

BEST PAPER AWARD

An Exploration of Factors Influencing Oversharing on Facebook Groups

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Abstract—Social media usage is extremely prevalent and so is the oversharing of personal information online. This paper aims to examine the factors that influence information disclosure on Facebook and how participation in groups may affect sharing behaviors. Groups can provide a more intimate and supportive environment, which may lead to excessive information sharing. An online survey was conducted on Amazon’s Mechanical Turk platform with 373 accepted responses from self-reported Facebook users. The data was analyzed to determine which demographic and personality factors are correlated with oversharing behaviors on user profiles and within Facebook groups. This work has implications for understanding how individuals seek support online and what information they feel comfortable disclosing. Oversharing may increase user feelings of social support but also may make users vulnerable to cyberbullying and social engineering attacks.

Keywords—oversharing, information disclosure, social media, Facebook, social engineering

I. INTRODUCTION

Billions of people regularly use social media to keep in touch with their friends and family, connect with their communities, shop, and get news and other general information. In online spaces, users experience the online disinhibition effect where they feel more free to act however they wish due to the perceived anonymity and reduced social pressure [1]. The user is often interacting with others asynchronously with editable responses and does not have to worry about the immediate reaction of their audience, which helps create the sense of physical invisibility and relative anonymity [1]. This effect can lead to increased self-disclosure and positive social behavior like kindness and

generosity as a benign form of online disinhibition. Online disinhibition can cause many people to overshare, putting everything from mundane everyday activities and interests to their deepest desires and secrets online.

Oversharing has been defined as “excessive generosity with information about one’s private life or the private lives of others” [2]. Oversharing is a problematic but normalized social media behavior that can have serious consequences. Disclosing a lot of personal information online is driven by many factors, including the desire to belong when observing frequent oversharing behavior by others [3]. When users see others disclose personal information, they are more likely to disclose as well in reciprocity. This has been found to occur both in one-to-one conversations with strangers online as well as in public online discourse [4].

While there have been a large number of studies on the Facebook social platform as a whole, this paper will focus specifically on Facebook groups and participants’ propensity to overshare within these groups. Facebook defines groups as “a place to connect, learn and share with people who have similar interests. You can create or join a group for anything — stargazing, baking, parenting — with people across the globe or across the street. Groups can be public or private” [5]. As a Facebook user’s friend list grows, so does the variety of interests within the user’s group of friends. Groups provide an opportunity to gather people around an identity or shared interest, creating a more intimate experience within the social media platform. These smaller online spaces can develop their own group culture that fosters more sharing and involvement, so members may be more likely to overshare to fit in.

Seeking out online communities can be very helpful to those who are looking for emotional and social support. Facebook groups can be a source of information as well as a place to seek and provide advice, vent, and find humor. Due to the level of trust that some feel in these groups, some individuals may be prone to oversharing. Frequent use of social media can drive someone to overshare to generate more content to receive attention and social support, but this can make users vulnerable. The online disinhibition effect also empowers some users to act in toxic ways with anger, hatred, cruelty, and aggression [1]. Negative social behaviors are common on social media sites, with over 25% of Russian Facebook survey respondents reporting engaging in harmful online actions [6]. Providing safe and useful online spaces often requires moderation to protect the culture of the group, which could impact how comfortable members feel about disclosing their personal information.

Posting a lot of personal information online may leave someone at a higher risk for cyberbullying or social engineering attacks since there's more information available for malicious users to utilize. Heavy use of social media has been correlated with negative online experiences like cyberbullying for adolescents [7]. The perpetration of cyberbullying, catfishing scams, cyberstalking, and trolling have been associated with Dark Triad personality traits [8], [9]. Scammers have been found to target vulnerable populations like people experiencing isolation, loneliness, chronic illnesses, disabilities, advanced age, and financial hardships [10], [11]. Some of these populations may be targeted due to longer periods spent online where they are more likely to encounter users with malintent. Since users may feel more comfortable to overshare in Facebook groups, their information disclosure may be higher and lead to increased chances of negative consequences.

We will focus on several factors that may be influencing oversharing behavior within Facebook groups, including user demographics, the influence of leadership, individual psychological differences, and the feelings of comfort and trust users feel within Facebook groups and on Facebook as a whole.

