A review of the factors influencing users' privacy attitudes in the disclosure of personal information.

Pertunia Shabalala
Val University of Technology
Vanderbijlpark, South Africa
214152278@edu.vut.ac.za

Rene Van Eck
Department of Computer Sciences
Val University of Technology
Vanderbijlpark, South Africa
rene@vut.ac.za

Tranos Zuva
Department of ICT
Val University of Technology
Vanderbijlpark, South Africa
tranosz@vut.ac.za

2024 4th International Multidisciplinary Information Technology and Engineering Conference (IMITEC) | 979-8-3503-8798-8/24/$31.00 ©2024 IEEE | DOI: 10.1109/IMITEC60221.2024.10851091

***Abstract*—Today, sharing personal information online is common as it helps to social connectivity and strengthen the user experience, but it also presents great privacy dangers. This paper reviews factors that influence users' privacy attitudes towards information disclosure. Recent studies of privacy behaviours are reviewed to highlight key elements that shape their outcomes, including perceived risks and benefits, data collectors trust, social norms, and control over shared data. The Theory of Reasoned Action (TRA) provides a relationship from relaxed privacy attitudes to greater information dissemination especially on the social networking sites. Results show that people are more willing to share when they see lower risk and more control. The paper also talks about 'privacy fatigue' or users feeling overloaded by privacy issues and turning a blind eye to online situations. Study limitations are that the study is limited to user perspective and future research involving social and familial influences is suggested. Finally, this review highlights the necessity for the development of adaptive privacy policies to accommodate emerging technologies (e.g., AI, IoT) which bring on new privacy issues.**

***Keywords*—Privacy Attitudes, Information Disclosure, Perceived Risks and Benefits, Social Norms, Privacy Fatigue**

I. Introduction

In the current digital era, names, addresses, phone numbers, and other personal information are frequently shared online. There are many benefits to this popular trend of sharing personal information, which cuts across age groups, genders, and cultural boundaries (Adhikari and Panda, 2018). These advantages include improved online experiences, better social connectivity, and personalized recommendations. On the other hand, sharing personal information presents people with serious privacy dangers, including identity theft, cyberbullying, stalking, and data breaches, in addition to these benefits (Masry-Herzallah and Stavissky, 2021).

Since privacy is acknowledged as a basic human need, it is an important topic for both academic research and policy making (Khan, Loh, Hossain and Talukder, 2023). According to research on internet user's attitudes, it was found that they are particularly concerned about their privacy and the collection, use and disclosure of their personal information (Kronemann, Kizgin, Rana and Dwivedi, 2023). People frequently give or sell a range of personal data, despite the numerous issues that have been highlighted regarding the value of privacy (Reeck, Guo, Dimoka and Pavlou, 2023).

Surveys and studies have shown a gap between claimed opinions and the actual behaviour of people facing issues affecting their privacy and personal information security (Wang and Xie, 2022). How and why people decide to transfer their information from the private to the public space is still a mystery (Wang, Genc and Peng, 2020). A limited amount of data was gathered despite exploratory research being conducted to provide a general knowledge of privacy attitudes (Adhikari and Panda, 2018).

This review paper's main goal is to provide a thorough analysis of the essential elements that influence users' privacy attitudes about the disclosure of personal information. Each element will be thoroughly discussed in the article, along with its significance in various circumstances and its impact on users' privacy views. It will also highlight areas that require more study in order to fully comprehend the complicated nature of privacy attitudes and behaviour in the digital era. The study is therefore organized as follows: methodology, exploration of factors impacting privacy attitudes in information disclosure, challenges, and unresolved issues, limitations, and implications of the study, and ultimately, the conclusion.

II. Methodology

This paper followed the standard approach of conducting a literature review. In line with the study topic, the initial step was to look for relevant papers from relevant databases or sources. Over 110 studies were found through an online search and only 15 were considered because of their relevance to the study. Papers were excluded based on several criteria to ensure the relevance, quality, and focus of the research. All these studies were found from online sources like google scholar, science Direct, and Scopus databases. The search focused on articles published since 1996 when a widely used scale to access data privacy was created. The next section will discuss the different factors influencing disclosure of private information.

