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How Much for My Name? Privacy Perceptions and Motivations for Sharing Personal Information on Social Networking Sites

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This study surveyed young adults in order to study their attitudes toward what personally identifiable information they deemed private and what they hoped to gain from sharing personal information on social network services. Respondents chose telephone numbers, home addresses, search history, date of birth, and online purchases most often as personal information they felt was private. As far as motivations for sharing this information, users seeking to manage friendships or entertainment on social networks were found to also spend more time on them, find them more important, and to be more willing to share information. These findings help explain what social network site users feel is private and what benefit they hope to gain from sharing it.

Keywords: social networking sites, social media, personal information, uses and gratifications, expectancy-value theory

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In March 2018, word leaked of a massive Facebook user-data exploit conducted by internet research firm Cambridge Analytica (CA) in an effort to gather data for use in political advertising. This information was allegedly used to target voters in both the 2016 United States presidential election and the 2016 British referendum on exiting the European Union, known as the Brexit vote (Rosenberg et al., 2018). Using an app created for Facebook and shared through and Amazon's *Mechanical Turk*, CA was able to scrape demographic and psychographic information from some 50 million Facebook users (Cadwalladr & Graham-Harrison, 2018). Facebook faced not only the anger of tens of millions of users and in the backlash lost nearly $80 billion worth of value in one month (La

Monica, 2018). Behind the outrage and stock fluctuations lie the hazily defined but increasingly lucrative personally identifiable information (PII), the bits of who we are that we leave behind our social media excursions that advertising companies crave and consumers are still struggling to understand.

The purpose of this research is to try and better understand the motivations for sharing personal information on social network sites and also examine what users consider to be private information. This research aims to provide future researchers with a better understanding of what users expect in return for sharing information on social network sites.

LITERATURE REVIEW

Two communication theories underpin this research. The first, uses and gratifications theory (UGT), explains that consumers pick the media they do based on satisfying needs and that different media compete with one another to serve these needs (Katz et al., 1973). The growing popularity of the Internet has propelled a resurgence of uses and gratifications research (Parker & Plank, 2000; Ruggiero, 2000; Stafford et al., 2004). Some examples of studies taking this approach include cognitive questions around Internet usage (LaRose & Eastin, 2004); examining elections (Dunleavy & Weir, 1998); internet marketing (Stafford et al., 2004); and interactive advertising (Ko et al., 2005). As the Internet has continued to expand and evolve, research using UGT has continued to play a useful role in exploring new developments.

Important to the study at hand, UGT has also proved a fruitful starting point for research on social network sites. Raacke and Bonds-Raacke (2008) used UGT to explore why college students participated on social network sites and to profile these users, determining that such sites proved useful tools in connecting to others and maintaining friendships. Joinson (2008) focused on Facebook specifically in an effort to determine why users joined and which gratifications participation on the site satisfied. Joinson found that the better these interests were satisfied, the more avid a user became. Dunne et al. (2010) used a UGT approach to research the reasons younger Bebo users participated on the site, finding younger members of

Bebo used the site to help establish identity and maintain relationships. These studies represent a modest selection of available literature, but they support the clear role UGT plays in recent SNS research.

A second theory, expectancy-value theory (E-V theory), also presents an avenue in researching the expectations a user of one of these sites may have. E-V theory explains that an individual develops an opinion or belief about information and then assigns value to this information. The result of the interplay between value and belief results in an individual developing an expectation of that information (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Further development of the theory has also linked it to goal attainment and positive outcomes (Book & Barnett, 2006). The expansion of E-V theory into outcomes as well as goals is based on research by Sorrentino and Higgins (1986) that observed the emotional satisfaction of attaining a goal proved a motivator in striving for that goal.