Our hypotheses are as follows:

- H1:** Younger users are more likely to overshare than older users.
- H2:** Those with higher involvement in Facebook tend to overshare more often.
- H3:** Those with higher involvement in Facebook groups tend to overshare more often.
- H4:** People who exhibit the personality trait of openness are more likely to overshare.
- H5:** People who are high in conscientiousness are less likely to overshare.
- H6:** People who are highly extraverted are more likely to overshare.

H7: People who are more agreeable are more likely to overshare.

H8: People who are high in neuroticism are more likely to overshare.

We examine an individual's perceived level of comfort within a Facebook group as well as their sentiments about disclosing personal information.

II. DEMOGRAPHIC FACTOR

A. Age

Age is a crucial demographic to consider. Americans 65 and older are the least likely age group to use Facebook, with only half saying they do, compared to around 70% of other age groups [12]. 69% of U.S. adults surveyed by the Pew Research Center reported ever using the site. When compared to other social media sites, Facebook has less of an age gap between users. Teenagers and young adults are shown to be more active on social media platforms. Being young has been shown to be predictive of problematic social media behavior, which can include oversharing [13]. This lack of awareness makes them more susceptible to social engineering tactics, as they may trust misleading messages or requests. Older adults who do use Facebook report higher levels of relatedness, which is an important indicator of well-being, especially for those with mobility issues [14].

III. PSYCHOLOGICAL FACTORS

In addition to demographic factors and group culture factors, there are individual differences between people when it comes to their personalities. Certain personality types may be more prone to oversharing.

The tool used in our study to examine individual psychological differences is the five-factor model. This model defines one's personality using five measures: openness, conscientiousness, extraversion, agreeableness, and neuroticism. The five-factor model is a well-tested framework developed by researchers over the years [15], [16].

We hypothesize that the personality traits that tend to overshare within Facebook groups consist of those high in openness, low in conscientiousness, and high in extraversion, agreeableness, and neuroticism.

A. Openness

Openness is defined by a person's inclination to explore new ideas and experiences [17]. This willingness to learn and explore makes those high in openness more likely to interact frequently with others. Open individuals were among the first to start using Facebook [18] and spend a lot of time on the website [19]–[21]. Facebook offers opportunities to connect and explore ideas with others in a convenient online environment. Those high in openness likely find the environment conducive to learning. Having more friends on the platform means having more people to learn from. Indeed, open individuals tend to have more Facebook friends [18], [20], [21].

Survey data indicate that open individuals have a greater tendency to be sociable through Facebook and use the platform to connect with others to discuss a wide range of interests [21], [22]. This is supported by actual measurements of user behavior within Facebook which show that open individuals are more willing to use the application as a communication tool and use a greater number of features than others [23].

In addition, Facebook profile data of 180,000 users show a positive correlation between openness and the number of likes given, group associations, and status updates [24].

We believe this high volume of activity on the website translates to a higher likelihood of oversharing within Facebook groups (H4).

B. *Conscientiousness*

Conscientious individuals are known for their thoughtfulness, good impulse control, and goal-directed behaviors [17]. Someone who is highly conscientious likely spends less time on Facebook due to obligations outside of the social media platform such as work or family [18]. In fact, those who are very conscientious likely do not have a Facebook account at all [20], [25].

A study specifically looking at motivations for using Facebook found that those who are conscientious are cautious in their online self-presentation [26]. This makes sense because conscientious people tend to be more careful and thorough when making posts.

The tendency to air on the side of caution leads to fewer posts on one's Facebook wall or timeline and more regret over posted content [27]. It also leads to fewer comments, likes given, and group memberships [24], [28], [29].

We hypothesize that the careful nature of conscientious individuals will also apply within a Facebook group (H5).

C. *Extraversion*

Those high in extraversion tend to enjoy socializing and interacting with others [17]. This is true in both online and in-person environments. Extraverts have more friends in-person as well as on Facebook [18], [20], [23], [24], [27], [29].

Those high in extraversion also tend to spend more time on the social media platform [18], [19]. Extraverts use Facebook to meet new people [28] and use many of its features such as uploading photos, sharing status updates, clicking "like", writing comments, and clicking "share" more often than introverts [29]. Extraversion has also been shown to be associated with higher group membership [22].

Similar to openness, we believe extraversion will be positively correlated with oversharing within Facebook groups (H6).

D. *Agreeableness*

Agreeableness is a measure of a person's friendliness and how much empathy they feel for others [17]. Agreeable

people are more willing to cooperate with others, and that includes risking the sharing of too much information.

