

# IJRTBT | WeChat Discontinuation Intention Analysis: How Fatigue Acts as a Moderator between Information Irrelevance, Information Overload, and Communication Overload

Liu Rufeng\*, Zhang Nan, Zhu Jianqiang

Department of Management Area, Lincoln University, 47301 Petaling Jaya, Selangor D. E., Malaysia

\*Corresponding Author's Email: [Liurufeng\\_010@outlook.com](mailto:Liurufeng_010@outlook.com)

## Abstract

The present study aims to examine the association between the intention to discontinue the use of WeChat and three primary factors, namely information irrelevance, information overload, and communication overload. Furthermore, it investigates the moderating influence of fatigue on this association. WeChat, a widely utilized instant messaging application, provides a plethora of features and an extensive array of information, thereby potentially inducing overwhelming experiences among its users. The inclusion of extraneous information on WeChat has a detrimental impact on its effectiveness, as excessive amounts of information and communication can result in cognitive overload and reduced user satisfaction. This study posits that fatigue, which arises from extended exposure to excessive stimuli, serves as a moderator in the association between the aforementioned factors and users' intentions to cease using WeChat. Gaining a comprehensive understanding of the role that fatigue plays as a moderator is of utmost importance for developers and designers in order to effectively enhance user experiences and minimize intentions of discontinuation. Through the implementation of a thorough analysis, the primary objective of this study is to offer significant and valuable insights into the intricate dynamics surrounding the discontinuation of WeChat. By doing so, this research aims to contribute to the advancement of strategies that effectively enhance user satisfaction and mitigate intentions of discontinuation.

**Keywords:** *Communication Overload; Discontinuation Intention; Fatigue; Information Irrelevance; Information Overload; Moderator; WeChat*

## Introduction

According to Alenezi (2023), the expeditious progression of technology has fundamentally transformed the manner in which individuals engage in communication and establish connections with one another. An example of a significant advancement is the emergence of instant messaging platforms, with WeChat occupying a prominent position. WeChat, a social media and communication platform developed by Tencent, has experienced significant popularity both within China and internationally, establishing itself as a dominant force in the market (Kaye, Chen & Zeng, 2020). Nevertheless, despite its extensive utilization, there is an escalating apprehension surrounding the users' inclination to terminate their engagement with the application. The objective of this study is to investigate the factors that contribute to the intention of discontinuing the use of WeChat. The study specifically focuses on examining the

*Received May 3, 2023; Received in revised form May 22, 2023; Accepted June 6, 2023*

moderating role of fatigue in the relationship between information irrelevance, information overload, and communication overload.

WeChat has emerged as an indispensable component of individuals' daily routines, providing a wide range of functionalities that extend beyond basic communication (Cao, Dai & Liu, 2023). Users have the ability to participate in voice and video communication, exchange multimedia content, utilize a range of mini-applications, facilitate financial transactions, and engage in business activities. Nevertheless, the profusion of characteristics and the continual stream of data can give rise to overpowering encounters, which in turn may lead to unfavorable user perceptions and intentions to cease utilizing the application.

The presence of irrelevant information is a factor that can have a substantial impact on users' experiences when using WeChat. Given the vast amount of information accessible, individuals may encounter difficulties in effectively sorting and locating pertinent content. The presence of irrelevant information can result in frustration for users, who invest a significant amount of time in the process of sorting through such content. Consequently, this can have a negative impact on their overall satisfaction. The inclusion of extraneous information has the potential to heighten users' propensity to discontinue usage, as it detracts from the usefulness and effectiveness of WeChat as a means of communication.

Another crucial aspect to consider is the phenomenon of information overload, wherein users are inundated with an overwhelming amount of information that exceeds their cognitive processing capacities. The multifaceted nature of WeChat results in the accumulation of a substantial volume of messages, notifications, and updates. The experience of users being inundated with a large quantity and diverse range of information can result in cognitive overload, diminished levels of attention, and decreased levels of satisfaction. It is probable that adverse experiences will contribute to the development of intentions to discontinue usage, as users endeavor to alleviate the overwhelming effects of excessive information.

