to face interactions, so I thought that might transfer to computer-mediated communication. Also the research has shown that experience with communication tools increases participants' average self-disclosure (Frye & Dornisch, 2010). Based on the results of both studies this logical connection was supported.

Based on the results of both Study 1 and Study 2, trust is a very important variable. Trust was positively correlated with reported SNS usage and self-disclosure in Study 1 and was positively correlated with SNS usage in Study 2. These results mean that as people have higher levels of trust they are using social network sites and disclosing more on them. Interestingly, the behavioral results show a conflicting story. As reported levels of trust increase the behavioral results show that people are posting less specific autobiographical memories. These results show a discrepancy between the self-report data and the behavioral data. The self-report data is showing that trust is affecting SNS usage and self-disclosure exactly how we think it does. The behavioral data on the other hand is showing the opposite interaction. A possible explanation is that

the amount of specific autobiographical memory is affecting trust, so as people post more specific autobiographical memories their trust in the social network site is lowering. This could be explained by the belief that there is more information for others to do harm with or that it would be easier for their information to be stolen since there is more of it. On the other hand control was not correlated with anything in the self-report data, but was positively correlated with the number of specific autobiographical memories posted. This behavioral data follows the expected results and replicates previous self-report data (Taddie & Contena, 2013).

The importance of privacy in people's everyday thoughts and comments coupled with the number of possible risks associated with privacy when online led me to believe that privacy had to have a key role in the relationship among SNS usage and self-disclosure. I hypothesized that privacy concerns would have a mediating effect on the amount and the type of autobiographical memories we share online because of the difference in the amount we use social networking sites. My prediction was that higher usage of social networking sites leads to greater specific memory sharing when privacy concerns are low. Neither the results of Study 1 nor Study 2 supports this hypothesis. The salience of privacy concerns does not seem to affect our SNS usage or self-disclosure. Even though we assume our privacy concerns affect our SNS usage and self-disclosure, these privacy concerns are not affecting our SNS usage or self-disclosure. These studies provide evidence that our actions and beliefs are not the same when it comes to social network site usage. Interestingly, our beliefs on how the social network site usage is affected by privacy concerns are not even being shown in purely self-report data.

**Implications**

The importance of trust and control in self-disclosure and privacy concerns non-existent effect on self-disclosure could have important implications. Possibly the most important result is the negative relationship between trust and self-disclosure. This negative relationship and the lack of a relationship between privacy concerns and self-disclosure could mean that people are self-disclosing without thinking about the consequences. Then, after they self-disclose, the consequences become apparent and their trust is lowered because of it. This is good news for social network sites, because the results show that people are self-disclosing more after using the site more and their trust might not be affecting their usage, but rather their self-disclosure is affecting their trust. People need to be made aware of this because, whether their trust is affecting their self-disclosure or their self-disclosure is affecting their trust, they are self-disclosing more specific memories on sites that they trust less.

Then perception of control lead to an increase in the amount of specific autobiographical memories shared online. These results imply that increasing the perceived control over information is a major factor in increasing the amount specific memories people share online. The biggest implication is that it is the perception of control and not necessarily the actual amount of control that has the relationship with the number of specific memories shared online. This could be very useful for online network sites, because they only have to increase the perception of control not actual control. But people should be made aware of this, because without an accurate perception of control they could be misled and share information in insecure situations.

The fact that our privacy concerns are not affecting our SNS usage or self-disclosure is also important. These results show that we have concerns over privacy online, but we are not taking them into account while we are online. We are dismissing our concerns and using forms of communication that we feel might have privacy limitations. The state of the world, with all of the leaks about infringements on privacy, could be a factor here. One possible explanation is that college students have privacy concerns for all forms of communication, and since these concerns are not limited to online communication they are not affecting online communication the way we think they should. Because we know that we have less privacy in general we do not let our privacy concerns affect our online communication, even though people and mass media see privacy concerns as an important issue. This could also lead people to disclose personal information in online settings that are unsecure and could lead to privacy violations.