One study found that highly agreeable people upload more pictures and tend to have more contact info on their profile [23]. This makes sense because they want to keep their friends informed about their lives and make themselves easy to reach. When expressing oneself on social media, people may be motivated to either present themselves in only a positive light, or to express their genuine selves and feelings. Agreeable people are more likely to express their actual selves [26]. Expressing one's actual self online opens the door to meaningful connections. This opportunity comes with an increased risk of oversharing.

Fewer studies exist that demonstrate the effects of agreeableness on Facebook use. However, based on what we do know as well as the definition of the trait, we hypothesize that highly agreeable people tend to overshare within Facebook groups (H7).

E. *Neuroticism*

Neuroticism measures a person's emotional stability. Those who are neurotic tend to be sad, moody, and emotionally unstable [17].

Highly neurotic individuals often seek emotional support on social media, leading them to put more information on their profiles [23] and participate in more groups [24].

In order to receive support on Facebook, one must be willing to share their story. This potentially includes the sharing of personal information that may put one at risk of being targeted by cybercriminals. Studies have shown that neurotic individuals tend to spend more time on Facebook [18], [27]. One study that examined social media as a whole came to the same conclusion [19]. More time spent on Facebook increases the likelihood of choosing to share too much information, including within groups. Similar to agreeableness, fewer studies exist that show the effects of neuroticism on Facebook use.

Based on existing evidence, we hypothesize that highly neurotic people tend to overshare within Facebook groups (H8).

IV. ESTABLISHED PLATFORM TRUST

A. *Enduring User Base*

When creating an account, users agree to Facebook's terms and conditions which allow for their public profile information to be shared with other members and data collected for advertising purposes [30]. In 2018, there was the Cambridge Analytica scandal where the personal data of more than 87 million customers was collected for political message targeting, which led to questions from government agencies and a backlash from users which led to a #deleteFacebook campaign trending [31]. While some users did delete their Facebook accounts in response, Facebook's user base has grown from 2.32 billion monthly active users (MAUs) in 2018 to 2.99 billion MAUs in the first quarter of 2023 [32]. There have been dozens of data breach scandals

since Facebook's inception, but many have not resulted in legal consequences or major publicity [33]. Through their continued use of Facebook, there may be implied trust from users for the platform but the relationship between trust and the desired privacy of users is complex.

B. Trust and Privacy

Though many users report concerns about their privacy and the utilization of their personal information, these beliefs often do not reflect how user information disclosure choices in what is described as the "privacy paradox" [34]. Social media users must weigh the cost of their loss of privacy against the perceived benefits of joining or continuing to use a social media site like Facebook. This requires some level of trust from the user that Facebook will abide by their policies on handling user data and not disclose personally identifying information of their users. Users have been found to trust Facebook, ascribing beliefs in the technical competence of the platform (functionality, reliability, and helpfulness) but also in interpersonal trust components such as benevolence, competence, and integrity [35]. Facebook has become more than a website that performs a service, but an entity that users can relate to on a more personal level.

Facebook has also become a major source of news and information that goes beyond social networking. During times of crisis, such as natural disasters like floods, hurricanes, and earthquakes, Facebook was used to exchange information and provide social support for those affected [36]. Social media can be a useful way to get in contact when cellular networks may be damaged or overloaded. Its utility for distributing information from governmental and organizational sources is mixed. During a survey conducted during the COVID-19 pandemic, only 36% of users saying that they trust information from social media sites, including official sources, and trust in social networks was negatively correlated with accurate information about COVID-19 [37]. User wariness about information may not be a bad thing, since misinformation is able to be spread rapidly and effectively on social media sites like Facebook, greatly amplifying the effect and lowering the perceived legitimacy of experts and major organizations involved [38].

Remaining on sites like Facebook may not directly indicate trust for some users who have chosen to remain on the site despite their concerns. Privacy cynicism refers to apathy that some online users feel due to the overwhelming privacy threats online [39]. These users feel that distribution of their personal data online is inevitable, and will continue to use online services despite the risk. This has been found to negatively influence the reported satisfaction level of users with their social media services but not their level of trust [40]. These cynical users may report low levels of trust or comfort despite continued use of the site.

Users who do trust Facebook are more willing to make themselves more vulnerable to Facebook through information disclosure and will use the site more often [35]. This trust could dictate how comfortable users feel disclosing information on their Facebook profile page and timeline for public viewing and we expect higher comfort level ratings

and overall interaction. Users with greater trust in Facebook may be more inclined to disclose more personal information and possibly overshare.