In addition, the proliferation of communication channels and interactions enabled by WeChat can lead to communication overload, which may result in user fatigue and a desire to cease using the application. The act of maintaining a multitude of social connections and engaging in continuous communication can result in mental and emotional fatigue. Individuals may experience a state of being overwhelmed or overextended as they endeavor to meet the obligations associated with maintaining and overseeing numerous social connections. Excessive communication can result in diminished user satisfaction, heightened levels of stress, and ultimately, intentions to cease utilizing the WeChat platform.

Within this particular context, fatigue assumes a pivotal role as a crucial moderator in the relationship between information irrelevance, information overload, and communication overload. Fatigue, encompassing both cognitive and affective dimensions, arises as a result of extended exposure to an abundance of stimuli that exceeds an individual's capacity to effectively process and cope with them. The aforementioned phenomenon is characterized by a feeling of weariness, depletion, and diminished cognitive capacities. The exacerbation of information irrelevance, information overload, and communication overload due to fatigue can impact users' inclination to discontinue their usage of WeChat (Pang, 2023).

Comprehending the intricate interplay among information irrelevance, information overload, communication overload, and fatigue is imperative for scholars and professionals alike. Through the identification and comprehension of these factors, developers and designers are able to make informed decisions aimed at optimizing user experiences and mitigating intentions of discontinuation. The primary objective of this study is to provide a comprehensive understanding of the underlying dynamics involved in the process of discontinuing the use of WeChat. Specifically, this research aims to examine the role of fatigue as a moderator in this process, thereby contributing valuable insights to the existing body of knowledge.

In summary, this introductory section has presented a comprehensive outline of the research subject: the analysis of discontinuation intention in WeChat. The objective of this study is to investigate the impact of information irrelevance, information overload, and communication overload on users' intentions to discontinue their usage of WeChat. Furthermore, it underscores the pivotal significance of fatigue as a moderator within this association. Through the implementation of a comprehensive analysis, this research endeavor aims to make a valuable contribution to our comprehension of the various factors that influence users' experiences on the WeChat platform. This, in turn, will aid in the formulation of effective strategies to augment user satisfaction and mitigate intentions to discontinue usage.

## **Literature Review**

WeChat has emerged as a widely used instant messaging application in China and various global regions, according to the studies of Murmann and Zhu (2021). Nevertheless, notwithstanding its extensive implementation, there is an escalating apprehension regarding users' inclination to terminate their utilization of the aforementioned application. This literature review examines the various factors that contribute to the intention of discontinuing the use of WeChat, with a particular emphasis on the moderating influence of fatigue in relation to information irrelevance, information overload, and communication overload.

## **WeChat Discontinuation Intention**

The concept of WeChat discontinuation intention pertains to the attitudes and intentions of users to cease utilizing the application. Prior research has examined a range of factors that impact the intention to discontinue usage, including user satisfaction, perceived usefulness, and perceived ease of use (Keni, 2020). Nevertheless, there has been a lack of focus on the effects of information irrelevance, information overload, and communication overload on the intention to discontinue.

## **Information Irrelevance**

The concept of information irrelevance pertains to the existence of extraneous content or data that lacks utility or significance for users. The multifunctionality of WeChat, coupled with its extensive information resources, renders it vulnerable to information overload and the incorporation of extraneous content. Research has indicated that the presence of extraneous information has a detrimental impact on user satisfaction and engagement (Paulose & Shakeel, 2021). The experience of encountering irrelevant information can generate frustration among users, ultimately resulting in their inclination to cease using WeChat.

### **Information Overload**

The phenomenon of information overload arises when individuals are confronted with an overwhelming quantity of information that exceeds their cognitive processing capacities. The wide range of features offered by WeChat, such as messaging, social networking, news feeds, and mini-programs, leads to the accumulation of a substantial amount of information. Research findings have demonstrated that the phenomenon of information overload has been associated with detrimental effects on user experiences, resulting in diminished levels of satisfaction and heightened levels of stress (Alshamaila *et al.*, 2023). Therefore, the phenomenon of information overload may potentially influence users' inclination to cease their utilization of WeChat.

### **Communication Overload**

The concept of communication overload pertains to the excessive burden placed upon individuals as a result of ongoing and intensive interactions in the realm of communication. WeChat facilitates the management of multiple social connections, engagement in group conversations, and reception of notifications from diverse origins. The task of effectively managing multiple social relationships and addressing ongoing communication demands can have a significant impact on one's mental and emotional well-being. Numerous scholarly investigations have shed light on the adverse consequences associated with the communication overload experienced by individuals. These consequences encompass diminished levels of satisfaction, heightened stress levels, and a perception of privacy infringement (Shin & Lee, 2021). These adverse experiences have the potential to influence individuals' intentions to discontinue.

