

UNDERSTANDING OF SOCIAL PSYCHOLOGY IN THE ERA OF CLOUD COMPUTING

¹*Beenish Sarfaraz and ²**Moe K Moussavi

¹MSIT, University of North America, USA

²University of North America, CIS & IT Business Management, USA

*Corresponding Author: beenish.syed@live.uona.edu

**mohammad.moussavi@live.uona.edu

ABSTRACT: A significant development in social psychology is the incorporation of cloud computing, which makes it possible to collect, analyze, and apply data more widely across various social domains. Using cloud-based technologies to improve mental health therapies, democratize educational access, and enable real-time behavioral monitoring, this article investigates the nexus between social psychology and cloud computing. We examine how cloud computing might enhance accessibility, lessen the digital gap, and foster diversity through a thorough analysis of recent research. Cloud-based mental health platforms that track stress and wellbeing, as well as educational technologies that offer flexible, accessible learning opportunities, are important uses. Notwithstanding its advantages, cloud computing raises moral questions about data privacy and the effects of ongoing monitoring on people. To leverage cloud computing's potential for social good within an ethically sound framework, this study urges more research on striking a balance between privacy issues and the technology's promise.

Keywords: Social psychology, Cloud computing,

1. INTRODUCTION

Social psychology has gradually evolved into a distinct science during the past century. The innovative outcomes generated by social psychology, through its growing integration with other societal sciences, are applicable across all sectors of society. With the advent of technology in recent years, cloud computing is capable of aggregating and integrating substantial volumes of social psychological research data via its established parallel and distributed computing technologies. This accelerates the advancement of social psychology research and conserves considerable time for individuals studying the field [1]. However, the rise of personal cloud computing is a significant recent advancement in computing, progressively representing a substantial share of overall Internet usage. Services like Dropbox and Google Drive are swiftly gaining popularity among both individual and organizational users. The advantages encompass the distant storage and processing of substantial volumes of private and shared data, synchronized, with an individual's local computer directories and accessible from many devices [2]. National Institute of Standards and Technology [3] states that cloud computing is a business and technology model that makes it possible to share and use a shared pool of IT resources (network, processing power, storage, applications, and other IT-based services) virtually. Furthermore, in contrast to earlier IT utilization models, cloud computing is distinguished by its significant scalability and flexibility, coupled with minimal administrative requirements.

Advancements in information technology increasingly influence individuals' lives, with all facets of existence incorporating Internet components to enhance productivity. The research by Moqbel [4] indicated that the intention to utilize technology is affected by a broader array of factors and underscored the significance of moderating factors in the interactions among attitudes, intentions, and usage. Social psychology and cloud computing are interconnected, exploring the impact of these technologies on social behavior, interpersonal interactions, and psychological processes inside digital contexts. This research examines individual interactions, communication, and the formation of social connections in a virtual environment, emphasizing the

significance of social relationships in the success of IT outsourcing, notwithstanding the economic and technological potential of cloud computing.

Cloud computing has emerged as an effective instrument for promoting behavioral change by delivering real-time feedback and data-driven insights, particularly in the domains of health and education. Cloud-based health applications, for example, aggregate and preserve users' data regarding physical activity, nutrition, and mental health, providing tailored recommendations that promote better behaviors over time [5]. Cloud computing technology can serve as a platform for data collecting in social psychology research, hence enhancing data support for the field's orientation and current advancements. A cloud computing-based mental health service platform can gather clients' psychological research data. This cloud computing-based mental health service platform may aggregate diverse data sources from the terminal and evaluate and process these data through cloud computing technologies.

2. REVIEW OF LITERATURE

Zhao [1] asserts that mental health issues should be regarded as a long-term research focus, advocating for the real-time collection of users' psychological characteristic data akin to chronic diseases, followed by the storage and classification of this specific data, thereby utilizing a cloud computing-based mental health service platform for ongoing monitoring. This study presents a large-scale cloud computing-based mental health data center analysis platform, which fulfils the research requirements of professionals in the field. Furthermore, cloud computing alters workplace relations and fosters ecologically sustainable behaviors. Collaborative platforms such as Google Workspace and Microsoft Teams depend on cloud infrastructure, facilitating remote work, instantaneous document sharing, and group communication, hence promoting digital-first work practices and transforming company cultures [6]. Moreover, by centralizing data and minimizing the requirement for physical resources, cloud platforms promote environmentally sustainable practices in both personal and corporate settings. Cloud platforms have enabled community participation, permitting users to

participate in virtual support networks and advocacy organizations that strengthen social norms and inspire collective action [7].

The advantages of cloud computing for eLearning, include cost-effectiveness, enhanced data security, virtualization, centralized data storage, and the capability to monitor data access. They delineated the advantages of cloud computing for e-learning concerning the attributes of the three cloud service models: infrastructure (e-learning systems can operate on the provider's infrastructure), platform (e-learning systems can be developed using the provider's development interface), and service (e-learning systems can utilize solutions developed by the provider). In their study of the advantages of using cloud computing for e-learning, [8] discovered that it is inexpensive, offers better performance, fast software upgrades, enhanced document format compatibility, and data security and security. Moreover, it offered numerous advantages for students and educators, including online courses, examinations, assignments, projects, feedback, forums, and the management of e-learning content and resources. Research by [9] indicates that cloud technology not only improves mental health and educational accessibility but also provides an opportunity for organizations and individuals to interact with technology in previously unattainable manners. Cloud computing's capacity to analyze extensive data sets and deliver on-demand analytics enables academics to investigate social behaviors and psychological well-being on unprecedented sizes.