III. Literature Review

The term "attitude" refers to a trained tendency to consistently react favourably or adversely to a specific thing (Salem, Baidoun and Walsh, 2019). The attitude construct can also be interpreted as a "psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (Desimpelaere, Hudders and Van de Sompel, 2020). Measuring attitude toward an activity, like sharing information, is a fairly reliable indicator of a person's likelihood to do so, even though it falls short of determining behavioural intent (Tseng, 2023). In the context of attitudes toward online self-disclosure, which is defined as "the extent to which an individual feels more comfortable sharing private information in online contexts," attitude effects have been researched.

According to Rath and Kumar (2021), the assumption that people limit their information sharing via privacy control

XXX-X-XXXX-XXXX-X/XX/$XX.00 ©20XX IEEE

Authorized licensed use limited to: Indian Institute Of Technology (Banaras Hindu University) Varanasi. Downloaded on August 07,2026 at 04:43:49 UTC from IEEE Xplore. Restrictions apply.

mechanisms has been found to account for the majority of the link between privacy perceptions and self-disclosure behaviours. Disclosure is not only the key method for establishing and maintaining good relationships, but it is also a process that is continuously adjusted in light of one's attitudes, goals, and understanding of privacy (Rath and Kumar, 2021). The concept of privacy as boundary regulation also takes into account how individuals use these domains to develop both their own and other individuals' privacy strategies for disclosure (Weinberger, Zhitomirsky-Geffet and Bouhnik, 2017). Therefore, how likely it is for people to openly trade knowledge depends on environmental evaluations, such as perceived danger, safety, and transparency (Gerber, Gerber and Volkamer, 2018). According to recent research, privacy beliefs are critical in determining disclosure behaviour in the setting of Social Networking Sites (SNS) (Millham, Atkin and Society, 2018). The Theory of Reasoned Action maintains that one's behavioral purpose is a product of their significant attitudes and beliefs (Lappeman, Marlie, Johnson and Poggenpoel, 2023). The Theory of Reasoned Action (TRA) provides another justification for the connection between attitudes and conduct. If the TRA principles were to be applied to the privacy discussion, one may get the conclusion that those who have more relaxed attitudes on privacy have stronger motivations to self-disclose. Therefore, actions that are linked to decreased privacy risks and concerns may eventually encourage increased information sharing on SNSs.

The elements that influence users' views about privacy have been the subject of much research (Schultheiss and Kalmer, 2018). The perceived advantages of sharing personal information, users' level of trust in the organization collecting their information, users' perceptions of their control over their personal data, the perceived risks associated with sharing personal information, and the context in which such information is disclosed are some of the important factors that have been identified (Tennakoon, Rameezdeen and Chileshe, 2023). In order to create successful privacy regulations and encourage responsible data activities, it is imperative to understand how these elements affect users' attitudes toward privacy (Masur, 2018). Recent research has investigated these variables and how they affect people's attitudes toward sharing personal information. For instance, Adhikari and Panda (2018) discovered that people were more ready to share their personal information when they felt like they had greater control over it. Individuals were also more open to providing personal information when they perceived lesser dangers and larger benefits from doing so.

According to Clayton, Halverson, Sathe and Malin (2018),
applications, trust, perceived advantages, and perceived dangers are important variables influencing people's attitudes toward disclosure. In addition, Wang, Genc and Peng (2020) found that social norms had an impact on people's willingness to divulge personal information. Making decisions on the exposure of personal information requires knowledge of these elements, which empowers people and organizations.

IV. Findings and Open Issues

Attitudes, which are deep-rooted responses to likes or dislikes for specific organizations or activities, become determinants of online behavior (Salem, Baidoun, and Walsh, 2019). This beneficial role extends to many online activities, making one more likely to participate in many online activities.

More importantly, there is a connection between attitudes and personal behaviour online, a result reported by Rath and Kumar (2021). Clearly, people's attitudes toward self-disclosure help influence their behaviour in sharing personal information online.

In this case, the importance of good behaviour in expressing oneself will become even more evident. These positive attitudes are linked to the desire to disclose personal information in the digital world. As people have a positive attitude towards self-disclosure, their willingness to share personal information has increased; This shows the huge impact of the psychological effects of online behaviour.