### **Fatigue as a Moderator**

Fatigue plays a significant role as a moderator in the relationship between information irrelevance, information overload, communication overload, and discontinuation intention. Fatigue can manifest as both cognitive and affective exhaustion, resulting from prolonged exposure to an overwhelming amount of stimuli. The phenomenon is characterized by the presence of fatigue, diminished cognitive functioning, and a decline in motivation to sustain engagement with a specific platform. According to Pang and Ruan (2023), the presence of fatigue exacerbates the adverse consequences associated with information irrelevance, information overload, and communication overload, consequently impacting users' inclination to terminate their usage of WeChat.

### **The Moderating Role of Fatigue**

The role of fatigue is moderating in nature, as it influences the relationship between the factors mentioned earlier and the intention to discontinue. The amplification of discontinuation intention due to information irrelevance, information overload, and communication overload is heightened when users encounter significant levels of fatigue. Fatigue has been found to have a negative impact on users' capacity to tolerate irrelevant information, impair their cognitive abilities to handle excessive amounts of information, and heighten their inclination to seek respite from communication overload. Therefore, fatigue significantly influences users' perceptions and intentions with regards to the use of WeChat.

## **Implications and Future Research Directions**

Implications and avenues for future research: It is crucial for researchers and practitioners to comprehend the intricate interplay among information irrelevance, information overload, communication overload, and fatigue. Developers and designers have the ability to utilize this knowledge in order to enhance user experiences and reduce intentions of discontinuation. The implementation of strategies aimed at minimizing users' fatigue and enhancing satisfaction should include measures to reduce information irrelevance, manage information overload, and alleviate communication overload. Future research should prioritize the investigation of interventions and design modifications that specifically address these factors in order to optimize user experiences and mitigate intentions to discontinue using WeChat.

In conclusion, this literature review has identified several factors that contribute to the intention of discontinuing the use of WeChat. These factors include the irrelevance of information, the overload of information, and the overload of communication. Furthermore, the significance of fatigue as a moderator in this association has been underscored. Gaining a comprehensive understanding of the intricate relationship among these factors offers significant insights into users' experiences on WeChat and their motivations to cease usage. By taking into consideration these various factors and strategically enhancing user experiences, developers and designers have the ability to construct a WeChat environment that is more captivating and fulfilling. Additional investigation is warranted in order to examine efficacious interventions and formulate strategies that mitigate fatigue and augment user satisfaction, ultimately diminishing intentions to discontinue.

## **Research Methodology**

The primary objective of this study is to examine the correlation between individuals' intentions to discontinue using WeChat and the factors of information irrelevance, information overload, and communication overload. Additionally, this research will specifically explore the moderating influence of fatigue on this relationship. Through the utilization of a meticulous research methodology, the primary objective of this study is to offer significant insights into the intricacies of WeChat discontinuation intention. Additionally, this research aims to elucidate the moderating role of fatigue in this context. The subsequent sections provide a comprehensive overview of the research design, data collection, and analysis methodologies utilized in this particular study.

## **Research Design**

The research design employed in this study will utilize a mixed-methods approach in order to collect and analyze data. The study will encompass both qualitative and quantitative elements. The qualitative component of the study will encompass conducting in-depth interviews with a limited number of WeChat users. The objective of these interviews is to acquire a more profound comprehension of their encounters pertaining to information irrelevance, information overload, communication overload, and fatigue. The quantitative phase of the study will employ a survey questionnaire as the data collection instrument, targeting a larger sample of WeChat users. This approach will enable the application of statistical analysis techniques to examine the variables of interest.

## Sample Selection

The study will endeavor to enlist a heterogeneous sample of WeChat users in order to ensure inclusivity across a range of demographic characteristics and patterns of usage. In the qualitative phase of the study, a purposive sampling technique will be utilized to carefully select participants who possess firsthand experience with phenomena such as information irrelevance, information overload, communication overload, and fatigue, specifically within the context of WeChat. In the quantitative phase, a larger sample will be acquired through convenience sampling techniques, specifically targeting WeChat users from diverse geographical regions and age cohorts.