V. METHODS

A. Data Collection

This study utilized Amazon's Mechanical Turk (MTurk) platform to recruit participants to take an online survey for data collection on their Facebook usage. MTurk has been found to be a reliable and efficient method to capture survey responses from a relatively broad population of respondents [41], [42]. However, given the increasing concerns regarding quality issues with MTurk, several measures were taken. Only participants with a lifetime approval rate of 98% or greater with 5,000 or more previously completed tasks (i.e., HITs) performed were eligible to participate. Being an active Facebook member, defined as someone who has visited their Facebook profile within the last 6 months, was required to participate in the survey. Participation was limited to residents of the United States 18 years or older. Additionally, there were 2 quality control questions included within the survey where an incorrect response would conclude the survey early with an explanation of why it ended. For additional quality control measures, two demographics questions (i.e., gender identification and ethnic identification) were repeated at the end of the survey where responses were checked to see if they matched the answers to the same questions provided at the beginning of the survey. Non-matching responses resulted in the survey responses being rejected. There were 373 accepted responses with 54 discarded due to failure of quality control questions.

Prior to survey initiation, Institutional Review Board (IRB) approval was acquired and informed consent statements describing the survey contents were provided to respondents. Participants received \$3 of compensation. Upon conclusion of the survey, participants were asked how the time and effort required for this survey compared to others with 74% noting it was comparable or easier than other MTurk work they had completed before for similar compensation. The sample is not intended to be representative of the general population.

Most participants were between the ages of 25 and 44, with 19% between the ages of 30 and 34. The ethnicity of the majority of respondents (83%) was White/Caucasian. 59% of respondents were male and 41% female. As far as education level goes, the majority held a Bachelor's degree (60%) and 20% held a Master's degree. Most participants were married (69%) and 22% were single and never married. The next section discusses the survey instruments used to conduct this study.

B. Survey Instruments

Participants were first asked about their demographic information including their age, gender identity, ethnicity, education level, marital/relationship status, profession, and employment status. Personality factors were collected through use of the previously developed and validated Big Five Inventory (BFI) to assess extraversion, agreeableness,

conscientiousness, and neuroticism, and openness [43]–[45]. Participants were asked about the number of Facebook friends, length of account, and their general Facebook interaction habits. This included the frequency and type of content that they post to their timeline, how often they send or accept friend requests, or create events and polls.

A key part of the survey involved asking about their membership in Facebook groups. Participants were asked the number of Facebook groups they actively participate in, which was defined as posting or interacting with group content within the past 6 months. For those who do participate in groups, they were asked the types of groups they have membership in from a list of 24 group types or to select “other” and write in the type of group they participate in if it was not listed. This list of Facebook group types was formed by analyzing the common topics of popular groups on Facebook.

To measure oversharing behaviors, a series of questions were asked about the respondent’s comfort level sharing personal information. We used a 5-point Likert scale to assess their general feelings about sharing information as well as a qualitative question where they could explain their answer in their own words. The Online Oversharing Inventory (OOI) instrument from Shabahang, et. al (2022) was based on the Social Penetration Theory components of breadth and depth in information disclosure. It was used to quantify how respondents feel about sharing personal information like their thoughts, feelings, and life events [46]. An additional question was added to the end of the OOI to ask users specifically about their sharing habits of sad life events, as this may indicate vulnerability to other users.

VI. RESULTS

We conducted statistical analysis of the survey results by employing SPSS (Statistical Package for the Social Sciences), version 19. Two primary statistical tests were used, depending on the hypothesis being tested. This included an independent samples t-test when a dichotomous variable was involved, such as examining the role age may play in oversharing. And for the other hypotheses, we calculated the Pearson correlation coefficient to determine if there was a statistically significant relationship between the two or more variables and in what direction.

H1 (Supported): Younger users are more likely to overshare than older users.

For the first hypothesis, we calculated a new variable for age to delineate between younger (18-39) (N=222) and older individuals (40 and older) (N=151). An independent samples t-test was then performed to test this hypothesis. We examined whether this hypothesis was supported by assessing the mean value for the questions related to oversharing on Facebook in general as well as within Facebook groups. The 222 participants who were classified as younger (M = 3.41, SD = 1.39) compared to the 151 participants classified as older (M = 2.61, SD = 1.37) demonstrated significantly higher levels of sharing on Facebook, $t(371) = 5.513$, $p < .01$. Likewise, the 196

participants who were classified as younger (M = 3.40, SD = 1.40) compared to the 135 participants classified as older (M = 2.64, SD = 1.32) demonstrated significantly higher levels of sharing on Facebook, $t(329) = 5.007$, $p < .01$.