UGT and E-V theory complement one another, E-V theory adding a process-oriented approach researchers have argued UGT lacks (Galloway, 1981). Past research has outlined the relationship between each, supporting the use of these two theories in concert (Galloway, 1981; Palmgreen & Rayburn, 1982). Palmgreen and Rayburn argued for a role for E-V theory in UGT by noting efforts to outline and explain the relationship between gratifications sought (GS) and gratifications obtained (GO) in UGT (Palmgreen & Rayburn, 1979; McLeod & Becker, 1974). They explain that "recent attempts to distinguish both conceptually and empirically between gratifications sought from a particular source and subsequent gratifications obtained have contributed much to the development of a uses and gratifications theory" (Palmgreen & Rayburn, 1982, p. 562). Palmgreen and Rayburn then explain that an E-V theory informed approach to model GS and GO could prove generative (Palmgreen et al., 1981)

As research into the Internet has expanded, E-V theory in its own right has proved valuable to researchers examining a variety of online activities. Lim and Dubinsky (2004) used an expectancy-value approach to outline attitude predictors

for consumers engaged in online shopping. Leung (2008) used E-V theory to research health website user behaviors, explain their expectations of such sites, and how they perceived the internet. Expectancy-value informed studies have been used in exploring internet adoption (Rhee & Kim, 2004), job seeking online (Van der Broeck et al., 2010), and the internet's role in empowerment (Hu & Leung, 2003). These studies demonstrate E-V theory's importance to research online, and the work of Palmgreen and Rayburn (1982) and Galloway (1981) has supported its relevance to UGT, a theory popular in its own right for Internet research (Joinson, 2008; Dunne et al., 2010). For these reasons, it seems natural to consider the utility of these two theories when combined for social media research.

Internet Commerce & Privacy

The internet has drastically affected privacy in general (Solove, 2002) and specifically personally identifiable information (Schwartz & Solove, 2011). For information to be considered PII, it must offer an avenue by which to identify its owner. Previously, this definition was fairly straight forward. Examples of PII would include credit card numbers, social security numbers, and other information that, in the wrong hands, could infringe on the private life, from personal interactions to finance, of their owner. Traditionally, personal details available publicly did not reach the criteria of private. Addresses, birthdates, and other such details on their own normally weren't considered to be PII prior to the internet. What Schwartz and Solove (2011) point out is that the internet has made it much easier to aggregate these disparate details, connect them, and use these connections to infringe on privacy, making these data PII.

Ohm (2010) argues that the growing difficulty around anonymizing PII that would have previously been easily obfuscated makes PII increasingly anachronistic. Ohm points to two problems with PII that he believes render the concept evermore useless. First, attempts at anonymization and deidentification can too often be undermined to trust that the personally identifying aspects of information can ever be successfully removed. Second, the concept PII itself has become unwieldy, as it lacks the clarity it once possessed. Ohm explains, "It [reidentification] undermines

decades of assumptions about robust anonymization, assumptions that have charted the course for business relationships, individual choices, and government regulations" (2010, p.1776). As a result, Ohm sees a legal environment where information privacy's benchmark no longer depends on whether information is personally identifiable.

Present Study

Guided by this literature, this study explores why users share information and what they expect. Based on the literature in regard to personally identifiable information and how fluid its definition has become, the following research questions is asked.

RQ1: Which types of information do social network site users consider to be personal information?

Based on the connection between E-V Theory and UGT as outlined above, a three-pronged hypothesis based on how well gratifications sought are satisfied by social network sites is proposed.

H1a: The better gratifications sought on social network sites are satisfied the more important respondents will find these services.

H1b: The better gratifications sought on social network sites are satisfied the more frequently respondents will use social network sites.

H1c: The better gratifications sought on social network sites are satisfied the more willing a respondent will be to share personal information.

METHODS

To test this hypothesis and answer the research question, a survey method was employed and an online questionnaire distributed administered to gather user opinions about social network sites. A survey method was used due to its utility in collecting large amounts of generalizable data on respondents in a timely fashion (Barker & Barker, 1989). Additionally, much of the past research that informed

this study used a survey method, so the scales used from that prior research or constructed using rationale guided by past research were best suited for use as part of a survey questionnaire (Ellison et al., 2007; LaRose et al., 2005). Along with standard demographic and psychographic questions -- such as age, gender, political alignment, etc. -- the survey examined how respondents conceptualized social network sites and personal information by asking them what they consider necessary for a site to be considered a social network site and which types of information they consider to be personal information.