### **Future Directions**

These results pose an interesting question. Why does perceived self-disclosure seem to not be affected by any variable but SNS usage? One possible explanation could be that the variables I chose to study are unique in not affecting perceived self-disclosure, but there are other variables that do affect it. This would need to be tested to see if there are any other variables that I did not look at, which affect self-disclosure. Another possible explanation is that self-disclosure is only affected by SNS usage. Perhaps it is purely the amount of time that one spends on social networking sites that determines how much they disclose. An experiment where the participants are assigned to use a social



network site for a set amount of time and their disclosure is recorded would be able to test this hypothesis.

The mediation model, which has trust acting as a mediator between perceived control and the number of specific autobiographical memories disclosed, provides an area of research that needs to be explored. Previous research has shown that trust and control are important variables when discussing self-disclosure (Taddie & Contena, 2013). The results of Study 2 support the previous research and shows that control and trust need to be looked at more in depth to determine their relationship to self-disclosure and the type of memories disclosed. This could be done through an experiment or two that manipulates control and trust in social network sites and looks at people's self-disclosure after the manipulation.

Another step that needs to be taken is looking at other Social Network Sites. Facebook is not the most popular site for all people or for all types of communication. The questionnaire "SNS and Privacy" was found to be very reliable in Study 1. This questionnaire should be adapted for research on other sites so that there is a common questionnaire, which would allow for comparisons to be made more effectively across Social Network Site Platforms.

Improving the questionnaire would also be another direction. This questionnaire is relatively short and although it was very reliable, it would be beneficial if it had more questions over Self-Disclosure and Control. More questions in these areas would fill out these to scales because in this questionnaire they have 2 items and 3 items respectively.

These two studies scratch the surface of this area of research, and much more research needs to be done to fully understand how all these components interact; privacy,

social network site usage, self-disclosure, control, and trust. There are many limitations that have been mentioned that need to be addressed to provide a better understanding of the interaction of these components as well. This is an important area of research because of the predominant usage of Social Network Sites by individuals of all ages, and understanding how these components interact can help us safeguard against privacy threats that we might not be aware of otherwise, especially since our beliefs do not seem to be affecting our actions to the degree that we believe they are affecting our actions.

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Table 1

*Linear Model of Predictors of Social Network Site Usage*

	<i>B</i> (Std. Error)	Beta	<i>t</i>	Sig.
Privacy	.016 (.072)	.018	.222	.825
Trust	.534 (.093)	.537	5.767	.000
Control	.120 (.116)	.095	1.032	.305

Note:  $R^2 = .343$

Table 2

*Linear Model of Predictors of Self-disclosure*

	<i>B</i> (Std. Error)	Beta	<i>t</i>	Sig.
Privacy	-.082 (.074)	-.095	-1.103	.273
Trust	.527 (.095)	.541	5.552	.000
Control	-.102 (.119)	-.083	-.856	.394

Note:  $R^2 = .281$

Table 3

*Descriptive Statistics of Participants responses to the SNS usage scale, privacy scale, trust scale, control scale, and self-disclosure scale.*

	SNS usage	Privacy	Trust	Control	Self-disclosure
Mean	2.66	.32	3.37	3.40	1.97
Median	2.73	3.00	3.40	3.33	2.00
Std. Deviation	0.62	0.60	0.60	0.52	0.86
Minimum	1.30	1.38	1.00	2.33	1.00
Maximum	4.60	4.54	4.20	4.00	4.00

Table 4

*Linear Model of Predictors of Social Network Site Usage*

	<i>B</i> (Std. Error)	Beta	<i>t</i>	Sig.
Privacy	.324 (.115)	.317	2.814	.006
Trust	.256 (.123)	.247	2.078	.041
Control	.167 (.140)	.139	1.190	.238

Note:  $R^2 = .169$



Table 5

*Linear Model of Predictors of Self-disclosure*

	<i>B</i> (Std. Error)	Beta	<i>t</i>	Sig.
Privacy	.227 (.171)	.158	1.326	.189
Trust	.040 (.182)	.028	.218	.828
Control	.332 (.207)	.199	1.598	.115