H2 (Supported): Those with higher involvement in Facebook tend to overshare more often.

A Pearson correlation coefficient was computed to assess the linear relationship between the mean value for the 22 Facebook activity items (see Appendix) and the mean value of the five Facebook oversharing items. There was a positive correlation between the two variables, $r(371) = 0.868$, $p < .01$.

H3 (Supported): Those with higher involvement in Facebook groups tend to overshare more often.

A Pearson correlation coefficient was computed to assess the linear relationship between the mean value for the 22 Facebook group activity items (see Appendix) and the mean value of the five Facebook group oversharing items. There was a positive correlation between the two variables, $r(329) = 0.889$, $p < .01$.

H4 (Not Supported): People who exhibit the personality trait of openness are more likely to overshare.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait openness and the mean value of the five Facebook oversharing items. There was not a statistically significant relationship between the two variables, $r(371) = 0.017$, $p = .737$.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait openness and the mean value of the five Facebook group oversharing items. There was not a statistically significant relationship between the two variables, $r(329) = -0.070$, $p = .205$.

H5 (Supported): People who are high in conscientiousness are less likely to overshare.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait conscientiousness and the mean value of the five Facebook oversharing items. There was a negative correlation between the two variables, $r(371) = -0.385$, $p < .01$.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait conscientiousness and the mean value of the five Facebook group oversharing items. There was a negative correlation between the two variables, $r(329) = -0.423$, $p < .01$.

H6 (Supported): People who are highly extraverted are more likely to overshare.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait extraverted and the mean value of the five Facebook oversharing items. There was a positive correlation between the two variables, $r(371) = 0.282$, $p < .01$.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait extraverted and the mean value of the five Facebook group oversharing items. There was a positive correlation between the two variables, $r(329) = 0.244$, $p < .01$.

H7 (Not Supported): People who are more agreeable are more likely to overshare.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait agreeableness and the mean value of the five Facebook oversharing items. There was a negative correlation between the two variables, $r(371) = -0.289$, $p < .01$.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait agreeableness and the mean value of the five Facebook oversharing items. There was a negative correlation between the two variables, $r(329) = -0.376$, $p < .01$.

H8 (Supported): People who are high in neuroticism are more likely to overshare.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait neuroticism and the mean value of the five Facebook oversharing items. There was a positive correlation between the two variables, $r(371) = 0.243$, $p < .01$.

A Pearson correlation coefficient was computed to assess the linear relationship between the personality trait neuroticism and the mean value of the five Facebook oversharing items. There was a positive correlation between the two variables, $r(329) = 0.252$, $p < .01$.

VII. DISCUSSION

We examined eight hypotheses related to oversharing on Facebook, whether in general or within groups. Support was found for six of the eight hypotheses.

The personality trait of openness was not associated with oversharing, whether on Facebook in general or within groups on Facebook. Despite prior research suggesting a positive correlation between these variables [21], [22], [24], we did not find support for this hypothesis. It seems counter intuitive that support would not be found for this personality trait, but perhaps the design and implementation of various features on Facebook have changed over time to cater more to those less open. Regardless, this is something worth exploring further.

Additionally, the personality trait of agreeableness was negatively associated with oversharing on Facebook, whether in general or within groups. Despite prior literature suggesting those with higher levels of agreeableness would be more engaged, active, and perhaps overshare, we did not find evidence in the current study to support this. It is possible that the questions used to assess oversharing involved a type of sharing that was too personal for many with higher levels of agreeableness to share. It would be interesting to assess other types of oversharing that are less personal. However,

the less personal the information is then the less of a risk it poses for the end users as well.

A. Limitations

While the results of our study reveal insights on the factors influencing oversharing within Facebook groups, they do have limitations that should be noted. In the survey, we ask respondents about the types of groups they participate in and the type they participate in the most. There may be a disconnect between the type of group a person joins and their intended use of that group. For example, a bed and breakfast owner may join a travel group to promote their location and garner more business.

