



Personalization-privacy paradox in social media ads: Role of consumer-brand relationships

Garim Lee, Indiana University
Jennifer Huh, Texas Tech University
Hye-Young Kim, University of Minnesota

Keywords: Consumer-brand relationships, personalization, social media ads

Introduction. Fashion brands utilize algorithms and big data to deliver personalized advertising, which is tailored to a consumer's characteristics, interests, preferences, and shopping-related behaviors (Tran et al., 2023; Tucker, 2014). Social media allows brands to collect detailed information and increase the chance of creating sophisticated personalized ads, potentially creating a personalization-privacy paradox (Aguirre et al., 2016). Although the effect of personalized social media ads on perceived privacy concerns has been consistently explored, there remains room for investigating how consumer-brand relationships impact such an effect. Understanding the role of consumer-brand relationships is important as it can play a pivotal part in changing the effect of personalization-privacy paradox. In this vein, this study tests the effects of ad personalization, information collection methods, and consumer-brand relationships on the outcomes of personalized ads under the framework of the personalization-privacy paradox.

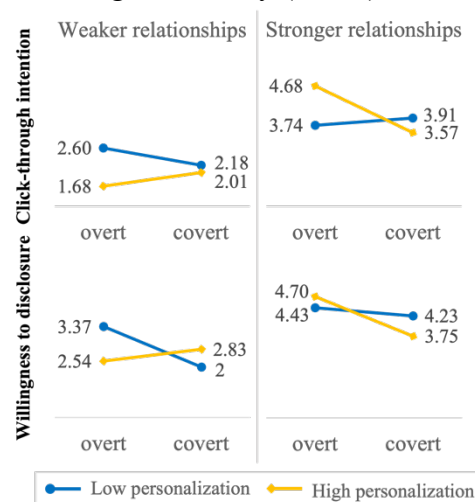
Literature Review. Personalization-privacy paradox explains that personalized promotional messages from a brand can both increase and decrease consumer engagement with the brand (Aguirre et al., 2016; Awad & Krishnan, 2006). The benefits of personalized advertising have been confirmed, including greater attention, recall, purchase/sharing intention, and click-through intention (e.g., Hayes et al., 2021). However, undesirable outcomes such as privacy concerns, perceived privacy costs, and creepiness may also result from personalized ads (Segijn et al., 2021; White et al., 2008). Consumers are even more concerned about their privacy when receiving personalized ads when they are not aware that their data is collected (covert) for personalized ads than they know about the collection and usage of their data (overt) (Aguirre et al., 2016; Hayes et al., 2021). Thus, high (vs. low) ad personalization (H1) and covert (vs. overt) information collection (H2) will lead to a greater privacy concern.

As the personalization-privacy paradox and the literature suggests, privacy concerns reduce advertising effectiveness by yielding ad avoidance, negative attitudes toward the ad, and less purchase or click-through intention (Bleier & Eisenbeiss, 2015; Morimoto, 2020; van Ooijen et al., 2022). Click-through intention is especially important because one of the most meaningful variables representing advertising effectiveness on social media is the click-through rate, which directly indicates return on investment (ROI) rate of social media ads (Fisher, 2009; Yoo, 2007). Also, self-disclosure is a crucial predictor of purchase responses to personalized promotions (Zeng et al., 2021). Thus, this study posits that privacy concerns will be negatively associated with click-through intention and willingness to disclose personal information, consequently mediating the effects of personalization and information collection (H3).

Strong consumer-brand relationships are characterized by a strong emotional connection between the consumer and the brand (Aaker et al., 2004; Fournier, 1998; Kim et al., 2010). One of the most critical elements of a committed consumer-brand relationship is trust (Aaker et al., 2004; Zemack-Rugar et al., 2017), which could alleviate negative outcomes of personalization (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015). For example, Aguirre et al. (2015) found that consumers do not feel vulnerable even in covert data collection in response to highly personalized ads when the ad was from a trustworthy website. Also, the Antecedents-Privacy Concerns-Outcomes model suggests trust weakens the relationships between privacy concerns and the negative behavioral reactions to the concerns (Smith et al., 2011). Therefore, the negative effects of (high) ad personalization and (covert) information collection on click-through intentions and willingness to disclose personal information will be weaker when the consumer-brand relationship is stronger (H4).

Methods & Results. A 2 (ad personalization: low vs. high) \times 2 (information collection: overt vs. covert) \times 2 (consumer-brand relationships: weaker vs. stronger) between-subjects experiment was conducted. Two hundred U.S. adults were recruited from Prolific. Multiple attention check questions were employed to ensure high-quality data, leaving 193 final data ($M_{age}=38.98$, $SD_{age}=14.05$, 46.6% female). Participants were randomly assigned to one condition and viewed a personalized ad scenario and Nike ad stimuli that manipulated ad personalization and information collection. Participants' relationships with Nike were measured, and a median split (median=3.05) was used to create the conditions of the consumer-brand relationships. A pretest ($n=134$, Amazon Mturk) checked the successful manipulation of the scenario. The measurements were adopted from the literature and all multi-item scales showed high reliability ($\alpha>.85$).

