

# THE MEDIATING ROLES OF PSYCHOLOGICAL STRESS TOWARDS THE RELATIONSHIP BETWEEN ORGANIZATION CULTURE AND TECHNOLOGY ACCEPTANCE

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## Abstract

Technology acceptance plays an essential role in enhancing organizational efficiency and performance. The adoption of up-to-date digital systems helps organizations maintain competitiveness and improve service delivery. However, despite the advantages of technology, resistance to change often occurs, particularly when employees lack confidence in using new systems or perceive technology negatively. Grounded in the Technology Acceptance Model (TAM), this study examines whether psychological stress mediates the relationship between organizational culture and technology acceptance among Malaysian government employees. A quantitative survey was conducted among 123 respondents from various administrative groups in government agencies. Data were analyzed using SPSS to test reliability, correlations, and regression effects. Findings confirm significant positive relationships between perceived usefulness, ease of use, and technology acceptance. Organizational culture factors includes role characteristics, supervision, and work group functioning were also significant predictors of acceptance. However, psychological stress (daily stress and anxiety) did not mediate the relationship between organizational culture and technology acceptance. This suggests that cultural support and technological perceptions exert stronger influence than stress-related experiences. The results offer practical implications for public sector digital transformation, highlighting the value of strengthening cultural elements, fostering collaborative environments, and ensuring system usability.

*Keywords: Psychological Stress, Organizational Culture, Technology Acceptance, Job Performance, Usefulness of Technology, User Satisfaction, Ease of Use.*

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## 1. INTRODUCTION

The rapid digitalization of the public sector has transformed how employees interact with technology in their daily work routines (Andersson et al., 2022). Governments worldwide, including Malaysia, have placed strong emphasis on adopting digital tools to enhance efficiency, transparency, and productivity. Technology now

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supports a wide range of functions in the workplace organizing information, managing records, communicating with colleagues, and assisting in task completion and policy development (Magliocca et al., 2025). Commonly used technologies within the government sector include computers, mobile devices, software applications, internet systems, virtual communication platforms, and other digital tools designed to streamline work processes.

However, successful implementation of digital initiatives relies not only on technological infrastructure, but also on employees' willingness to accept and engage with these systems. Organizational culture strongly influences how government employees respond to digital change by shaping attitudes, behaviors, and readiness towards technology adoption (Bozkus, 2023). Therefore, understanding the relationship between organizational culture and technology acceptance in the government sector is crucial.

Technology acceptance in the workplace is often driven by perceived usefulness and ease of use (Hussain et al., 2025), in line with the Technology Acceptance Model. Employees' attitudes toward new systems are also affected by cultural beliefs, norms, and values, which determine how they respond to organizational change (Hafeez et al., 2021). Employees commonly resist new technologies when they feel unprepared or doubtful about their skills, especially in highly structured environments like the government sector (Saghafian et al., 2021; Al Sayegh et al., 2023; Na et al., 2022).

Organizational culture encompasses shared values, behavioral norms, and expectations that shape work environments (Jerab & Mabrouk, 2023). In this study, three cultural elements are highlighted—supervision, role characteristics, and work group functioning. Supportive supervision and clear role expectations can encourage learning and experimentation (Kranthi et al., 2024), while cohesive work group functioning may improve collaboration and confidence in digital tools (Woolley et al., 2023). Conversely, when cultural norms conflict with technological initiatives, employees may experience resistance, uncertainty, or psychological strain (Vranakova & Babelova, 2025).

Psychological stress has therefore emerged as a relevant dimension in technology-related behavior. Rapid digital change, increased work demands, and continuous system adaptation can heighten stress levels among government employees (Liu et al., 2023). Stressors such as anxiety and daily life stress may influence how individuals evaluate technology, shaping perceived usefulness, ease of use, and motivation to engage with new systems (Chang et al., 2024; Cho et al., 2021). Empirical evidence examining psychological stress as a mediating factor remains limited within the government sector (Jia et al., 2022), particularly in Malaysia.

Employees in government environments may also resist change due to comfort with established routines or the complexity of modern technologies (Shokrollahi et al., 2024). When organizational culture does not support change, resistance can affect employees, the organization, and service delivery (Stergiou et al., 2023). Technology adoption requires mindset change across all organizational levels, yet many organizations struggle due to employees' difficulty adapting to new work expectations (Tan et al., 2024).

