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Understanding Self-Disclosure With Conversational Agents

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The exponential growth of data has led to the integration of AI as a crucial component within major social network platforms. Users now rely on these platforms for leisure activities and educational purposes, forming an essential part of their online experience (Mohit et al., 2023). Furthermore, AI services, including conversational agents like chatbots, are widely utilized by organizations and their clients. As clients become more accustomed to interacting with chatbots and companies recognize their benefits, such as faster, more convenient, and cost-effective communication, their usage continues to grow (Kang & Kang, 2023; Laban et al., 2020). While numerous studies have highlighted the advantages of applying chatbots to improve mental health (Kang & Kang, 2023), enhance consumer services (Belen-Saglam et al., 2022), foster social relationships (Lee et al., 2021) , and reduce bias in job interviews (Pickard & Roster, 2020), there are concerns associated with self-disclosure to AI agents. Many users still hesitate to disclose their personal information when interacting with AI agents. Some studies focusing on user perceptions of trust (Lappeman et al., 2022), privacy calculus (Carmichael et al., 2022; Skjuve et al., 2023), and privacy concerns (Li et al., 2019) aim to understand the factors that contribute to client concerns when engaging with conversational agents.

Our research aims to analyze empirical studies to explore the main determinants that affect users' decisions to disclose to conversational agents and their consequences in various contexts. By conducting this analysis, we develop a comprehensive theoretical framework and provide research recommendations on this topic. Our approach followed the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) framework. Initially, we conducted keyword searches using terms like "information disclosure" or "self-disclosure" and "conversational agents" or "chatbots" in two significant databases: Web of Science (WOS) and Scopus. We identified the most relevant papers for further analysis, resulting in a total of 30 papers selected according to the PRISMA guidelines. We focused on self-disclosure based on people's motivations for sharing information. Through this process, we gained an overall understanding of self-disclosure definitions and categorized them into four primary groups:

1. Physiological intention: sharing information with the intention of alleviating anxiety or seeking emotional support.
2. Privacy intention: a desire to share information on trustworthy and private platforms.
3. Trade-off intention: sharing information with the aim of obtaining better services or benefits in exchange for disclosure.
4. Developing relationship intention: a desire to build trust and reduce uncertainty between parties involved.

By analyzing the literature, we obtained valuable insights into the different dimensions of self-disclosure in conversational agents. Numerous studies have investigated the factors influencing individuals' personal information disclosure in various domains. To provide a comprehensive analysis, we have categorized these factors into four groups: conversational agents' features, individuals' characteristics, nature of information, and context.

Regarding conversational agents' features, our findings indicate that both anthropomorphism and personalization positively impact consumers' attitudes toward self-disclosure (Kronemann et al., 2023). Additionally, research by Meng & Dai, 2021 suggests that emotional support and reciprocal disclosure can reduce users' stress and worries. Individuals' characteristics, such as personal background (gender, age, culture), perception of interaction (perceived privacy, trust, positive effect), and physiological disorders (e.g., schizophrenia), also play a role in self-disclosure decisions. The nature of information is another crucial factor affecting self-disclosure. The sensitivity and relevance of the information influence individuals' intention to share personal and medical information (Belen-Saglam et al., 2022). We also recognize "context" as a significant situational and environmental factor influencing self-disclosure. Based on our findings, we have categorized different contexts, including psychological and mental health well-being, job interviews, commercial and financial, and coaching and social relationship development.

During our review, some papers frequently employed the social penetration theory. However, many studies lacked a theoretical framework that could enhance the conceptual basis of their findings. Therefore, we encourage future research to incorporate theoretical frameworks to strengthen the robustness of the results. Additionally, most studies in our review relied on experimental methods. Hence, we suggest that future research adopts longitudinal, quantitative, and survey methodologies to more effectively investigate the cognitive factors influencing self-disclosure. In conclusion, we propose a further exploration of individuals' interaction with conversational agents and self-disclosure, recognizing it as a complex phenomenon influenced by various factors and contexts.

The Selected References

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