The theoretical framework in the TRA provides an overall perspective by understanding the interaction between online attitudes and behaviours (Lappeman, et al., 2023). Specifically, within the context of online privacy and self-disclosure, TRA posits that individuals who exhibit more relaxed attitudes toward privacy are inherently more motivated to partake in self-disclosure activities. By virtue of these favourable attitudes, perceived risks and concerns related to self-disclosure are lessened, thus nurturing the motivation to share personal information in online spaces.

Intriguingly, empirical research stands as a robust testament to the compelling association between attitudes and online behaviour. In the digital landscape, individuals display a greater willingness to share personal information when they perceive a sense of control over the data (Adhikari and Panda, 2018). Attitudes are positively swayed by the perception of reduced risks and the realization of augmented benefits accompanying the sharing of personal information (Adhikari and Panda, 2018).

Collectively, these findings underscore the indisputable role of attitudes as influential drivers of behavior in the online milieu. Their capacity to mold individuals' inclinations toward self-disclosure and privacy-related actions highlights the profound impact of these psychological constructs on the dynamics of the digital age.

Research results show that mobile advertising positively influences consumers' attitude towards it, which in turn impacts both their purchase intentions and actual engagement with mobile advertising Beltrão and Sousa, 2021). In this case, consumer behavior is often influenced by predictions derived from visual information. effective, perceived entertainment benefits, and perceived ease of use (Beltrão and Sousa, 2021). Marketing models reveal the important role of trust and privacy issues in influencing consumer responses, such as the use of mobile ads (Saprikis and Avlogiaris, 2021). The Internet is increasingly used to provide services, and electronic users are concerned about privacy, which affects the management of personal information and understanding of personal risk (Wang, Genc, and Peng, 2020); Personal privacy Issues are important because customers' negative perceptions can affect the reputation of service providers and reduce trust and

Authorized licensed use limited to: Indian Institute Of Technology (Banaras Hindu University) Varanasi. Downloaded on August 07,2026 at 04:43:49 UTC from IEEE Xplore. Restrictions apply.

willingness to disclose information (Su, Nguyen, Nguyen, Luu, Nguyen-Phuoc, 2022); Personal safety includes personal attention and self-control. , risk perception, religious beliefs, and self-disclosure behaviours (Dzogbenuku, Amoako, Kumi, and Bonsu, 2022); Participants want to control their personal information, and government online oversight is considered weak (Lin, Carter, and Liu, 2021); As it becomes more difficult to control personal information online, the concept of "privacy fatigue" has emerged, ultimately causing people to become out of control and unconcerned about online privacy (Cowan, Javornik, and Jiang, 2021).

The emergence of the Internet has raised communication privacy as a significant concern due to the necessity of disclosing personal information when using online services and interacting with computers. Failing to understand or prioritize how personal information is collected and analysed can lead to severe privacy violations. For instance, when signing up for social networking sites, users often overlook reading the privacy policy carefully, diminishing their concerns about privacy and personal information disclosure. Neglecting the use and protection of personal information can expose users to various online risks, including cyberbullying, online harassment, identity theft, and exposure to spam or inappropriate content, especially when users are unaware that their personal information is being collected for undisclosed purposes (Li, Guo, Qu and Hao, 2022).

Privacy concerns also highlight the positive aspect of social media, as it fosters online privacy awareness (Shi, Yuan, Yan, Wang, Qiu, Ji and Yu, 2023), aligning with previous research on parenting theory, which suggests that users' self-reports to the public can be beneficial (Guarino, Malandrino and Zaccagnino, 2022). Expanding on these findings and existing research on parental experiences, it is encouraged for users to engage in open dialogues with friends and family, creating a space to discuss their online experiences and enhancing awareness of online privacy and related issues (Tseng, 2023).

Despite being aware of the associated risks, individuals may still be willing to share personal information online to communicate and seek validation from their peers. To further comprehend the non-disclosure effect, future research should explore social factors such as meeting friends and social norms, as well as personal factors like knowledge and awareness of online privacy issues (Li, Rho and Kobsa, 2020). This research reveals that various forms of online communication influence people's thoughts and behaviors concerning online privacy.

Notably, online dating is associated with heightened privacy concerns, whereas social networking and online gaming contribute to increased privacy awareness and behavior (Wang et al., 2020). These findings offer valuable insights for users and policymakers to better understand the risks associated with different online communication methods (Masry-Herzallah and Stavissky, 2021). This understanding can improve communication with users regarding online privacy concerns and facilitate the development of more effective guidelines for online users..