Technology competence is now an essential part of public service work, supported by evidence that Malaysian jobs rely increasingly on digital tools. In 2019, survey findings reported that 20% of employees described their jobs as heavily dependent on technology, and another 43% used technology to some extent (Statista, 2019). Public sector employees therefore need sufficient skills and technological confidence to meet modern service standards (Sial et al., 2023). At the same time, digital interruptions and system changes may reduce technology usage (Baham et al., 2023), and resistance may arise from fear, individual differences, or previous negative experiences (Ouedraogo & Tientore, 2021).

Resistance to technology not only affects organizational performance but also impairs productivity, service quality, and customer satisfaction. Public service outcomes depend heavily on employees' adaptability, motivation, and cultural alignment (Rahaman et al., 2023; Islam, 2023).

Adoption of new technology can also increase psychological stress. Digital change may trigger anxiety and uncertainty (Priyadarshi & Premchandran, 2022), while continuous stress may reduce performance, motivation, and health outcomes (Yassin et al., 2024). Complex or unfamiliar systems may contribute to technostress, undermining employees' confidence in their work abilities (Wang et al., 2023). If technology adoption fails, public recipients may experience slow services, higher error rates, and reduced satisfaction.

This study therefore examines the mediating role of psychological stress in the relationship between organizational culture and technology acceptance among government employees. Specifically, it investigates how supervision, role characteristics, and work group functioning influence technology acceptance, and whether anxiety and daily life stress mediate these relationships. By integrating organizational and psychological perspectives, this research advances understanding of the human and cultural dimensions of digital transformation in the government sector.

Findings reveal that perceived usefulness and ease of use significantly predict technology acceptance, supporting TAM theory. Among organizational culture dimensions, role characteristics and work group functioning significantly influence acceptance, while supervision shows limited effect. Psychological stress does not mediate the relationship between organizational culture and technology acceptance. These findings highlight the importance of supportive culture, collaborative work environments, and role clarity when promoting technology adoption in the government sector.

## 2. LITERATURE REVIEW

### 2.1. *Technology Acceptance*

Technology exists in multiple organizational forms—electronic, mechanical, medical, industrial manufacturing and communication systems—all requiring different levels of skills, techniques, and operational processes. Technology acceptance, therefore, depends not only on system design but also on employees' willingness to engage with technology as intended (Ahn & Chen, 2022). Prior studies show that individual decision-making around technology adoption is shaped by multiple behavioral and contextual factors, such as confidence, experience, and perceived relevance of the tool (Darioshi & Lahav, 2021; Rahmiati & Jelitalia, 2021).

A dominant framework explaining this phenomenon is the Technology Acceptance Model (TAM), which emphasizes perceived usefulness and perceived ease of use as key determinants of technology acceptance (Davis et al., 1989). TAM proposes that individual beliefs shape attitudes and behavioral intentions, which subsequently influence actual system use. Many studies across different contexts have supported TAM's predictive power, demonstrating that employees are more likely to adopt technologies when they believe systems improve performance and require minimal effort (Ahn & Chen, 2022; Rahmiati & Jelitalia, 2021).

However, more recent research suggests that acceptance dynamics may differ in structured, bureaucratic environments such as the government sector. O'Connor (2025) argues that technological change within government agencies can be perceived as risky, particularly because complex systems may disrupt established routines, work processes, and authority structures. Bailey et al. (2022) also emphasize that government organizations face a unique expectation to continuously update technology to maintain efficiency and public service relevance. At the same time, organizational-level readiness and cultural influence play equally decisive roles. Bozkus (2023) highlights that acceptance depends not only on the technological system itself, but on an organization's culture and leadership capacity to persuade employees to embrace digital change.

These findings, when compared collectively, reveal several inconsistencies and gaps. While TAM research stresses individual perceptions (usefulness and ease of use), studies in the government sector indicate that broader cultural and structural forces may override personal attitudes. Furthermore, although adoption challenges have been widely reported in other industries, government-based evidence remains fragmented and less conclusive. For example, Darioshi and Lahav (2021) focus on individual cognitive decision-making, whereas O'Connor (2025) highlights organizational power disruption—demonstrating that different theoretical lenses yield differing explanations of acceptance behavior.

Additionally, existing studies rarely explore how psychological or emotional factors interact with cultural determinants of technology use. Although TAM assumes rational decision-making, government environments may involve stress, uncertainty, or resistance caused by bureaucratic structures, job security norms, or hierarchical supervision. Limited empirical data exist on how these factors merge, particularly within Malaysian public sector settings.