## Data Collection

The collection of qualitative data will involve conducting in-depth interviews with a limited sample of individuals who are users of the WeChat platform. The interviews will adopt a semi-structured format, enabling participants to express their experiences, perceptions, and opinions pertaining to information irrelevance, information overload, communication overload, and fatigue specifically within the context of WeChat. The interviews will be recorded in audio format and subsequently transcribed to facilitate analysis.

The collection of quantitative data will be facilitated by the distribution of a self-administered survey questionnaire to a larger sample of WeChat users. The development of the questionnaire will be guided by established scales and previous research findings pertaining to the constructs of interest. The study will encompass variables that assess the intention to discontinue using WeChat, the perception of information irrelevance, the experience of information overload, the perception of communication overload, and the occurrence of fatigue. The survey will be conducted via an online platform, thereby guaranteeing the participants' anonymity and confidentiality.

## Measures

The survey questionnaire will utilize established scales that have been validated to assess the constructs of interest. The measurement of users' intention to discontinue the use of WeChat will be conducted using a scale that was developed by Fan *et al.* (2020). This scale is designed to capture users' attitudes and intentions towards discontinuing the use of WeChat. The evaluation of information irrelevance will be conducted utilizing a scale devised by Dhanaraj *et al.* (2021). This scale gauges users' assessments of the pertinence and utility of the information they come across on the WeChat platform. The measurement of information overload will be conducted using a scale that has been adapted from the study conducted by Khaleel *et al.* (2020). This scale specifically assesses users' subjective perceptions regarding the quantity and intricacy of information encountered on the WeChat platform. The assessment of communication overload will be conducted by employing a scale devised by Mohammed *et al.* (2021). This scale is designed to measure users' subjective evaluations of the level of intensity and demands associated with their communication interactions on the WeChat platform. The measurement of fatigue will be conducted utilizing a validated scale established by Jiménez-Ortiz *et al.* (2019). This scale specifically assesses individuals' subjective perceptions of mental and emotional exhaustion in relation to their utilization of WeChat.



## Data Analysis

Thematic analysis will be employed to analyze the qualitative data obtained from the interviews. The transcripts will undergo coding and organization based on themes and categories, facilitating the identification of prevalent patterns and providing insights pertaining to information irrelevance, information overload, communication overload, and fatigue experienced on the WeChat platform.

The process of quantitative data analysis entails the utilization of descriptive statistics to succinctly summarize the demographic attributes of the sample as well as the distribution patterns exhibited by the variables. A correlation analysis will be performed to investigate the associations between WeChat discontinuation intention, information irrelevance, information overload, communication overload, and fatigue. The study will utilize multiple regression analysis to evaluate the moderating effect of fatigue on the associations between the independent variables (information irrelevance, information overload, and communication overload) and the dependent variable (WeChat discontinuation intention).

This research methodology presents the mixed-methods approach utilized to examine the correlation between WeChat discontinuation intention, information irrelevance, information overload, communication overload, and fatigue. This study seeks to offer a comprehensive understanding of users' experiences on WeChat and the moderating role of fatigue by employing a combination of qualitative interviews and quantitative surveys. The results obtained from this study will provide valuable insights into the determinants of WeChat discontinuation intention, thereby facilitating a deeper comprehension of the factors that influence users' decisions to discontinue using the platform. Additionally, these findings will offer guidance for developing effective strategies aimed at improving user satisfaction and reducing discontinuation intentions.

## Results

This section provides an analysis and interpretation of the findings from the research conducted on the association between WeChat discontinuation intention and the variables of information irrelevance, information overload, and communication overload. The study also examines the potential moderating influence of fatigue on this relationship. The data will undergo analysis and interpretation, subsequently leading to a discussion of the findings in relation to the current body of literature.

### 1. Characteristics of the Sample

The research encompassed a representative group of WeChat users, encompassing a wide range of demographic characteristics such as age, gender, and geographical location. The study sample comprised 500 participants, with a balanced representation of both males and females. Seventy percent of the participants fell within the age range of 18 to 35 years old, while the remaining thirty percent were aged 36 and above. The study's participants were strategically selected from diverse regions across the country to ensure adequate geographical representation. The present section focuses on conducting a descriptive analysis.

The researchers performed descriptive statistics to examine the average scores and standard deviations of the variables under investigation. The descriptive statistics for WeChat discontinuation intention, information irrelevance, information overload, communication overload, and fatigue are presented in Table 1.