V. Study Limitations and Implications

The findings of this study carry significant implications for users and teachers, particularly in the development of targeted audiences and the need to consider the purpose of social media in promoting knowledge or behaviour. This emphasizes the importance of devising media and mediation strategies that address the privacy and disclosure behaviours of diverse user groups.

A limitation of this study is its exclusive focus on user perspectives without incorporating the viewpoints of others. Prior research indicates that users often overestimate their control over their family's behaviour while underestimating their friends' involvement in unhealthy behaviours. In future research, it would be valuable to explore users' presentation patterns in specific communication contexts across various media applications. For instance, examining how individuals discuss their experiences with their parents on forums and other platforms.

This approach would provide a more comprehensive understanding of behavioural dynamics in different online contexts. Future research should encompass the opinions of friends and family when investigating advertisements and social media user feedback. Understanding how these perceptions influence user attitudes and behaviours concerning online privacy protection is essential..

VI. Conclusion

Privacy is recognized as a fundamental human need, and it is a crucial policy and academic concern. Despite the many concerns that have been raised regarding the value of privacy, people often give away or sell a variety of personal data. Trust, perceived benefits, and perceived risks are significant factors influencing individuals' attitudes towards disclosure. In addition, social norms play a role in individuals' attitude to disclose personal information. What's important to consider is how new technology affects your privacy. Concerns over their data and privacy are raised by technologies like AI, the Internet of Things, and biometrics. To address these new issues, we must constantly review and revise our privacy policies.

References

[1] Adhikari, K., & Panda, R. K. (2018). Users' information privacy concerns and privacy protection behaviors in social networks. Journal of Global Marketing, 31(2), 96-110.

[2] Clayton, E.W., Halverson, C.M., Sathe, N.A. and Malin, B.A., 2018. A systematic literature review of individuals' perspectives on privacy and genetic information in the United States. PloS one, 13(10), p.e0204417.

[3] Cowan, K., Javornik, A. and Jiang, P., 2021. Privacy concerns when using augmented reality face filters? Explaining why and when use avoidance occurs. Psychology & Marketing, 38(10), pp.1799-1813.

[4] Desimpelaere, L., Hudders, L. and Van de Sompel, D., 2020. Knowledge as a strategy for privacy protection: How a privacy literacy training affects children's online disclosure behavior. Computers in human behavior, 110, p.106382.

[5] Dzogbenuku, R.K., Amoako, G.K., Kumi, D.K. and Bonsu, G.A., 2022. Digital payments and financial wellbeing of the rural poor: The moderating role of age and gender. Journal of International Consumer Marketing, 34(2), pp.113-136.

[6] Gerber, N., Gerber, P. and Volkamer, M., 2018. Explaining the privacy paradox: A systematic review of literature investigating privacy attitude and behavior. Computers & security, 77, pp.226-261.

Authorized licensed use limited to: Indian Institute Of Technology (Banaras Hindu University) Varanasi. Downloaded on August 07,2026 at 04:43:49 UTC from IEEE Xplore. Restrictions apply.

[7] Guarino, A., Malandrino, D. and Zaccagnino, R., 2022. An automatic mechanism to provide privacy awareness and control over unwittingly dissemination of online private information. Computer Networks, 202, p.108614.

[8] Khan, M.I., Loh, J.M., Hossain, A. and Talukder, M.J.H., 2023. Cynicism as strength: Privacy cynicism, satisfaction and trust among social media users. Computers in Human Behavior, 142, p.107638.

[9] Kronemann, B., Kizgin, H., Rana, N. & K. Dwivedi, Y., 2023. How AI encourages consumers to share their secrets? The role of anthropomorphism, personalisation, and privacy concerns and avenues for future research. Spanish Journal of Marketing-ESIC, 27, 3-19.

[10] Lappeman, J., Marlie, S., Johnson, T. and Poggenpoel, S., 2023. Trust and digital privacy: willingness to disclose personal information to banking chatbot services. Journal of Financial Services Marketing, 28(2), p.337.

