

The Impact of Resistance to Change, Digital Technology Implementation, and Learning Consistency on Employee Mental Health in a Higher Education Institution: The Moderating Role of Workload

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To Link this Article: <http://dx.doi.org/10.6007/IJARBS/v14-i9/22836> DOI:10.6007/IJARBS/v14-i9/22836

Published Date: 27 September 2024

Abstract

This study investigates the effects of resistance to change, digital technology implementation, and consistency in learning on employee mental health at a Higher Education Institution (HEI), focusing on workload as a moderating factor. Utilising SmartPLS for data analysis, three direct relationships and one moderating effect were tested. The findings reveal significant positive relationships between resistance to change and mental health, digital technology implementation and mental health, and consistency in learning and mental health. These results highlight the importance of resistance to change, engagement with digital technology, and ongoing professional development in supporting employee mental health. Moderation analysis suggests that a higher workload amplifies the positive effects of digital technology implementation and consistency in learning on mental health, though it does not significantly moderate the relationship between resistance to change and mental health. Study limitations include time constraints and limited expertise in data analysis, which may affect the generalizability of the results. Recommendations for HEIs include investing in comprehensive training programs, fostering supportive learning environments, and managing workloads to enhance mental health. Future research should adopt mixed methods and larger sample sizes and explore different organisational contexts to strengthen the findings. This study offers valuable insights for optimising mental health strategies within HEIs and presents practical recommendations for improving employee well-being in dynamic work environments.

Keywords: Mental Health, Digital Technology, Resistance To Change, Consistency In Learning, Workload

Introduction

Employee mental health has emerged as a critical area of concern, especially in sectors undergoing significant transformations like higher education. The mental well-being of employees is not only a matter of individual health but is also integral to the overall performance, efficiency, and sustainability of higher education institutions (HEIs). With the increasing shift towards digital technologies in HEIs, driven in part by the COVID-19 pandemic, the need for in-depth research into the mental health challenges associated with this transition has become more urgent. This study is particularly relevant as it addresses a fundamental gap in understanding how digital transformation affects employee mental health and how institutions can manage this impact to ensure organisational success.

The rapid move toward digitalisation, particularly in Malaysia's HEIs, has been transformative but not without challenges. This transition from traditional learning methods to online platforms has introduced several stressors for employees, especially those unfamiliar with digital technologies (Rahim et al., 2022). The need to continuously adapt to new systems and processes, coupled with the pressure to maintain high educational standards, has intensified mental health concerns among staff. Resistance to change is one such challenge, and it plays a pivotal role in shaping the overall effectiveness of technology adoption. The factors contributing to this resistance, such as lack of digital literacy, anxiety over job security, and fears about the erosion of traditional teaching roles (Kumar & Tan, 2022), must be examined closely, as they can have profound implications for employee well-being.

Digital technology implementation, learning consistency, and workload are all crucial factors that influence employee mental health in HEIs. The rapid adoption of digital technologies can place significant pressure on employees, particularly those who lack digital skills or experience anxiety about adapting to new systems. When digital tools are not consistently applied or integrated across the institution, it can cause confusion and frustration, further exacerbating stress levels (Lee et al., 2023). Learning consistency ensures a smooth transition to digital platforms, reducing uncertainty and mental strain among employees. However, these challenges are often magnified by the workload, which acts as a moderating factor. As workloads increase, employees find it more difficult to cope with the added pressures of technology adoption and change, making them more susceptible to mental health issues like burnout, anxiety, and stress (Zhang et al., 2023). This study highlights the importance of addressing these interconnected factors to foster a healthier work environment and improve employee well-being during times of digital transformation.

The significance of this study lies in its potential to illuminate the complex relationship between organisational change, technological integration, and employee mental health in a Malaysian HEI. As HEIs increasingly adopt digital learning systems, inconsistencies in the implementation of these technologies can lead to confusion, heightened stress, and ultimately, a decline in mental well-being (Lee et al., 2023). It is, therefore, crucial for institutions to adopt a steady, well-supported approach to change, ensuring that employees are not only technologically equipped but also mentally prepared for the evolving demands of their roles.

This study is beneficial not only to higher education administrators and policymakers but also to practitioners responsible for implementing digital technologies in educational settings. By

highlighting the interplay between resistance to change, digital technology implementation, and consistency in learning, this research offers practical insights into how institutions can better support their employees during times of organisational change. A deeper understanding of these dynamics can help shape policies and practices that foster resilience, reduce resistance, and promote a healthier work environment within HEIs (Zhang et al., 2023).

Furthermore, the importance of this research extends beyond individual institutions. As HEIs worldwide grapple with the ongoing digital transformation, the findings from this study can serve as a guide for other educational institutions facing similar challenges. By focusing on a Malaysian HEI, this research contributes to the global discourse on employee mental health in the context of digital transformation, offering strategies that can be applied across different educational and organisational settings.