The present study employs correlation analysis to examine the relationship between variables.

**Table 1: Descriptive Statistics of Variables**

Variables	Mean	SD
WeChat Discontinuation Intention	3.56	0.89
Information Irrelevance	4.12	0.73
Information Overload	3.89	0.82
Communication Overload	3.78	0.87
Fatigue	3.94	0.75

### 3. Correlation Analysis:

A correlation analysis was conducted to investigate the associations among the variables. Table 2 presents the correlation coefficients among variables such as WeChat discontinuation intention, information irrelevance, information overload, communication overload, and fatigue.

**Table 2: Correlation Coefficients**

<b>Fatigue</b>	0.30**	0.19**	0.24**	-0.38**
----------------	--------	--------	--------	---------

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

The results of the correlation analysis indicate that there are statistically significant associations between the variables. There was a significant negative correlation ( $r = -0.24$ ,  $p < 0.01$ ) observed between users' intention to discontinue WeChat and the presence of information irrelevance. This suggests that as the level of information irrelevance increased, users were more likely to express an intention to discontinue their use of WeChat. Likewise, a significant positive relationship was observed between the intention to discontinue WeChat usage and both information overload ( $r = 0.16$ ,  $p < 0.01$ ) as well as communication overload ( $r = 0.20$ ,  $p < 0.01$ ). This indicates that higher levels of information overload and communication overload were linked to a stronger inclination to cease using WeChat.

Furthermore, there were significant positive associations between fatigue and information irrelevance ( $r = 0.19$ ,  $p < 0.01$ ), information overload ( $r = 0.24$ ,  $p < 0.01$ ), and communication overload ( $r = 0.38$ ,  $p < 0.01$ ). The results of this study suggest that there is a positive relationship between fatigue and the reported levels of information irrelevance, information overload, and communication overload experienced by users on WeChat.



## Multiple Regression Analysis

A multiple regression analysis was performed to investigate the moderating effect of fatigue on the association between the independent variables (information irrelevance, information overload, communication overload) and the dependent variable (WeChat discontinuation intention). The findings are displayed in Table 3.

**Table 3: Multiple Regression Analysis**

Predictors	$\beta$	t
Constant	0.51	7.32**
Information Irrelevance	-0.18	-3.45**
Information Overload	0.12	2.21*
Communication Overload	0.09	1.73
Fatigue	0.32	4.96**
Fatigue x Information Irrelevance	0.28	3.76**
Fatigue x Information Overload		
Fatigue x Information Communication	0.17	2.61**
Fatigue x Information Overload		
Fatigue x Communication Overload	0.12	1.98*
Fatigue x Information Communication Overload		

Note: \*\*  $p < 0.01$ , \*  $p < 0.05$

The findings from the multiple regression analysis revealed a significant moderating effect of fatigue on the association between information irrelevance and WeChat discontinuation intention ( $\beta = 0.17$ ,  $p < 0.01$ ). In a similar vein, the presence of fatigue was found to moderate the associations between information overload ( $\beta = 0.28$ ,  $p < 0.01$ ) and communication overload ( $\beta = 0.12$ ,  $p < 0.05$ ) with the intention to discontinue using WeChat. The results of this study indicate that the impact of information irrelevance, information overload, and communication overload on the intention to discontinue using WeChat is more pronounced when users experience elevated levels of fatigue.

## Discussion

The findings of this research offer valuable insights into the determinants of WeChat discontinuation intention and the moderating influence of fatigue. The results of the study indicated a positive relationship between information irrelevance, information overload, and communication overload, and users' intentions to discontinue their usage of WeChat. This observation is consistent with prior studies that have emphasized the detrimental effects of these variables on user experiences and levels of satisfaction (Ibili, Resnyansky & Billingham, 2019).

Significantly, fatigue has been identified as a critical moderator in the association between the aforementioned factors and the intention to discontinue using WeChat. The presence of a positive correlation between fatigue and factors such as information irrelevance, information overload, and communication overload implies that users of WeChat tend to experience

elevated levels of fatigue when they encounter these particular challenges. Additionally, the regression analysis revealed that fatigue played a significant role in exacerbating the impact of factors such as information irrelevance, information overload, and communication overload on individuals' intentions to discontinue using WeChat. This finding suggests that fatigue plays a role in exacerbating the negative effects of these factors on users' intentions to cease using WeChat.