Sample & Data Collection

Participants in this research attended a large public university that has one of the largest undergraduate student populations in the United States and features a demographically diverse student population. Students who participated in the survey were invited by email to take an online survey questionnaire designed in Qualtrics, a software package that allows for the design and administration of surveys over the Internet. Students were compensated for their time through extra credit, the amount of which was determined by the professor of each class used in the survey. The option of an alternative assignment for students who opted not to take the survey or could not complete the survey was given in classes where extra credit was offered.

Prior to opening the online questionnaire to respondents, the survey was pretested by allowing a self-selected sample to take and critique it. The researcher accounted for these critiques, made changes where needed, and formed the final questionnaire distributed to participants. For this study, seven different class rosters were employed as the sample for the survey, ultimately yielding a convenience, rather than random, sample. Instructors for each of these classes were emailed an invitation to the survey, including a link to the consent form and beginning of the questionnaire. Respondents who either did not consent to the survey or did not use social media were not used as part of the data pool.

The survey remained open for two weeks, after which time it was closed and the results were compiled. After closing the survey, the data were uploaded into SPSS,

statistical analysis software, for analysis. Before uploading to SPSS, the university ID information was extracted from the database and reconciled with class rolls provided by the instructors. Only responses to demographic, psychographic, level of use, and Likert-Scale questions were used in analysis. Once all of the steps were taken to ensure the accuracy of the data entered into SPSS, as well as the confidentiality of the respondents, data analysis began.

Description of Sample Population

Total enrollment for the seven classes used in this survey equaled 926 students (N = 926). Of this number, 754 at least began the survey. After removing responses that either indicated a lack of consent or social media use, as well as surveys where respondents opted not to complete the survey, 618 responses remained for analysis. This yielded a response rate of 66.4% out of the total number of students given access to the questionnaire.

Most respondents were between the ages of 18-20 (n = 414, 67%), with ages between 21-23 comprising the second largest group (187, 30.3%), and were female (n = 442, 71.5%), with males making up only 28.3% of the sample population (n = 174). The majority of respondents reported being in their junior year (n = 246, 40%) with seniors (n = 149, 24.1%), and sophomores (n = 141, 22.8%) following behind respectively and answered white/non-Hispanic for race/ethnicity (n = 372, 60.2%). This was followed by Hispanic or Latino (n = 117, 18.9%) and Black or African-American (n = 65, 10.5%).

Facebook proved the most often used site in the past week by respondents (n = 603, 97.6%) with YouTube (n = 520, 84.1%) and Twitter (n = 480, 77.7%) following not far behind. Facebook also proved most popular with 98.4% (n = 608) of respondents listing it in their top 5 sites. With 85% (n = 525) placing it in their top five, Twitter also demonstrated a great deal of popularity. Almost half of respondents (n = 307, 49.7%) included Pinterest in their top five, a relatively new site compared to the others. Tumblr (n = 248, 40.1%) and Instagram (n = 246, 39.8%) complete the list of top five sites.

Survey Variables

Dependent Variables. A five-point, 10 item Likert-scale question regarding the likelihood of sharing personal information to receive certain goods or services and whether the respondent believes this information has value to him or her or another party was asked (Table 1).

Table 1
Likelihood of Sharing Scale

Statement	Mean	SD
By including my personal information, I will have a better user experience on social network sites.	2.91	1.02
Showing my personal information allows for more reward opportunities (i.e. coupons or discounts) on SNS	2.76	1.01
I don't mind giving personal details to [site] for access to more content/services/goods/etc.	2.50	1.09
By including personal information on [site], I will have better service on the site.	2.52	1.02
I am willing to share my location on SNS for discounts and coupons at businesses.	2.78	1.16
I am willing to share personal views and tastes on SNS in exchange for news and information that is more personalized.	3.07	1.07
Being able to share tastes in entertainment media (music, movies, books, etc.) in exchange for getting these media quicker and/or at a discount is valuable to me.	3.32	1.04
I would allow a SNS greater access to personal details in exchange for free wireless service when mobile.	2.73	1.14

The first eight items in this question focus on the likelihood of sharing and served as scale to measure this behavior The items in this scale were based on information commonly shared on social networking sites such as Facebook, Twitter, Instagram, etc. Respondents were asked to choose their level of agreement by selecting strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree. This scale was then collapsed into a variable representing total likelihood of sharing by recoding the factor scores in SPSS through a regression method. Summing the items, the scale yielded M = 22.56, SD = 6.39. The final two items in

this Likert-scale question are statements on valuation and will be treated as two separate, independent variables.