These limitations justify the present study, which integrates organizational culture dimensions with technology acceptance theory to examine how cultural context shapes employee behavior. By focusing on psychological stress as a mediating mechanism, this study addresses a significant gap in existing research and builds on both individual-level (TAM) and organizational-level perspectives to better explain technology acceptance within the government sector.

## 2.2. *Perceived Usefulness*

According to Bolodeoku et al. (2022), perceived usefulness is the extent to which individuals believe technology will improve their performance. Similar to this, a user's perspective on how technology is implemented will influence their response, behavior, and attitude towards accepting technology changes (Emon et al., 2024). According to Bankins et al. (2024), people tend to accept new technologies if they believe it is useful where it helps them accomplish particular goals and do their job more effectively. Perceived usefulness of technologies discovered that technology's advantages in decision making, productivity improvement, and economic development significantly influenced the success of people, member groups, and entire organizations across a variety of global industries (Alyoussef, 2023). Additionally, concept of perceived usefulness remains a crucial factor to carefully examine end users' intentions which is the employees to embrace technology when interacting with certain technology (Sujood et al., 2024).

## 2.3. *Ease of Use*

Ease of use is the degree to which individuals perceive how much work is required to use technology (Chen et al., 2025). According to Legramante et al. (2023), the definition of perceived usability is the end user's which is the employees' belief that using a certain information technology will directly improve their professional performance. Unfortunately, users are likely to abandon workplace technologies if they believe they don't increase productivity because they think the technology is less successful at completing tasks quickly, boosting performance, and improving overall effectiveness as well as having difficulties in accepting the technology (Griep et al., 2021). Bashir (2025) found that the technology quality including ease of use, adaptability, and user-friendliness affected how employees used technology and encouraged technology acceptance. When a technology is perceived by a user to be used without much effort and could be used with ease then there is a greater chance that the individual will accept it (Bolodeoku et al., 2022).

## 2.4. *Organizational Culture*

Organizational culture plays a vital role in the organization that leads to the organization's success due to the employees are willing to change their beliefs and norms. The culture of an organization is crucial that influences its success and significantly influences several perspectives such as the productivity of its employees and its ability to attract, motivate, and retain talented people (Ghaleb, 2024). Besides, organizational culture significantly affects innovation, which is the source of growth and development for each organization. Despite the fact that organizational culture can effectively promote or inhibit cooperation, sharing knowledge,

experience, and ideas (Lam et al., 2021) there are several factors that need to be a concern. Work stress is a concept that people come with frequently in their business life (Zurnizam et al., 2024). Organizational culture is a culture where it depends on role characteristics in which situations of frustration and conflict may emerge when the needs of the individual and the requirements of the organization are mismatched such as employees need to accept the technology which does not match with them (Ferine et al., 2021). As stated by Espasandin-Bustelo et al., (2021), employee health is heavily influenced by organizational culture. Besides, organization culture and technology adoption are two of the most critical issues in the public organization, which require the top level to work in changing, networked, decentralized, and virtual organizations because it influences individual decisions to utilize new technologies in the workplace (Ali et al., 2022). The concept of studying the relationship between culture and technology acceptance is crucial, especially now that many organizations are attempting to expand beyond their geographic boundaries. However, there is little research done to discover the impact of cultural values on technology acceptance as well as cultural impacts on technology acceptance at individual level are lacking.

## 2.5. Psychological Stress

Psychological stress is a comprehensive collection of reactions that takes place when people deal with changes in their internal and external environments including the response towards technology (Sarmiento et al., 2024). Employment stress is now generally acknowledged as a problem by social scientists, health organizations, and all organizations, including industry, research, information technology, and IT-enabled services. Employees with higher levels of stress cost firms more, are less productive and are more likely to suffer from illnesses such as cardiovascular diseases, cancer, depression, and anxiety compared to employees with normal levels of stress (Chung et al., 2023). Psychological stress might influence technology acceptance among employees. As stated by Abeliensky et al. (2024), physical and psychological work demands that can lead to psychological stress problems due to the application of automation and technology need to be managed properly. Significantly, in developing countries, there is an increasing concern about occupational stress, but there is limited research in Malaysia was conducted.