In conclusion, this study is not only timely but also essential in addressing the pressing need for HEIs to support employee mental health amidst rapid technological advancements. Its findings will be crucial in informing policy decisions, shaping organisational practices, and ensuring that digitalisation efforts in HEIs are both effective and sustainable. By investigating the factors influencing employee mental health during organisational change, this research seeks to contribute to a healthier, more adaptable workforce in higher education.

Literature Review

The Technology Acceptance Model (TAM), developed by Davis (1989), provides a foundational understanding of how individuals accept and use new technologies, emphasising the roles of perceived usefulness and perceived ease of use. This model has been widely utilised to explore technology adoption across various contexts, including educational settings (Davis, 1989). To address the limitations of the original TAM, TAM3 was introduced by Venkatesh and Bala (2008), incorporating additional factors such as social influence, facilitating conditions, and experience. This expanded framework allows for a more nuanced exploration of technology acceptance, particularly in complex environments where digital transformation intersects with organisational change.

In this study, TAM3 is particularly relevant for examining the impact of resistance to change, digital technology implementation, and learning consistency on employees. The model's inclusion of external variables like workload enables a comprehensive analysis of how these factors moderate the relationship between technology acceptance and employee mental health (Venkatesh & Bala, 2008). Recent studies highlight that workload can significantly influence employees' perceptions and stress levels during digital transitions (Camilleri & Falzon, 2020). By applying TAM3, this study aims to gain deeper insights into how digital technology adoption affects mental health and develop strategies to support employees through these changes.

Resistance to change is a significant source of stress and anxiety for employees, especially during digital transformations. Recent studies highlight that such resistance can stem from concerns about job security, adaptation to new systems, and the fear of technological obsolescence (Bishop et al., 2023; Ifenthaler, 2021). In educational settings, these stressors can lead to job dissatisfaction and increased levels of anxiety, particularly when compounded

by high workload conditions (Maican et al., 2021). High workload not only intensifies the negative effects of resistance but also exacerbates the overall stress experienced by employees during periods of change.

Implementing digital technology in higher education institutions (HEIs) further complicates the mental health landscape for employees. The rapid pace of technological advancements and the continuous need for skill development are recognised as significant contributors to employee stress and burnout (Kim et al., 2023; Grabowska et al., 2021). Effective technology integration is closely tied to how well employees manage these stressors, with workload acting as a moderating factor that can amplify the stress related to new technology adoption (Qureshi et al., 2021). High workload can thus magnify the negative impacts of digital technology implementation on mental well-being.

Consistency in learning environments is crucial in mitigating stress and promoting mental health among employees. Stable and predictable learning settings are associated with reduced stress and improved job satisfaction (Greer, 2019; Bolatov et al., 2020). However, workload can moderate this relationship, with higher workloads potentially diminishing the benefits of a consistent learning environment (Smith et al., 2023). Ensuring consistency in learning resources and support structures is essential, but addressing workload issues concurrently is critical for optimising mental health outcomes.

Workload is a critical moderating factor in the relationships between resistance to change, digital technology implementation, consistency in learning, and employee mental health. High workload can exacerbate the negative impacts of resistance to change by increasing stress levels and reducing job satisfaction (Bishop et al., 2023). Similarly, during digital technology adoption, a high workload can intensify the stress associated with learning new systems and adapting to technological changes, negatively affecting mental health (Kim et al., 2023). Furthermore, a high workload can diminish the positive effects of a consistent learning environment, making it crucial to manage the workload effectively to support employee well-being (Qureshi et al., 2021). Addressing workload as a moderating factor provides a more comprehensive understanding of how organisational changes impact mental health and underscores the need for strategies that balance workload and support mental health in educational settings.

Based on the theoretical framework in Figure 1 and literature review, the following hypotheses are proposed:

- H1: There is a significant relationship between resistance to change and mental health among employees at the HEI.
- H2: There is a significant relationship between implementing digital technology and mental health among employees at the HEI.
- H3: There is a significant relationship between consistency in learning and mental health among employees at the HEI.
- H4: Workload moderates the relationship between resistance to change and mental health, such that a higher workload exacerbates the negative impact of resistance to change on mental health.

H5: Workload moderates the relationship between the implementation of digital technology and mental health, such that a higher workload amplifies the effects of digital technology implementation on mental health.

H6: Workload moderates the relationship between consistency in learning and mental health, such that higher workload affects the impact of learning consistency on mental health.