Surveys are a useful method of gathering information. However, they rely on self-reports from respondents. These self-reports may be inaccurate due to limitations of a respondent's memory and perception. To increase the reliability of results, data pulled directly from Facebook can be used instead, similar to what other papers have done [23], [24], [27].

It is worth noting that we collected this data at a single point in time. Facebook is a software application that continually evolves. The addition of new features changes how Facebook users behave on the platform and what they are willing to share. We are also limited by the current circumstances of our survey respondents. Political, economic, and social events continually shape society's views and attitudes towards social media.

VIII. CONCLUSION

In conclusion, our survey provides valuable insights into the vulnerabilities and potential risks faced by different user groups. Understanding these factors is crucial for implementing targeted strategies to educate and protect the privacy and safety of end users.

In our survey, we looked at many factors, including demographic groups and psychological differences using the five-factor personality model. All of these factors can contribute to oversharing on Facebook.

Oversharing is a hot topic with new trends appearing constantly due to what social media sites like Facebook allow. For instance, a growing sub-trend called sharenting has emerged. It is defined by Collins Dictionary as "the habitual use of social media to share news, images, etc., of one's children."

Attackers will continue to tailor their strategies based on individual vulnerabilities and preferences. Awareness campaigns can be designed to address specific concerns and vulnerabilities. For example, campaigns can be tailored based on gender identity to ensure that all users, regardless of their gender, are well-informed about online privacy and security best practices.

Tailoring educational campaigns and implementing targeted security measures that address the specific needs and characteristics of different demographic segments can effectively mitigate these risks. By fostering a culture of

responsible online behavior and equipping users with the necessary knowledge, individuals can better protect themselves and their personal information in the digital realm.