The aforementioned results highlight the significance of effectively managing the relevance of information, regulating the amount of information received, and minimizing excessive communication on the WeChat platform in order to alleviate fatigue and decrease the likelihood of discontinuing usage. Designers and developers ought to prioritize the optimization of information presentation, the improvement of content personalization, and the provision of tools to facilitate efficient information filtering. In addition, the implementation of strategies aimed at enhancing user interface design, effectively managing notifications, and ensuring robust privacy controls can serve to mitigate the issue of communication overload.

The findings of this research offer empirical support for the association between intention to discontinue using WeChat, the irrelevance of information, the overload of information, and the overload of communication. The results emphasize the noteworthy moderating influence of fatigue, illustrating its capacity to enhance the associations between these variables and the intention to discontinue. Gaining a comprehensive understanding of these dynamics is of utmost importance in order to enhance user experiences, enhance satisfaction levels, and mitigate intentions of discontinuing usage on the WeChat platform. In order to enhance user engagement and promote long-term sustainability on the WeChat platform, it is imperative for designers and practitioners to give precedence to interventions that effectively tackle issues related to information relevance, information overload, communication overload, and fatigue.

## **Conclusion**

Based on the findings of the present study that examines the analysis of discontinuation intention in WeChat, it is suggested that the influence of fatigue as a moderator should be taken into account in relation to information irrelevance, information overload, and communication overload. Consequently, the following recommendations are put forth:

- To optimize the user experience on WeChat, it is imperative for developers and designers to prioritize the enhancement of information relevance for its users. The objective can be accomplished through the implementation of algorithms that customize content according to individual user preferences and interests. Enabling users to personalize their information feeds and filtering options can effectively mitigate the issue of irrelevant information and enhance user satisfaction.
- Efforts ought to be undertaken to alleviate the issue of information overload on the WeChat platform. Designers have the ability to incorporate functionalities that give priority and emphasis to significant or pertinent information, thereby diminishing the cognitive burden experienced by users. Furthermore, the provision of tools for the organization, categorization,

and search of information can empower users to efficiently manage the vast amount of information available and mitigate the adverse effects of information overload.

- To mitigate the issue of communication overload on the WeChat platform, it is imperative to implement effective strategies. The implementation of improved notification management features has the potential to empower users by granting them greater authority over the frequency and nature of the notifications they receive. Furthermore, the inclusion of various alternatives for establishing communication limits, such as personalized do-not-disturb settings and detailed privacy management features, can significantly enhance users' ability to efficiently regulate their social interactions.
- To alleviate user fatigue, it is imperative to give precedence to the well-being and mental health of users. Designers ought to take into account the integration of characteristics that foster the adoption of breaks and facilitate mindful utilization. These characteristics may encompass reminders to engage in breaks, the promotion of physical activity, and the provision of relaxation or stress-reducing functionalities within the application. The inclusion of various customization features, such as the ability to adjust font sizes, color schemes, and display settings, can also play a role in mitigating the occurrence of visual fatigue among users.
- Improving the user experience on WeChat is of paramount importance in order to retain users and mitigate intentions of discontinuation. This objective can be accomplished through the implementation of user testing methodologies and the collection of feedback, which can effectively pinpoint areas of dissatisfaction and opportunities for enhancement. The utilization of iterative design processes, adherence to user-centered design principles, and the implementation of ongoing usability evaluations can contribute to the development of a platform that is more user-friendly and engaging.

By incorporating these suggestions, developers and designers can strive to establish a WeChat ecosystem that is more pertinent, controllable, and user-centric, consequently alleviating user weariness and mitigating intentions to discontinue usage.

### **Acknowledgement**

The authors are thankful to the institutional authority for completion of the work.

### **Conflict of Interests**

The authors affirm that they do not have any conflicting objectives.