Note:  $R^2 = .064$

Table 6

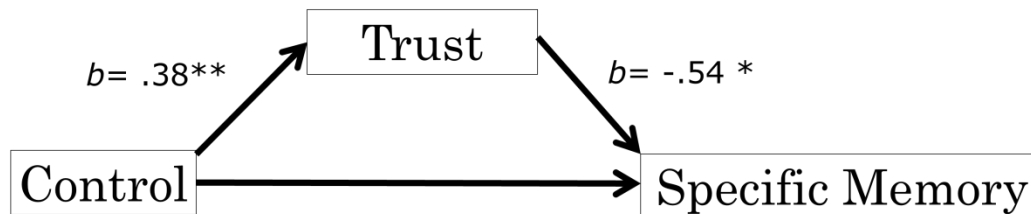
*Linear Model of Predictors of the Number of Specific Autobiographical Memories*

	<i>B</i> (Std. Error)	Beta	<i>t</i>	Sig.
Privacy	.094 (.227)	.048	.413	.681
Trust	-.523 (.242)	-.266	-2.162	.034
Control	.692 (.275)	.304	2.514	.014

Note:  $R^2 = .115$

Table 7

*Model of Control as Predictor of Specific Autobiographical Memory, Mediated by Trust, and The Confidence Interval for the Indirect Effect is a BCa Bootstrapped CI Based on 1000 Samples.*



Direct effect:  $b = .69^*$

Indirect effect:  $b = -.20$ , 95% CI [-0.76, -0.02]

Note:  $*p < .05$ ,  $** p < .01$

## Appendix A

## Social Network Site usage: Time 1

## Informed Consent to Participate in an Experimental Study

Title: Facebook Usage and Beliefs

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Description: This study involves filling out a questionnaire, allowing observation of your Facebook page, and a post questionnaire. The first session will last under 30 minutes. The Facebook observation will last a week. The final questionnaire will be e-mailed and last less than 30 minutes.

Risks and Benefits: The potential risks of the research are minimal. The potential benefits of the research include increasing our knowledge of how privacy affects our information sharing on social network sites, such as Facebook. If you decide to participate, you will also receive .5 credits for the first session, .5 credits for the observation, and .5 credits for the final questionnaire. If you refuse to participate, there will be no penalty or loss of benefits.

**Confidentiality:** Your responses in this experiment will be kept confidential to the fullest extent of the law. Your name will only be known to the experimenter but will not be attached to or stored with your responses. After the data is collected, only a code number will be used to identify your responses. Data from questionnaires and your Facebook will be stored on a secure computer in Dr. Denise Beike's lab. Reports of the research results will concern mainly statistical information that could not be used to identify or embarrass a participant.

**Voluntary Participation and Right to End Participation:** Your participation in this experiment is completely voluntary. You have the right to end your participation at any time during the session(s) without loss of benefits. If you choose to do so, contact Zachary Mensch at [zmensch@uark.edu](mailto:zmensch@uark.edu). After the session you may also request that we do not use your data. If you have any questions or experience and adverse effects as a result of participation, you may contact Zachary Mensch at [zmensch@uark.edu](mailto:zmensch@uark.edu) or Dr. Denise Beike at [dbeike@uark.edu](mailto:dbeike@uark.edu).

**Restrictions:** You must be at least 18 years old to participate, must have a Facebook, and you may participate only once.

**Informed Consent:** "I have read the description, including the nature and purposes of the study, the procedures to be used, the potential risks and benefits, as well as the option to discontinue my participation during the session. I believe I understand what is involved in agreeing to participate. My consent indicates that I am at least 18 years old and that I agree to participate in this experimental study."