To create composite variables, a series of principal component analyses were run on several Likert-scale batteries in order to reduce them into a smaller number of variables. As correlation was assumed between statements, and oblimax rotation was used in each case and items loading correlation coefficients below .50 were suppressed.

To create a variable from the likelihood of sharing scale in Table 1, a PCA of the scale was conducted. A KOM value of .90 was obtained as well as statistical significance ($p<.01$) in Bartlett's Test of Sphericity, suggesting the factorability of the correlation matrix (Bartlett, 1954; Kaiser, 1970). The PCA was conducted, resulting in one variable representing overall likelihood of sharing to serve as the DV in a hierarchical regression analysis. The analysis revealed the presence of one component with an eigenvalue of 4.49, explaining 56.17% of the variance. This analysis was used to collapse these statements into the likelihood of sharing personal information for goods and service variable (which will be referred to more simply as the "likelihood of sharing" variable from here on).

A dependent variable representing importance was generated as well. A five item Likert-scale question was asked which focused on importance in order to measure attitudes on the importance of social networks (Table 2). Respondents were

Table 2
SNS Importance Scale

Statement	Mean	SD
Social Network Sites are important to me.	4.00	.88
Social Network Sites are part of my daily routine.	4.26	.81
Social Networking Sites are an essential part of my staying connected to others.	4.06	.91
I would be sorry if the social network sites I use the most shut down.	3.91	1.04
It is easy for me to take time away from Social Network Sites.*	3.50	1.02

*Answered reversed so direction of importance would align with other statements.

asked their level of agreement on a five-point scale, with higher scores indicating stronger agreement. This scale was created by considering how to best directly ask respondents about the essentialness and importance of social network sites in their lives and was informed by research on media dependency (Ball-Rokeach & DeFleur, 1976; Sun et al., 2008). A KOM value of .80 was obtained, as well as statistical significance ($p<.01$) in Bartlett's Test of Sphericity, suggesting the factorability of the correlation matrix (Kaiser, 1970; Bartlett, 1954), and a corresponding PCA was conducted in order to collapse this scale into one variable regarding the ease with which a respondent could avoid a social network service loaded below .5 and was thus not used as part of the factor generated. The analysis revealed one component with an eigenvalue of 2.78, explaining 55.23% of the variance.

Independent Variables. A question asking about 22 types of information commonly shared online or created by online activity was presented for respondents to answer whether they considered the information to be private information. This battery was created by selecting different common data points that are personal to an SNS user that they might also share online, either through text or pictures.

Several steps were taken in order to produce two variables representing different dimensions of Gratifications Obtained that would go on to serve as IVs in a series of Pearson product moment correlation tests. First, a Likert-scale question relating to Gratifications Sought (Table 3) was asked using a five-point scale to measure attitudes ranging from "never" to "always."

Table 3 *Gratifications Sought Statements*

Relationship Tested (Desire vs. Fulfillment)	Mean	SD
I wish to use social networks to share media I create such as music, videos, or photos.	4.04	.82
I wish to use social networks to find new places to shop.	3.16	1.11
I wish to use to find new places to go for leisure suck as bars, night clubs, and parks.	3.36	1.07
I wish to use social networks to find restaurants.	3.31	1.09
I wish to use to tell others where I am located.	2.98	1.11
I wish to use for entertainment.	3.91	.87
I wish to use social networks to find friends with whom I've lost contact.	4.03	.85
I wish to use social networks to keep up with my friends.	4.28	.73
I wish to use social networks to expand my professional connections	3.79	.95

These statements were generated from past research on SNS activity (boyd, 2010; boyd & Ellison, 2007; Ellison et al., 2007; LaRose et al., 2005) and the range of activities that can be performed on sites such as Facebook and Twitter. Of the nine statements offered, eight had a mean score higher than "neither agree nor disagree." These eight statements were used to create a corresponding scale of Gratifications Obtained based on gratifications respondents showed interest in satisfying, found in Table 4.