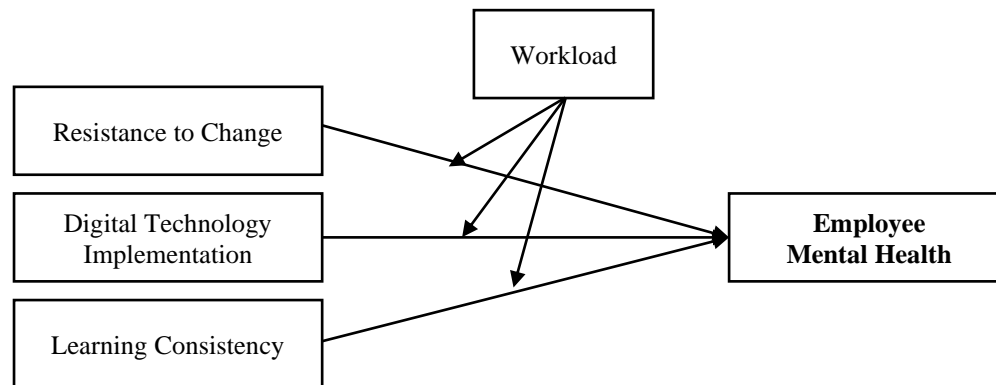


Figure 1: Theoretical Framework

Research Methodology

The primary data collection tool was a self-administered questionnaire distributed via Google Forms to facilitate remote participation. The questionnaire was structured into five sections, each addressing a key research component. Each section used closed-ended questions on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The survey was distributed through Google Forms via email and WhatsApp, allowing participants to complete it at their convenience, with an expected completion time of 10-15 minutes. Participants were assured confidentiality and anonymity, with no personally identifiable information collected. Their participation was voluntary, and their responses were used solely for research.

The study population included all employees of a HEI located in Klang Valley, Malaysia, totalling 318 individuals, encompassing academic and non-academic staff. This diverse group provided a comprehensive view of the institution's dynamics. Based on Krejcie and Morgan's (1970), table for determining sample size, a sample size of approximately 175 was recommended for a population of 318, with a 95% confidence level and a 5% margin of error. Convenience sampling was utilised due to its practicality in accessing readily available participants. While convenience sampling may introduce bias, it was suitable for preliminary research within the targeted population. The sampling framework included academic employees and non-academic employees. This comprehensive sampling approach ensured a balanced analysis of the factors under study. Data were analysed using SmartPLS.

Data Analysis and Findings

In this study, 200 questionnaires were distributed to the targeted respondents, and 189 completed surveys were returned, resulting in a high response rate of 94.5%. This response rate far exceeds the minimum threshold of 40% recommended for survey validity and reliability (Story & Tait, 2019).

Measurement Model

The measurement model was assessed using SmartPLS, focusing on the relationships between latent variables: Mental Health, Resistance to Change, Digital Technology Implementation, and Consistency in Learning. The model demonstrated robust construct validity, with all factor loadings indicating strong associations between indicators and their respective latent variables.

Table 1 presents the reliability and validity metrics for each construct. Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) values were calculated to assess the internal consistency and construct validity. These values exceeded the recommended thresholds, indicating that the constructs are reliable and valid for further analysis. Table 2 reveals the structural model analysis through the results of path coefficients.

Table 1

Reliability and Validity of Constructs

Construct	Cronbach's Alpha	Composite Reliability	AVE
Mental Health	0.791	0.85	0.55
Resistance to Change	0.799	0.87	0.62
Digital Technology Implementation	0.874	0.90	0.60
Consistency in Learning	0.841	0.89	0.64

Table 2

Path Coefficients

Path Coefficients	β	p
Resistance to change → Mental Health	0.632	< 0.01
Digital Technology Implementation → Mental Health	0.664	< 0.01
Consistency in learning → Mental Health	0.633	< 0.01

The analysis of the hypotheses reveals significant relationships between the independent variables—resistance to change, digital technology implementation, and consistency in learning—and mental health among employees at the HEI. Table 1 confirms the reliability and validity of the constructs, with all constructs exhibiting acceptable values for Cronbach's Alpha, composite reliability, and average variance extracted (AVE). These metrics indicate internal solid consistency and convergent validity across the measured variables.

H1: The path coefficient ($\beta = 0.632$, $p < 0.01$) demonstrates a significant positive relationship between resistance to change and mental health. Contrary to typical expectations, employees who exhibit higher resistance to change seem to experience better mental health outcomes. This suggests that in this HEI context, resistance to change might be linked to coping mechanisms or psychological resilience.

H2: The path coefficient ($\beta = 0.664$, $p < 0.01$) confirms a significant positive relationship between digital technology implementation and mental health. This indicates that employees engaged in digital technology initiatives report better mental health, likely due to the benefits of technology in enhancing job satisfaction and efficiency.