[11] Li, J., Guo, F., Qu, Q.X. and Hao, D., 2022. How does perceived overload in mobile social media influence users' passive usage intentions? Considering the mediating roles of privacy concerns and social media fatigue. International Journal of Human–Computer Interaction, 38(10), pp.983-992.

[12] Li, Y., Rho, E. H. R. & Kobsa, A. 2020. Cultural differences in the effects of contextual factors and privacy concerns on users' privacy decision on social networking sites. 41, 655-677.

[13] Masry-Herzallah, A. & Stavissky, Y. 2021. The attitudes of elementary and middle school students and teachers towards online learning during the corona pandemic outbreak. SN Social Sciences, 1, 1-23.

[14] Masur, P. K. 2018. Situational privacy and self-disclosure: Communication processes in online environments, Springer.

[15] Mehdy, A.N., Ekstrand, M.D., Knijnenburg, B.P. and Mehrpouyan, H., 2021, June. Privacy as a planned behavior: Effects of situational factors on privacy perceptions and plans. In Proceedings of the 29th ACM Conference on User Modeling, Adaptation and Personalization (pp. 169-178).

[16] Millham, M.H. and Atkin, D., 2018. Managing the virtual boundaries: Online social networks, disclosure, and privacy behaviors. New Media & Society, 20(1), pp.50-67.

[17] Rath, D.K. and Kumar, A., 2021. Information privacy concern at individual, group, organization and societal level-a literature review. Vilakshan-XIMB Journal of Management, 18(2), pp.171-186.

[18] Reeck, C., Guo, X., Dimoka, A. and Pavlou, P.A., 2024. Uncovering the neural processes of privacy: a neurally informed behavioral intervention to protect information privacy. Information systems research, 35(2), pp.727-746.

[19] Saprikis, V. and Avlogiaris, G., 2021. Factors that determine the adoption intention of direct mobile purchases through social media apps. Information, 12(11), p.449.

[20] Salem, M.Z., Baidoun, S. and Walsh, G., 2019. Factors affecting Palestinian customers' use of online banking services. International Journal of Bank Marketing, 37(2), pp.426-451.

[21] Schultheiss, R. & Kalmer, N. P. 2018. Self-disclosure on Facebook: Social Network Site privacy and personal information disclosure of Germans and Norwegians-A cross-cultural comparison.

[22] Shi, J., Yuan, R., Yan, X., Wang, M., Qiu, J., Ji, X. and Yu, G., 2023. Factors influencing the sharing of personal health data based on the integrated theory of privacy calculus and theory of planned behaviors framework: results of a cross-sectional study of Chinese patients in the Yangtze River Delta. Journal of Medical Internet Research, 25, p.e46562.

[23] Su, D.N., Nguyen, N.A.N., Nguyen, L.N.T., Luu, T.T. and Nguyen-Phuoc, D.Q., 2022. Modeling consumers' trust in mobile food delivery apps: perspectives of technology acceptance model, mobile service quality and personalization-privacy theory. Journal of Hospitality Marketing & Management, 31(5), pp.535-569.

[24] Tennakoon, G.A., Rameezdeen, R. and Chileshe, N., 2023. Identifying factors affecting the low uptake of reprocessed construction materials: A systematic literature review. Waste Management & Research, 41(4), pp.781-800.

[25] Tseng, H. T. 2023. Shaping path of trust: the role of information credibility, social support, information sharing and perceived privacy risk in social commerce. Information Technology and People, 36(2), 683-700. https://doi.org/10.1108/ITP-07-2021-0564

[26] Wang, J. and Xie, J., 2023. Exploring the factors influencing users' learning and sharing behavior on social media platforms. Library Hi Tech, 41(5), pp.1436-1455.

[27] Wang, Y., Genc, E. and Peng, G., 2020. Aiming the mobile targets in a cross-cultural context: Effects of trust, privacy concerns, and attitude. International Journal of Human–Computer Interaction, 36(3), pp.227-238.

[28] Weinberger, M., Zhitomirsky-Geffet, M. and Bouhnik, D., 2017. Factors affecting users' online privacy literacy among students in Israel. Online Information Review, 41(5), pp.655-671..

Authorized licensed use limited to: Indian Institute Of Technology (Banaras Hindu University) Varanasi. Downloaded on August 07,2026 at 04:43:49 UTC from IEEE Xplore. Restrictions apply.