1. Legal Name

2. Facebook Name

3. Date

4. How long have you been using Facebook?

<input type="checkbox"/>	0 months to 6 months
<input type="checkbox"/>	6 months to 1 year
<input type="checkbox"/>	1 year to 2 years
<input type="checkbox"/>	2 years to 4 years

	4+ years
--	----------

5. On average, how many hours per day do you use social network sites?

--

6. Which social media sites are you subscribed to?

Social Network Site	Yes	No
Facebook		
Twitter		
Tumblr		
Reddit		
YouTube		
Google+		
LinkedIn		
Pinterest		
Instagram		
Other		

If other, please specify:

--

7. Of those social network sites you are subscribed to, which is your most often used?

--

8. For what reasons do you use social networks sites?

	Yes	No
Boredom		
Procrastination		
Relationship management/maintenance		
Keeping track of events (birthdays/parties/etc.)		
Entertainment		
Keeping up with current events (News/Journalism)		
Other		

If other, please specify:

9. How many friends do you have on Facebook? (give a rough estimate if necessary)

10. Overall satisfaction with Facebook

	Strongly Disagree	Disagree	Agree	Strongly Agree
I am satisfied with Facebook usage.				
Facebook usage causes me to feel connected to others.				
Facebook usage causes me to feel happy.				
I find that Facebook is easy to use.				
I find that Facebook is reliable.				

11. How many, if any, private groups are you a part of? (give a rough estimate if necessary)

12. Rate different uses based on perceived Facebook use

	Never	Rarely	Some times	Often	Always
I private message and chat.					
I look at (read) other's statuses.					
I look at other's profiles.					
I look at other's pictures.					
I look at (watch) other's videos.					
I look at other's comments.					
I update my own status.					
I keep up with events (birthdays, parties, etc.).					
I post pictures of myself.					
I post pictures not of myself.					
I post videos about myself (that					

I am in).					
I post videos not about myself (that I am not in).					
I “like” (click the like button) other people’s statuses.					
I “like” (click the like button) other people’s comments.					
I “like” (click the like button) other people’s pictures.					
I “like” (click the like button) other people’s videos.					
I comment on other people’s statuses.					
I comment on other people’s comments.					
I comment on other people’s pictures.					
I comment on other people’s videos.					

13. Your gender (please mark one):

<input type="checkbox"/>	Male	<input type="checkbox"/>	Female
--------------------------	------	--------------------------	--------

14. Your age:

<input style="width: 100%; height: 40px;" type="text"/>
---

15. Your ethnicity (please mark all that apply):

<input type="checkbox"/>	White/Caucasian
<input type="checkbox"/>	Black/African American
<input type="checkbox"/>	Asian/Asian American
<input type="checkbox"/>	Pacific Islander
<input type="checkbox"/>	Hispanic/Latino
<input type="checkbox"/>	Native American
<input type="checkbox"/>	Other



Appendix B

Social Network Site usage: Time 2

1. Legal Name

2. Facebook

3. Date

4. How long have you been using Facebook?

<input type="checkbox"/>	0 months to 6 months
<input type="checkbox"/>	6 months to 1 year
<input type="checkbox"/>	1 year to 2 years
<input type="checkbox"/>	2 years to 4 years
<input type="checkbox"/>	4+ years

5. On average, how many hours per day do you use social network sites (SNS)?

6. Which social media sites are you subscribed to?

Social Network Site	Yes	No
Facebook	<input type="checkbox"/>	<input type="checkbox"/>
Twitter	<input type="checkbox"/>	<input type="checkbox"/>
Tumblr	<input type="checkbox"/>	<input type="checkbox"/>
Reddit	<input type="checkbox"/>	<input type="checkbox"/>
YouTube	<input type="checkbox"/>	<input type="checkbox"/>
Google+	<input type="checkbox"/>	<input type="checkbox"/>
LinkedIn	<input type="checkbox"/>	<input type="checkbox"/>
Pinterest	<input type="checkbox"/>	<input type="checkbox"/>
Instagram	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>

If other, please specify:

7. Of those social network sites you are subscribed to, which is your most often used?

8. For what reasons do you use social networks sites?

	Yes	No
Boredom		
Procrastination		
Relationship management/maintenance		
Keeping track of events (birthdays/parties/etc.)		
Entertainment		
Keeping up with current events (News/Journalism)		
Other		

If other, please specify:

9. How many friends do you have on Facebook? (give a rough estimate if necessary)

10. Overall satisfaction with Facebook

	Strongly Disagree	Disagree	Agree	Strongly Agree
I am satisfied with Facebook usage.				
Facebook usage causes me to feel connected to others.				
Facebook usage causes me to feel happy.				
I find that Facebook is easy to use.				
I find that Facebook is reliable.				

11. How many, if any, private groups are you a part of? (give a rough estimate if necessary)

--

(SNS Usage Scale)

12. Rate different uses based on perceived Facebook use

	Never	Rarely	Sometimes	Often	Always
I private message and chat.					
I look at (read) other's statuses.					
I look at other's profiles.					
I look at other's pictures.					
I look at (watch) other's videos.					
I look at (read) other's comments.					
I update my own status.					
I keep up with events (birthdays, parties, etc.).					
I post pictures of myself.					
I post pictures not of myself.					
I post videos about myself (that I am in).					
I post videos not about myself (that I am not in).					
I "like" (click the like button) other people's statuses.					
I "like" (click the like button) other people's comments.					
I "like" (click the like button) other people's pictures.					
I "like" (click the like button) other people's videos.					
I comment on other					

people’s statuses.					
I comment on other people’s comments.					
I comment on other people’s pictures.					
I comment on other people’s videos.					

(Self-Disclosure Scale – 1<sup>st</sup> two items)

13. Uses of memories online versus real life

	Never	Rarely	Sometimes	Often	Always
When online, I share a lot of specific events in my life (for example, “That one time I...”; or “the other day I...”)					
When online, I share a lot of general descriptions of myself (for example, “I consider myself...” or “I like to ...”)					
In face to face interactions, I share a lot of specific events in my life (for example, “That one time I...”; or “the other day I...”)					
In face to face interactions, I share a lot of general descriptions of myself (for example, “I consider myself...” or “I like to ...”)					

(Privacy Scale)

14. How much are you concerned that the information submitted on Facebook...

	Never	Rarely	Moderately	Often	Always
...can be used in a way you did not foresee;					

...can be used against you by someone;					
...can become available to someone without your knowledge;					
...can become available to someone you don't want (e.g. "ex", parents, teacher, employer, unknown person, etc.);					
...can be misinterpreted;					
...can be continuously spied on (by someone unintended);					
...can be used for commercial purposes (e.g. market research, advertising).					

(Privacy Scale – continued)

15. How do you feel about your privacy online?

	Never	Rarely	Sometimes	Often	Always
I tailor my online writing/comments to protect against privacy threats.					
I am conscientious about what I post online due to privacy threats.					
I feel a need to censor my speech online.					
I feel safe posting personal information on a SNS.					
I utilize privacy controls.					
I think about privacy online.					
I am concerned about privacy online.					

16. Overall...

...how much privacy do you	Very	Poor	Fair	Good	Very
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feel like you have on SNS?	Poor				Good
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17. In the past...

...has any personal information you have posted on a SNS been used to harm you?	Yes	No
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(Trust in provider Scale)

18. In general, Facebook...

	Strongly Disagree	Disagree	Unsure/ Undecided	Agree	Strongly Agree
...Is open and receptive to the needs of its members					
...makes good-faith efforts to address most members concerns					
...is honest in its dealings with me					
...keeps its commitments to its members					
...is trustworthy					

19. Statement

	Strongly Disagree	Disagree	Unsure/ Undecided	Agree	Strongly Agree
Generally, I find Facebook transparent in how the personal information I provide can be used.					

Facebook clearly communicates what information it can collect about me.					
Facebook clearly communicates in which cases my personal information can be shared with the other parties (marketing, HR agencies etc.).					