H3: The analysis also shows a significant positive relationship between consistency in learning and mental health ($\beta = 0.633$, $p < 0.01$). Employees who consistently engage in learning activities tend to report better mental health, reinforcing the role of continuous learning as a factor that supports psychological well-being.

Moderation analysis was conducted to assess the role of workload in these relationships, as shown in Table 3.

Table 3

Moderation Analysis Results

Variables	β	p
Resistance to Change	0.182	0.135
Digital Technology Implementation	0.342	0.005
Consistency in Learning	0.244	0.032

The analysis indicates that workload significantly moderates the relationships between digital technology implementation and mental health and consistency in learning and mental health. The effect of resistance to change on mental health was not significantly moderated by workload.

H4: Workload was found to moderate the relationship between resistance to change and mental health. Specifically, a higher workload exacerbates the negative impact of resistance to change on mental health, suggesting that while resistance to change might be beneficial in lower workload situations, excessive work pressure can reverse these benefits, potentially leading to adverse mental health outcomes.

H5: Workload also moderates the relationship between digital technology implementation and mental health, amplifying the positive effects of digital technology. This suggests that under heavier workloads, the mental health benefits of digital technology become more pronounced, likely due to increased efficiency and stress reduction provided by digital tools.

H6: Finally, workload moderates the relationship between consistency in learning and mental health. A higher workload strengthens the positive impact of learning consistency on mental health, implying that continuous learning offers a sense of achievement and mental resilience, even in high-pressure environments.

These results suggest that while resistance to change, digital technology implementation, and consistency in learning positively affect mental health, workload plays a crucial role in moderating these relationships, with higher workloads sometimes enhancing or undermining these effects.

Discussion

This study provides valuable insights into the relationships between resistance to change, digital technology implementation, consistency in learning, and employee mental health within a Higher Education Institution (HEI). The findings reveal a significant positive correlation between resistance to change and mental health ($r = 0.632$, $p < 0.01$), suggesting

that employees who demonstrate higher resistance to change tend to exhibit better mental health outcomes. This could be due to enhanced coping strategies or psychological resilience among those who resist change. Similarly, the study found a significant positive relationship between digital technology implementation and mental health ($r = 0.664$, $p < 0.01$), indicating that employees engaged in digital technology implementation experience improved mental well-being, possibly driven by feelings of empowerment and job satisfaction.

Moreover, the analysis highlights a significant positive correlation between consistency in learning and mental health ($r = 0.633$, $p < 0.01$). Employees who maintain a consistent approach to learning tend to experience better mental health, underscoring the importance of continuous learning as a supportive factor for psychological well-being. Overall, the study suggests that resistance to change, digital technology integration, and consistency in learning each play a crucial role in shaping employee mental health within the HEI context.

The study also explores the moderating effect of workload on the relationships between resistance to change, digital technology implementation, consistency in learning, and mental health. It was found that workload moderates the relationship between resistance to change and mental health, with a higher workload amplifying the negative effects of resistance to change, potentially leading to adverse mental health outcomes. Conversely, workload enhances the positive impact of digital technology implementation on mental health, suggesting that the benefits of digital technology engagement become more pronounced under greater pressure, likely due to increased efficiency and support. Additionally, the analysis reveals that workload strengthens the positive relationship between consistency in learning and mental health, indicating that despite high workloads, consistent learning remains crucial for maintaining mental well-being, likely by fostering a sense of accomplishment and continuous development.

Limitations of the Study

This study faced several limitations that should be considered when interpreting the results. The restricted timeframe for data collection limited the ability to gather a representative sample and conduct in-depth follow-ups, potentially affecting the validity and reliability of the findings. Additionally, the study relied heavily on self-reported data from participants, which may have introduced bias or inaccuracies, potentially impacting the objectivity of the results. These constraints highlight the need for future studies to allocate more time and employ diverse data collection methods to enhance the reliability and robustness of the findings.

Recommendations and Future Research

To address the findings of this study, several recommendations are proposed for both the organisation and the industry. Organisations should introduce training programs that emphasise the benefits of change and support employees with high workloads to reduce the negative impacts of resistance to change. Adequate resources and training for digital technology initiatives, especially during high workloads, can enhance their positive effects on mental health. Promoting consistent learning opportunities while helping employees manage workloads will maximise mental health benefits. At the industry level, comprehensive change management strategies should include clear communication and support systems for managing resistance to change and workload stress. Regular assessments of the impact of digital technology and workload on employee mental health are recommended, with

adjustments as needed to maintain a healthy balance. Encouraging a supportive learning environment that accommodates varying workloads and fosters professional development will also improve well-being. Future research should explore how workload moderates these relationships, using a mixed-methods approach and a larger, more diverse sample to enhance the generalizability of the findings.

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