Table 4 *Gratifications Obtained Statements*

Statement	Mean	SD
Social networks are useful in helping maintain friendships.	4.04	.79
Social networks are useful in helping find lost friends.	4.00	.79
Social networks are useful in helping for show others media I create.	4.03	.79
Social networks are a good source of entertainment.	4.05	.81
Social networks are useful for expanding my professional connections.	3.76	.89
Social networks are useful in helping me find new places to shop.	3.23	1.05
Social networks are useful in helping me find restaurants.	3.35	1.02
Social networks are useful in helping me find new places to go for leisure.	3.44	1.00
Social networks are useful in helping tell others where I am.	3.45	1.00

This scale was then reduced into two component variables through a PCA. A KOM value of .84 was obtained as well as statistical significance ($p<.01$) in Bartlett's Test of Sphericity, suggesting the factorability of the correlation matrix (Bartlett, 1954; Kaiser, 1970). Principal components analysis revealed the presence of two components, Entertainment/Friendship and Location, with eigenvalues of 3.85 and 1.60, which explained 48.20% and 19.83% of the variance respectively.

RESULTS

RQ1 asked which types of information a SNS user might consider personal, the results of which are contained in Table 5. Respondents felt their telephone number more often than other types of information listed (n = 571, 92.4%) should be considered private with home addresses (n = 564, 91.3%) scoring nearly as highly. Search history, date of birth, and a history of online purchases scored nearly equally, chosen by 80.6% (n = 498), 79% (n = 488), and 78% (n = 482) of respondents respectively. Full name (n = 469, 75.9%), email address (n = 467, 75.6%), a user's website visit history (n = 463, 74.9%) and birthplace (n = 453, 73.3%) all ranked closely together in how often they were chosen by respondents as well. In total, of the 22 types of personal information that appeared on the survey, 16 were chosen by more than half of respondents as information they considered to be personal (Table 5).

To test H1a, first separate Pearson correlations were run to determine the relationship between importance, the DV in the tests, and both Gratifications Obtained (GO) variables, entertainment/friendship and location. In the first test, a significant positive correlation with a medium effect size (Cohen, 2013) was found between the entertainment/friendship variable and the overall importance variable representing the importance respondents placed on social network sites ($r = .40$, $n = 618$, $p < .01$). For the second test, a significant negative correlation with a small effect size (Cohen, 2013) was found between the new places/location variable and overall importance variable ($r = -.25$, $n = 618$, $p < .01$).

Table 5
Personal Information Considered Private

Item	Percentage	Count (n = 618)
Telephone Number	92.4	571
Home Address	91.3	564
Driver's License Number	90.0	562
License Plate	87.4	540
Search History	80.6	498
Date of Birth	79.0	488
Online Purchases	78.0	482
Full Name	75.9	469
Email Address	75.6	467
Offline Purchases	75.1	464
Website History	74.9	463
Birthplace	73.3	453
Age	67.3	416
IP Address	67.0	414
Employment	65.7	406
Pictures on SNS	62.9	389
Video on SNS	58.9	364
Last Name	54.4	336
Race/Ethnicity	53.6	331
Education	52.0	315
First Name	39.2	242
SNS Profile	37.5	232
Screen Names	37.4	231
SNS Friends List	35.9	222
Tweets/Status Updates	34.5	213
SNS Likes	27.5	170

These finding demonstrate mixed support for H1a. While these analyses support that satisfaction with how well social network services assist in friendship maintenance and entertainment correlates to increased perceptions of importance, the opposite is found for how well satisfaction with finding new places and communicating location correlates to perceived with importance. In fact, in this second test, satisfaction negatively predicted importance. For these reasons, support for H1a is mixed with one aspect of satisfaction correlating to increased use while the other actually correlates to less use.

H1b suggests that the better user expectations are met, the more frequently users will use social networking sites. Time spent on social networks services served

as a DV in separate Pearson correlation tests with the same GO variables used in Ha. When entertainment/friendship was used as the second variable, a significant positive correlation with a small effect size was found between it and time spent on social network site ($r = .18$, $n = 618$, $p < .01$). When using new places/location as the second variable, a significant negative correlation between this variable and time spent on social network sites with a large effect size (Cohen, 2013) was found ($r = -.98$, $n = 618$, $p < .05$). Due to these contradicting results, support for H1b is mixed with entertainment/friendship maintenance predicting more use but places/location predicting just the opposite.