The manipulation of ad personalization and information collection was successful. As hypothesized, ANOVA showed that participants in the covert (vs. overt) information collection condition showed higher privacy concerns ($M_{overt}=4.18$ vs. $M_{covert}=4.60$; $F=5.44$, $p=.021$), supporting H2. Privacy concerns did not significantly differ depending on ad personalization, not supporting H1. This means that consumers become significantly more anxious about privacy when receiving personalized ads without knowing the collection of their personal data. Personalization did not show a significant effect on privacy concerns, but it may be due to interaction effects. PROCESS model 4 results confirmed the mediation of privacy concerns on the effect of information collection on click-through intention ($b=-.15$, $CI=[-.3021, -.0084]$) and willingness to disclose ($b=-.21$, $CI=[-.4394, -.0117]$). The mediation was not significant on the effect of ad personalization. Thus, H3 was supported for information collection but not for ad personalization. Lastly, ANOVA showed a significant three-way interaction effect on click-through intention ($F=5.73$, $p=.018$)



and willingness to disclose ($F=4.25$, $p=.031$). Briefly speaking, positive ad effectiveness was the highest when highly personalized ads were delivered overtly for those with stronger brand relationships. In contrast, for those with weaker brand relationships, positive ad effectiveness was the highest when less personalized ads were delivered overtly. In sum, the negative effect of high personalization was mitigated for stronger (vs. weaker) consumer-brand relationships when information collection was overt, consistent with H4. However, in contrast to H4, the negative effect of covert information collection was mitigated for weaker (vs. stronger) consumer-brand relationships when ad personalization was high. Thus, H4 was partially supported.

Conclusion. This study contributes to the personalized advertising literature by exploring the effects of ad personalization and information collection methods on consumers' privacy concerns in the social media ads context building on the personalization-privacy paradox. Furthermore, this study provides theoretical and managerial implications by incorporating the literature on consumer-brand relationships into the effectiveness of personalized advertising. The findings confirmed the importance of transparently informing consumers about the collection and usage of their data in reducing perceived privacy concerns and thus enhancing ad effectiveness. More importantly, brands are recommended to strategically tailor ad personalization levels based on target consumers' information in social media and their relationships with the consumers.

References

- Aaker, J., Fournier, S., & Brasel, S. A. (2004). When good brands do bad. *Journal of Consumer Research*, 31(1), 1-16.
- Aguirre, E., Mahr, D., Grewal, D., De Ruyter, K., & Wetzels, M. (2015). Unraveling the personalization paradox: The effect of information collection and trust-building strategies on online advertisement effectiveness. *Journal of Retailing*, 91(1), 34-49.
- Aguirre, E., Roggeveen, A. L., Grewal, D., & Wetzels, M. (2016). The personalization-privacy paradox: implications for new media. *Journal of Consumer Marketing*, 33(2), 98-110.
- Awad, N. F., & Krishnan, M. S. (2006). The personalization privacy paradox: an empirical evaluation of information transparency and the willingness to be profiled online for personalization. *MIS Quarterly*, 13-28.
- Bleier, A., & Eisenbeiss, M. (2015). The importance of trust for personalized online advertising. *Journal of Retailing*, 91(3), 390-409.
- Fisher, T. (2009). ROI in social media: A look at the arguments. *Journal of Database Marketing & Customer Strategy Management*, 16(3), 189-195.
- Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4), 343-373.
- Hayes, J. L., Brinson, N. H., Bott, G. J., & Moeller, C. M. (2021). The influence of consumer-brand relationship on the personalized advertising privacy calculus in social media. *Journal of Interactive Marketing*, 55, 16-30.

- Kim, H. Y., Kim, Y. K., Jolly, L., & Fairhurst, A. (2010). The role of love in satisfied customers' relationships with retailers. *The International Review of Retail, Distribution and Consumer Research*, 20(3), 285-296.
- Morimoto, M. (2020). Privacy concerns about personalized advertising across multiple social media platforms in Japan: the relationship with information control and persuasion knowledge. *International Journal of Advertising*, 1-21.
- Segijn, C. M., Voorveld, H. A., & Vakeel, K. A. (2021). The role of ad sequence and privacy concerns in personalized advertising: An eye-tracking study into synced advertising effects. *Journal of Advertising*, 1-13.
- Smith, H. J., Dinev, T., & Xu, H. (2011). Information privacy research: an interdisciplinary review. *MIS Quarterly*, 989-1015.
- Tran, T., Sen, S., & Van Steenburg, E. (2023). This ad's for you: how personalized SNS advertisements affect the consumer-brand relationship. *Journal of Consumer Marketing*.
- Tucker, C. E. (2014). Social networks, personalized advertising, and privacy controls. *Journal of Marketing Research*, 51(5), 546-562.
- van Ooijen, I., Segijn, C. M., & Oprea, S. J. (2022). Privacy cynicism and its role in privacy decision-making. *Communication Research*
- White, T. B., Zahay, D. L., Thorbjørnsen, H., & Shavitt, S. (2008). Getting too personal: Reactance to highly personalized email solicitations. *Marketing Letters*, 19(1), 39-50.
- Yoo, C. Y. (2007). Implicit memory measures for web advertising effectiveness. *Journalism & Mass Communication Quarterly*, 84(1), 7-23.
- Zemack-Rugar, Y., Moore, S. G., & Fitzsimons, G. J. (2017). Just do it! Why committed consumers react negatively to assertive ads. *Journal of Consumer Psychology*, 27(3), 287-301.
- Zeng, F., Ye, Q., Li, J., & Yang, Z. (2021). Does self-disclosure matter? A dynamic two-stage perspective for the personalization-privacy paradox. *Journal of Business Research*, 124, 667-675.

Funding

This study was supported by Association for Education in Journalism and Mass Communication (AEJMC) Ad Division Grad Student Research Grant.