REFERENCES

- [1] J. Suler, "The online disinhibition effect," *Cyberpsychology & behavior*, vol. 7, no. 3, pp. 321–326, 2004.
- [2] A. Persson, "Front-and backstage in social media," *Language, Discourse & Society*, vol. 1, no. 2, pp. 11–, 2012.
- [3] R. Shabahang, H. Shim, M. S. Aruguet, and Zsila, "Oversharing on Social Media: Anxiety, Attention-Seeking, and Social Media Addiction Predict the Breadth and Depth of Sharing," *Psychological Reports*, p. 003329412211228, Aug. 2022.
- [4] J. Venkatanathan, V. Kostakos, E. Karapanos, and J. Goncalves, "Online disclosure of personally identifiable information with strangers: Effects of public and private sharing," *Interacting with computers*, vol. 26, no. 6, pp. 614–626, 2014.
- [5] "Groups | Facebook Help Center." [Online]. Available: <https://www.facebook.com/help/1629740080681586>
- [6] O. Bogolyubova, P. Panicheva, R. Tikhonov, V. Ivanov, and Y. Ledovaya, "Dark personalities on Facebook: Harmful online behaviors and language," *Computers in Human Behavior*, vol. 78, pp. 151–159, Jan. 2018.
- [7] C. Liu, R. P. Ang, and M. O. Lwin, "Influences of narcissism and parental mediation on adolescents' textual and visual personal information disclosure in Facebook," *Computers in Human Behavior*, vol. 58, pp. 82–88, May 2016.
- [8] K. Kircaburun, P. K. Jonason, and M. D. Griffiths, "The Dark Tetrad traits and problematic social media use: The mediating role of cyberbullying and cyberstalking," *Personality and Individual Differences*, vol. 135, pp. 264–269, Dec. 2018.
- [9] C. Lauder and E. March, "Catching the catfish: Exploring gender and the Dark Tetrad of personality as predictors of catfishing perpetration," *Computers in Human Behavior*, vol. 140, p. 107599, Mar. 2023.
- [10] E. Carter, "Distort, Extort, Deceive and Exploit: Exploring the Inner Workings of a Romance Fraud," *The British Journal of Criminology*, vol. 61, no. 2, pp. 283–302, Mar. 2021.
- [11] C. Cross, K. Holt, and T. J. Holt, "To pay or not to pay: An exploratory analysis of sextortion in the context of romance fraud," *Criminology & Criminal Justice*, p. 17488958221149581, Feb. 2023, publisher: SAGE Publications.
- [12] J. Gramlich, "10 facts about Americans and Facebook," Jun. 2021. [Online]. Available: <https://www.pewresearch.org/short-reads/2021/06/01/facts-about-americans-and-facebook/>
- [13] N. Gugushvili, K. T&aumh, ht, R. A. C. Ruiter, and P. Verduyn, "Facebook use intensity and depressive symptoms: a moderated mediation model of problematic Facebook use, age, neuroticism, and extraversion," *BMC Psychology*, vol. 10, no. 1, pp. NA–NA, Nov. 2022, publisher: BioMed Central Ltd.
- [14] R. Clark and G. Moloney, "Facebook and older adults: Fulfilling psychological needs?" *Journal of Aging Studies*, vol. 55, p. 100897, Dec. 2020.
- [15] L. R. Goldberg, "An alternative "description of personality": The big-five factor structure," vol. 59, pp. 1216–1229.
- [16] R. R. McCrae and P. T. Costa, "Validation of the five-factor model of personality across instruments and observers." vol. 52, pp. 81–90, place: US Publisher: American Psychological Association.
- [17] Cherry, Kendra. What are the big 5 personality traits?
- [18] B. Caci, M. Cardaci, M. E. Tabacchi, and F. Scrima, "Personality variables as predictors of facebook usage," vol. 114, pp. 528–539, place: US Publisher: Psychological Reports.
- [19] T. Correa, A. W. Hinsley, and H. G. de Zúñiga, "Who interacts on the web?: The intersection of users' personality and social media use," vol. 26, no. 2, pp. 247–253.
- [20] M. Eşkisü, R. Hoşođlu, and K. Rasmussen, "An investigation of the relationship between facebook usage, big five, self-esteem and narcissism," vol. 69, pp. 294–301.
- [21] J. L. Skues, B. Williams, and L. Wise, "The effects of personality traits, self-esteem, loneliness, and narcissism on facebook use among university students," vol. 28, no. 6, pp. 2414–2419.
- [22] C. Ross, E. S. Orr, M. Sisc, J. M. Arseneault, M. G. Simmering, and R. R. Orr, "Personality and motivations associated with facebook use," vol. 25, no. 2, pp. 578–586.
- [23] Y. Amichai-Hamburger and G. Vinitzky, "Social network use and personality," vol. 26, no. 6, pp. 1289–1295.
- [24] Y. Bachrach, M. Kosinski, T. Graepel, P. Kohli, and D. Stillwell, "Personality and patterns of facebook usage," in *Proceedings of the 4th Annual ACM Web Science Conference*, ser. WebSci '12. Association for Computing Machinery, pp. 24–32.
- [25] T. Ryan and S. Xenos, "Who uses facebook? an investigation into the relationship between the big five, shyness, narcissism, loneliness, and facebook usage," vol. 27, no. 5, pp. 1658–1664.
- [26] G. Seidman, "Self-presentation and belonging on facebook: How personality influences social media use and motivations," vol. 54, no. 3, pp. 402–407.
- [27] K. Moore and J. C. McElroy, "The influence of personality on facebook usage, wall postings, and regret," vol. 28, no. 1, pp. 267–274.
- [28] M. B. Horzum, "Examining the relationship to gender and personality on the purpose of facebook usage of turkish university students," vol. 64, pp. 319–328.
- [29] E. Lee, J. Ahn, and Y. J. Kim, "Personality traits and self-presentation at facebook," vol. 69, pp. 162–167.
- [30] "Facebook Terms of Service," Jul. 2022. [Online]. Available: <https://m.facebook.com/terms/>
- [31] J. Isaak and M. J. Hanna, "User Data Privacy: Facebook, Cambridge Analytica, and Privacy Protection," *Computer*, vol. 51, no. 8, pp. 56– 59, Aug. 2018, conference Name: Computer.
- [32] "Meta Reports First Quarter 2023 Results," Apr. 2023. [Online]. Available: <https://investor.fb.com/investor-news/press-release-details/2023/Meta-Reports-First-Quarter-2023-Results/default.aspx>
- [33] N. Foeking, M. Wang, and T. L. D. Huynh, "How do investors react to the data breaches news? Empirical evidence from Facebook Inc. during the years 2016–2019," *Technology in Society*, vol. 67, p. 101717, Nov. 2021.
- [34] S. B. Barnes, "A privacy paradox: Social networking in the United States," *First Monday*, Sep. 2006.
- [35] N. K. Lankton and D. H. McKnight, "What does it mean to trust facebook? examining technology and interpersonal trust beliefs," *ACM SIGMIS Database: the DATABASE for Advances in Information Systems*, vol. 42, no. 2, pp. 32–54, May 2011.
- [36] H. Szymczak, P. Kücükbalaban, S. Lemanski, D. Knuth, and S. Schmidt, "Trusting Facebook in Crisis Situations: The Role of General Use and General Trust Toward Facebook," *Cyberpsychology, Behavior, and Social Networking*, vol. 19, no. 1, pp. 23–27, Jan. 2016.
- [37] I. Fridman, N. Lucas, D. Henke, and C. K. Zigler, "Association Between Public Knowledge About COVID-19, Trust in Information Sources, and Adherence to Social Distancing: Cross-Sectional Survey," *JMIR Public Health and Surveillance*, vol. 6, no. 3, p. e22060, Sep. 2020, company: JMIR Public Health and Surveillance Distributor: JMIR Public Health and Surveillance Institution: JMIR Public Health and Surveillance Label: JMIR Public Health and Surveillance Publisher: JMIR Publications Inc., Toronto, Canada.
- [38] L. Crouse and M. Dupuis, "A Dangerous Infodemic: An Examination of the Impact Social Media Misinformation has on COVID-19 Vaccination Status," in *The 23rd Annual Conference on Information Technology Education*. Chicago IL USA: ACM, Sep. 2022, pp. 37–43.