H1c states that the better expectations are met, the more willing a user will be to share personal information on a SNS. Once again, separate Pearson correlation tests were run, this time with the likelihood of sharing variable serving as a DV in both tests and the two GO variables used in H1a and H1b used separately as IVs in two tests. Using the GO variable representing entertainment/friendship, a significant positive correlation with a small effect size was revealed ($r = .26$, $n = 618$, $p < .01$). For the variable representing new places/location, a significant negative correlation with a medium effect size was also found ($r = -.40$, $n = 618$, $p < .01$). Due to these contradicting results, support for H1c is also mixed as in H1a and H1b with entertainment/friendship maintenance predicting more personal information sharing but places/location predicting less.

DISCUSSION

The increasing importance and popularity of social network sites poses a difficult but important area for research as communication continues to evolve and the internet grows and changes. Today's communication landscape is more tailored to the individual, and through social network sites, the users of these sites have largely become their own entertainment. Photos, videos, thoughts, writings, and even friendship become the product social network users consume, and the majority of these media are created and distributed by the users themselves.

This research sought to examine motivations for SNS use and information exchange from a uses and gratification approach informed by E-V theory. Specifically, a three-pronged hypothesis posited that the better desired outcomes were fulfilled, the more importance respondents would place on social networks sites social network sites. Additionally, SNS use was expected to increase as well gratifications sought formed the basis for an expectation that respondents sought to meet through choosing the medium of a social network site. In this study E-V theory helped inform the connection between gratifications sought and why obtaining those gratifications should predict greater usage.

The survey presented nine statements to respondents, asking them first how much they agreed the statement represented a gratification sought and then how much social network services fulfilled that desire (gratifications obtained). As expected, the more satisfied respondents were with using an SNS for the entertainment/friendship dimension, the more important they felt these sites were. Table 2 lists the items that were collapsed to create a measure of overall importance respondents placed on SNS. Additionally, satisfaction also positively correlated with the amount of time respondents spent on social networking sites and the likelihood of sharing personal information, ultimately partially supporting all three prongs of the hypothesis. As UGT and E-V theory predict, satisfaction correlates with more use of this medium from and a greater importance placed on this medium.

However, this research is not without some contradictions in the results. Support for the hypothesis was mixed because, while the friendship/entertainment satisfaction component correlated positively to importance, time spent, and increased sharing of information, the location component revealed a negative correlation in all three of those same areas. According to the results of this study, the more satisfied a respondent was with the ability to find new locations as well as communicate where they were, the less important they found social network sites, the less they used them, and the less they shared on them. Perhaps these users spend less time and share less information on these sites because they briefly use an SNS to find where something or someone is and then go there, reducing the free

time they have to participate on social network sites. This reduction in time spent could lead to less sharing and ultimately less importance. However, this explanation seems more convenient than satisfying. What is left is a curious relationship, and the nature of the reasons for what appears a contradiction leave an open question for further explanation.

This study also sought to better understand what respondents consider to be sensitive, personal information online. From a legal standpoint, PII is information that can be connected and/or used to identify a person to whom the information relates (Schwartz & Solove, 2011), but the growth in sophisticated data aggregation has made it complicated to clearly say what can and cannot be used to identify and individual (Ohm, 2010). While this study does not address which information would meet legal scrutiny as personal or offer a better way for that determination to be made, it does offer insight into what respondents consider personal.

Interestingly, the two categories of information most often considered personal by respondents were telephone numbers (92%) and home addresses (91%), two categories not generally considered private information from a legal standpoint. Prior to the internet's popularity, telephone books listing both types of information were common in American households, though some telephone owners chose to keep their telephone numbers unlisted. Respondents also frequently picked "full name" (76%) and to a lesser degree "last name" (54%) as particularly personal information as well, information also commonly available to the public. While this study didn't ask respondents why they considered certain kinds of information personal, perhaps the offline connective ability of this information makes it particularly sensitive to users, fostering a view that this information is too specific for widespread use in a networked community.