20. Facebook makes a reasonable effort to...

	Strongly Disagree	Disagree	Unsure/ Undecided	Agree	Strongly Agree
...communicate how I can protect my information against abuse (e. g. by other parties or users);					
...warn me about possible misuse of my information (by other parties or users);					
...warn me about possible threats on the network (e.g. viruses, information misuse).					

(Control Scale)

21. How much control is given to you by Facebook (e.g. through functionality, privacy policies) over:

	None	Little	Some	Substantial
...the information you provide on				

Facebook (e.g. in the profile, on the Wall etc.);				
...who can view your information on Facebook;				
...what information is accessible to whom.				

22. Mark the individual(s) that you are willing to share each piece of information with. (please mark all that apply)

	Stranger	Acquaintance	Friend
I am willing to share my contact information (phone number, address, etc.) with...			
I am willing to share my personal information (birthday, relationships, etc.) with...			
I am willing to share my personal secrets with...			
Including their name, I am willing to share a friend's personal secrets with...			
Not including their name, I am willing to share a friend's personal secrets with...			
I am willing to share general descriptions of myself (for example, "I consider myself..." or "I like to ...") with...			
I am willing to share my non-personally significant specific events in my life (for example, "That one time I..."; or "the other day I...") with...			
I am willing to share my personally significant specific events in my life (for example, "That one time I..."; or "the other day I...") with...			

23. Please respond to these statements about online relationships as honestly as you can.

	Strongly	Agree	Disagree	Strongly
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	Agree			Disagree
I feel that meeting people and forming relationships is important, regardless of whether the person was met through the Internet or in person.				
I would never use the Internet to make friends.				
I do not understand how it is possible to make friends by exchanging information about each other over the internet.				
I feel that a relationship which is formed online is not as successful in terms of it being strong, lasting and durable than relationships with are formed face-to-face.				
I like making new friends on networking websites, instant messaging programs and /or chat rooms.				
I think people who found a romantic partner on the Internet who share common interests, beliefs and values.				
I would never meet someone I first met online face-to-face.				
It is better to make friends in your own community than over the Internet.				
I think the Internet is a good arena to develop relationships.				
I frown upon people I know who have met a romantic partner or a friend over the Internet.				
I think in years to come, people making friends on the Internet and then meeting offline will become common practice.				
I do not believe it is possible to				

find love on the Internet.				
I feel that people who form relationships with other people on the Internet are somewhat different from the rest of the population.				

24. Your gender (please mark one):

<input type="checkbox"/>	Male	<input type="checkbox"/>	Female
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25. Your age:

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26. Your ethnicity (please mark all that apply):

<input type="checkbox"/>	White/Caucasian
<input type="checkbox"/>	Black/African American
<input type="checkbox"/>	Asian/Asian American
<input type="checkbox"/>	Pacific Islander
<input type="checkbox"/>	Hispanic/Latino
<input type="checkbox"/>	Native American
<input type="checkbox"/>	Other

Debriefing:

In the study you just completed, we are interested in the relationship between social network site usage, privacy, and the sharing of autobiographical memories. Past research has produced inconsistent results, and the aim of this study is to attempt to provide cohesive results to inspire future research. We are interested in how one’s privacy concerns affect their social network site usage and the sharing of autobiographical memory, which are past memories that we have for the self. Research has shown that people’s thoughts are not always reflected in their actions. This study is trying to determine if the perceived growth in privacy concerns are being reflected in our social network site behaviors such as sharing personal past memories. This in turn can provide participants with the knowledge, concerning the difference between their beliefs and actions, necessary for them to alter their actions to be more in line with their beliefs in addition to hopefully making us all more discerning internet users.

Thank you for your participation! Your credit will be administered within 24 hours. If

you have any questions or concerns about your rights as a research participant, you may contact Ro Windwalker at 575-2208, or at [irb@uark.edu](mailto:irb@uark.edu). If you have any questions or concerns about this study, you may contact Dr. Denise Beike at 575-4256 or at [dbeike@uark.edu](mailto:dbeike@uark.edu).”