- [39] [39] C. P. Hoffmann, C. Lutz, and G. Ranzini, "Privacy cynicism: A new approach to the privacy paradox," *Cyberpsychology: Journal of Psychosocial Research on Cyberspace*, vol. 10, no. 4, Dec. 2016.
- [40] M. I. Khan, J. M. I. . Loh, A. Hossain, and M. J. Hasan Talukder, "Cynicism as strength: Privacy cynicism, satisfaction and trust among social media users," *Computers in Human Behavior*, vol. 142, p. 107638, May 2023.
- [41] M. Dupuis, S. Khadeer, and J. Huang, "'i got the job!': An exploratory study examining the psychological factors related to status updates on facebook," vol. 73, pp. 132–140. [Online]. Available: <https://www.sciencedirect.com/science/article/pii/S0747563217301668>
- [42] Z. R. Steelman, B. I. Hammer, and M. Limayem, "Data Collection in the Digital Age: Innovative Alternatives to Student Samples," *MIS Quarterly*, vol. 38, no. 2, pp. 355–378, Feb. 2014.
- [43] V. Benet-Martínez and O. P. John, "Los cinco grandes across cultures and ethnic groups: Multitrait multimethod analyses of the big five in spanish and english," *Journal of personality and social psychology*, vol. 75, no. 3, pp. 729–750, 1998.
- [44] O. P. John and R. L. Donahue, E. M. & Kentle, *The Big Five Inventory— versions 4a and 5*. University of California, Berkeley, Institute of Personality and Social Research, 1991.
- [45] O. P. John, L. P. Naumann, and C. J. Soto, "Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues," in *Handbook of personality: Theory and research*, 3rd ed. New York, NY, US: The Guilford Press, 2008, pp. 114–158.
- [46] M. Masaviru, "Self-Disclosure: Theories and Model Review," 2016.

APPENDIX

A. Facebook Activity Level

General: On your Facebook timeline or profile page, how often do you perform the following actions?

Facebook Group: In this Facebook group, how often do you perform the following actions?

1=Never; 2=Rarely (once every month or so); 3=Sometimes (once every week or so); 4=Often (once every day or two); 5=Very Often (a few times a day); 6=All the Time (several times a day or more)

- Post text / “write something”
- Post a feeling / activity
- Post a photo
- Post a video
- Post or comment a GIF
- Post a meme
- Post a reel
- Post an anonymous post
- Post live video
- Comment / reply
- Share a post to your timeline
- Like / react with emoji
- Check in
- Tag people
- Create a poll
- Create event
- Attend an event (either in person or virtually)
- Send friend requests
- Accept friend requests
- Report post / comment
- Hide a comment
- Delete a post or comment that you made

B. Facebook Sharing Level

General: The statements below are related to your activity in the Facebook profile and timeline.

Facebook Group: The statements below are related to your activity in the Facebook group.

1=Disagree strongly; 2=Disagree a little; 3=Neither agree nor disagree; 4=Agree a little; 5=Agree strongly

- I post about all my feelings and thoughts on social media
- I enjoy detailing my experiences in life
- I post about most of the personal events of my life
- There is almost nothing too personal for me to disclose
- I post about sad events in my life