Digging further into the responses, it is interesting to see items like "IP Address" falling quite a bit below other items like a full name or an email address considering how much more useful an IP address is in tracking web activity. A separation also presents itself when contrasting visual content, such as pictures and video, from interactions such as likes or text content such as status updates or

tweets. Taken all together, respondents paint a somewhat differing picture as to what one might consider private than individuals might have 20 years ago while also revealing what might be possibly some emerging trends.

A question worth asking is why this information, like "telephone number" and "home address," was chosen by more than half of the respondents – are users looking at it as individual by definition and thus private, or might there be other factors at play? In particular, what is the connection, if any, between the control of one's online persona and connectivity and the perception of types of information that might bring his or her offline life more online that makes these once easily accessible categories now so personal? A possibility exists that as consumers become more astute aggregators of information and better experienced with searching for one another online that they have stumbled across the issue of being truly anonymous online and how clever use of search engines can make seemingly random information useful in finding a person. In turn, perhaps this has made them more cautious.

Moving away from categories of information existing prior to the internet, respondents frequently considered data that has sometimes been considered de-identifiable as personal. "Search History" (81%), "Online Purchases" (78%), and "Websites Visited History (75%) were all frequently chosen as personal information by respondents. Birth date (79%) also reveals an interesting result, as often a person's birth date can be used as a step gaining access to an account when a login issue occurs. Based on the results of the survey, there exists reason to explore if SNS users are indeed becoming savvier to value of the digital breadcrumbs they may be leaving behind, particularly in the months after the Facebook and Cambridge Analytica scandal has outraged Facebook Users (La Monica, 2018).

Much data that might be more naturally considered personal from a legal stand point also frequently appeared in answers as personal. Email addresses (76%), IP addresses (67%), pictures (63%) and videos (59%) posted to a SNS were all considered personal information by respondents. Website visitation history only falls behind email by a narrow margin, still placing well ahead of IP addresses, and

pictures and video. These results give the impression that users consider an aggregate of their Internet activities to be more telling than information that is specific to them. Respondents placing so much emphasis on these records is perhaps the most interesting outcome in regard to what they consider personal information.

Limitations and Future Research

The sample used in this study was not random. Classes were selected by the researcher and participants were self-selected from their rosters. While the ethnicity of the sample closely aligns with the ethnicity demographics at the university in question, the survey is still not a true random sample of these cross sections of students, and at 72% female, the sample is skewed heavily to one gender. Additionally, all of the classes used in this study were offered by the journalism and communications program at the university from which the sample came, so it could be argued that these students, due to their area of education, do not reflect the average college student in regard to social media and communication. Because of these factors, the ability of broader generalization to young adults and the greater U.S. population is limited.

Despite these limitations, the research supports the utility of UGT research when applied to the internet, and it supports the role of E-V theory informing UGT research. E-V theory proved useful in constructing and operationalizing a relationship between of uses and gratification for researchers may find helpful. Continued research informed by these theories only stands to refine UGT and the connection E-V theory has with it as well as provide better tools with which to engage digital media.

Additionally, as scholars have argued that anonymization and privacy might be impossibilities in the future (Schwartz & Solove, 2011; Ohm, 2010), looking into the motivations behind why users consider private what they do, as well as how different types of personal information might cluster together, such as video and pictures vs. status updates and likes, in their view. The past several years have seemingly presented one scandal after another centering on data security, ranging

from the Equifax breach (Hao, 2017) to Facebook's recent woes (Rosenberg et al., 2018). Understanding how these failures might be impacting user views of information security and what they consider private remains an interesting and important area for further research as we continue to try to understand what the future may bring for communication technologies and their integration ever further into daily life.

CONCLUSION

Our connections, musings, and personal lives have become entertainment, a source of contact, and an industry worth billions today. This study hoped to provide insight into why so many individuals share so much of themselves in this amazing ecosystem exist and their perception of the data they share in regard to privacy. The Facebook/Cambridge Analytica scandal is not the first involving PII, and it won't be the last. Social media platforms risk escalating scrutiny by not considering what SNS users consider private and the benefits they seek when sharing this information, and this study provides information useful to that end. For the scholar, the constant evolution of the perception of what is and isn't private, as well as why SNS users choose to share information they feel is sensitive while watched by the thirst eyes of social media companies, will continue to make this area of research necessary and vital when trying to understand why, ultimately, people do what they do online.

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