In the future, as cloud computing develops, it is cheap and convenient for more information processing of schools and individuals to move to the "cloud". Cloud-infrastructure provides educational institutions, educators and students with various information services.

3. METHODOLOGY

This review identified articles published from 2017 to 2024 that discuss the intersection of social psychology and cloud computing. The databases Google Scholar, IEEE Xplore, and ResearchGate were used for an exhaustive search with keywords such as "cloud computing," "social psychology," "mental health monitoring," and "digital divide." The inclusion criteria were: Articles published between 2017 and 2024. Research directly addresses cloud computing and social psychology. Digital access, or educational systems. Peer-reviewed journal articles and conference proceedings.

4. DISCUSSION

The discussion synthesizes key findings across the studies in areas such as mental health monitoring, educational quality management and digital inclusivity. This review highlights cloud computing's transformative effects on social psychology, particularly in mental health, education, and social inclusivity. Cloud platforms offer innovative solutions for continuous mental health monitoring, democratizing education, and supporting digital access across socioeconomic divides. However, challenges persist in ensuring data privacy, managing ethical considerations, and preventing over-reliance on digital monitoring. Furthermore, cloud computing platforms significantly enhance mental health monitoring, educational accessibility, and quality

management, tackling essential social issues. The research conducted by [10] and [11] illustrates the capacity of cloud computing to facilitate real-time psychological resources, hence enhancing the accessibility and responsiveness of mental health care. Likewise, the research conducted by [12] and [13] emphasizes the cloud's capacity to mitigate the digital gap and improve educational equity by providing marginalized groups with access to superior educational resources and uniform standards. [14] emphasize the advantages and ethical dilemmas associated with cloud computing in data-intensive sectors such as aviation, where real-time monitoring is crucial. Collectively, these findings underscore the essential role of cloud computing in promoting social inclusion and developing adaptable, scalable solutions in mental health and education.

REFERENCES

- [1] Zhao, Y., & Du, D. (2022). Research orientation and development of social psychology's concept of justice in the era of cloud computing. *Frontiers in Psychology*, 13, Article 902780. <https://doi.org/10.3389/fpsyg.2022.902780>
- [2] Drago, I. (2013). Understanding and monitoring cloud services.
- [3] National Institute of Standards and Technology (NIST). (2011). The NIST definition of cloud computing. NIST Special Publication 800-145. <https://doi.org/10.6028/NIST.SP.800-145>
- [4] Moqbel, M., Bartelt, V., & Al-Suqri, M. (2014). A study of personal cloud computing: Compatibility, social influence, and moderating role of perceived familiarity. In 20th Americas Conference on Information Systems, AMCIS 2014. Association for Information Systems.
- [5] Kushniruk, A., Patel, V., & Borycki, E. (2020). Cloud health applications and their influence on patient behavior: Exploring real-time feedback and long-term engagement. *Health Informatics Journal*, 26(4), 1015–1030.
- [6] Iqbal, A., & Khan, N. (2022). Workplace collaboration and productivity in cloud environments: A review of Google Workspace and Microsoft Teams. *Journal of Digital Workplace Studies*, 14(1), 22–39.
- [7] Zhang, X., & Lin, P. (2023). Community building and social support in cloud-based digital networks: Examining behavioral impacts. *Social Computing Research*, 32(1), 89–105.
- [8] Qaisar, F., Shahab, H., Iqbal, M., Sargana, H. M., Aqeel, M., & Qayyum, M. A. (2023). Recent trends in cloud computing and IoT platforms for it management and development: a review. *Pakistan Journal of Engineering and Technology*, 6(1), 98-105.,
- [9] Jou, M., & Wang, J. (2013). Observations of achievement and motivation in using cloud computing drCAD: Comparison of college students with high school and vocational high school backgrounds. *Computers in Human Behavior*, 29(2), 364–369. <https://doi.org/10.1016/j.chb.2012.11.005>
- [10] Reddy, B. A., Reddy, G. S., & Lokesh, K. (2023). AI-Driven Stress Analysis and Management: A novel approach leveraging OpenAI and NoSQL databases to empower students in stress management. *IEEE Xplore*.

- [11] Chennupalle, D., Challagulla, S. B., & Lokesh, R. (2023). Enhancing Mental Health with AWS Cloud Services for Mental Well Hub.
- [12] George, A. S. (2023). Bridging the Digital Divide: Understanding the Human Impacts of Digital Transformation.
- [13] Lukashov, D. (2023). Quality Management in the Modern Educational Context: Challenges and Perspectives.
- [14] Ćosić, K., Popović, S., & Wiederhold, B. K. (2024). Enhancing aviation safety through AI-driven mental health management for pilots and air traffic controllers. *Cyberpsychology, Behavior, and Social Networking*, 27(8), 588–598.