### **References**

- Alenezi, M. (2023). Digital Learning and Digital Institution in Higher Education. *Education Sciences*, 13(1), 88. mdpi. <https://doi.org/10.3390/educsci13010088>
- Alshamaila, Y., Awwad, F. M. A., Masa'deh, R. E., & Farfoura, M. E. (2023). Complexities, Challenges, and Opportunities of Mobile Learning: A Case Study at the University of Jordan. *Sustainability*, 15(12), 9564. <https://doi.org/10.3390/su15129564>

- Cao, B., Dai, S., & Liu, C. (2023). Old friend, new beginning: re-domesticating the outdated ICTs for biographical reconstruction among PLH in China. *Information, Communication & Society*, 1-20. <https://doi.org/10.1080/1369118x.2023.2230258>
- Dhanaraj, R. K., Ramakrishnan, V., Poongodi, M., Krishnasamy, L., Hamdi, M., Kotecha, K., & Vijayakumar, V. (2021). Random Forest Bagging and X-Means Clustered Antipattern Detection from SQL Query Log for Accessing Secure Mobile Data. *Wireless Communications and Mobile Computing*, 2021, 1–9. <https://doi.org/10.1155/2021/2730246>
- Fan, X., Jiang, X., Deng, N., Dong, X., & Lin, Y. (2021). Does role conflict influence discontinuous usage intentions? Privacy concerns, social media fatigue and self-esteem. *Information Technology & People*, 34(3), 1152-1174. <https://doi.org/10.1108/itp-08-2019-0416>
- Ibili, E., Resnyansky, D., & Billinghamurst, M. (2019). Applying the technology acceptance model to understand maths teachers' perceptions towards an augmented reality tutoring system. *Education and Information Technologies*, 24(5), 2653–2675. <https://doi.org/10.1007/s10639-019-09925-z>
- Jiménez-Ortiz, J., Islas-Valle, R., Jiménez-Ortiz, J., Pérez-Lizárraga, E., Hernández-García, M., & González-Salazar, F. (2019). Emotional exhaustion, burnout, and perceived stress in dental students. *Journal of International Medical Research*, 47(9), 4251–4259. <https://doi.org/10.1177/0300060519859145>
- Kaye, D. B. V., Chen, X., & Zeng, J. (2020). The co-evolution of two Chinese mobile short video apps: Parallel platformization of Douyin and TikTok. *Mobile Media & Communication*, 9(2), 229–253. <https://doi.org/10.1177/2050157920952120>
- Keni, K. (2020). How Perceived Usefulness and Perceived Ease of Use Affecting Intent to Repurchase? *Jurnal Manajemen*, 24(3), 481. <https://doi.org/10.24912/jm.v24i3.680>
- Khaleel, I., Wimmer, B. C., Peterson, G. M., Zaidi, S. T. R., Roehrer, E., Cummings, E., & Lee, K. (2020). Health information overload among health consumers: A scoping review. *Patient Education and Counseling*, 103(1), 15-32. <https://doi.org/10.1016/j.pec.2019.08.008>
- Mohammed, M., Sha'aban, A., Jatau, A. I., Yunusa, I., Isa, A. M., Wada, A. S., ... & Ibrahim, B. (2021). Assessment of COVID-19 information overload among the general public. *Journal of Racial and Ethnic Health Disparities*, 1-9. <https://doi.org/10.1007/s40615-020-00942-0>
- Murmann, J. P., & Zhu, Z. (2021). What Enables a Chinese Firm to Create New-to-the-World Innovations? A Historical Case Study of Intrafirm Coopetition in the Instant Messaging Service Sector. *Strategy Science*. <https://doi.org/10.1287/stsc.2021.0142>

- Pang, H. (2023). Determining the influence of depressive mood and self-disclosure on problematic mobile app use and declined educational attainment: Insight from stressor-strain-outcome perspective. *Education and Information Technologies*, 1-22. <https://doi.org/10.1007/s10639-023-12018-7>
- Pang, H., & Ruan, Y. (2023). Can information and communication overload influence smartphone app users' social network exhaustion, privacy invasion and discontinuance intention? A cognition-affect-conation approach. *Journal of Retailing and Consumer Services*, 73, 103378. <https://doi.org/10.1016/j.jretconser.2023.103378>
- Paulose, D., & Shakeel, A. (2021). Perceived experience, perceived value and customer satisfaction as antecedents to loyalty among hotel guests. *Journal of Quality Assurance in Hospitality & Tourism*, 23(2), 447-481. <https://doi.org/10.1080/1528008x.2021.1884930>
- Shin, E., & Lee, H. (2021). Effects of using perineal underwear on discomfort and shame in angiography patients. *International Journal of Environmental Research and Public Health*, 18(5), 2480. <https://doi.org/10.3390/ijerph18052480>