## 2.6. Theoretical Framework

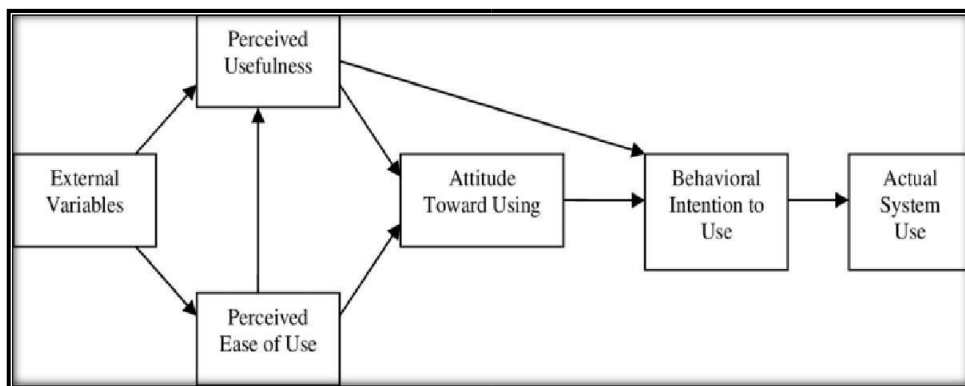


Fig. 1. Technology Acceptance Model (Davis, 1985)

As shown in Figure 1, the TAM was chosen as a theoretical foundation while investigating literature relevant to the issue of resistance to embracing technological systems because of its relevance as a cornerstone theorem of research focusing on a user's acceptance or rejection of information technologies. The study suits with the Technology Acceptance Model which relates with the technology acceptance among the employees' The TAM

is frequently employed to predict individual or group adoption of a new technology pre- and post-implementation. Stress theories can be differentiated into models that explain stress reactions and models that define the stress process.

## 2.7. Conceptual Framework

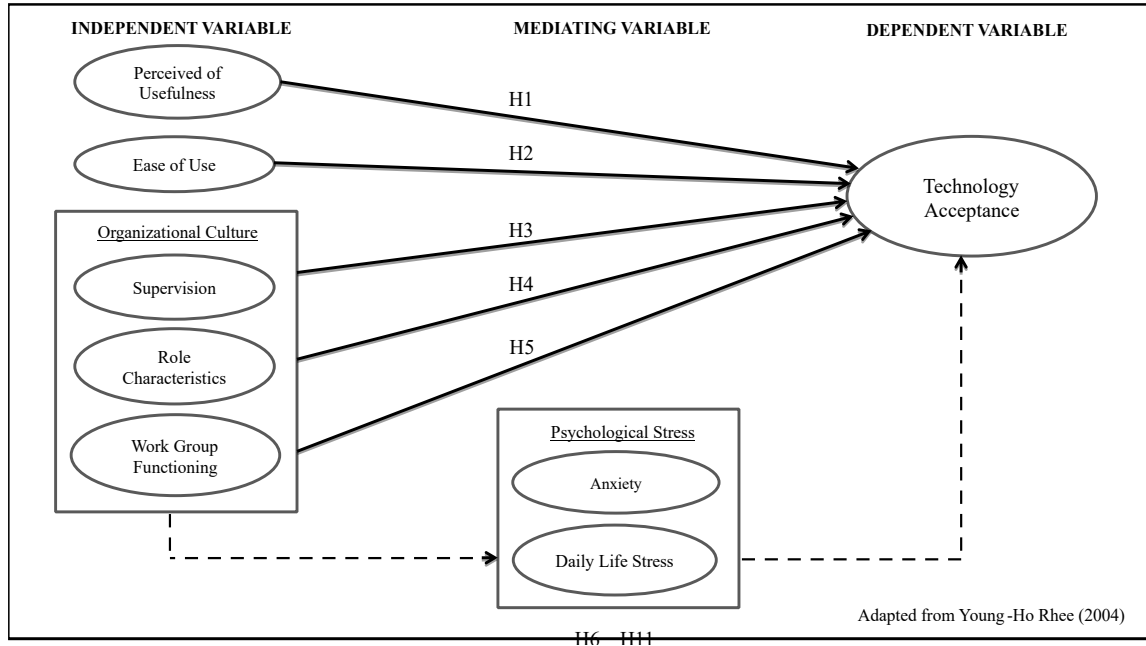


Fig. 2. Conceptual Framework

Figure 2 shows the conceptual framework of the mediating roles of psychological stress towards the relationship between organizational culture and technology acceptance. The researcher adapts it from only one author in the same article to form a conceptual framework diagram. There are three independent variables that have been highlighted by the researcher which are supervision, role characteristics, and work group functioning. Meanwhile, for the dependent variable the researcher stated three subdimension which are perceived usefulness, ease of use, and user's satisfaction with technology characteristics. Further, the researcher also added psychological stress as the mediator between organizational culture and technology acceptance. Previous study indicated that the failure of information systems has been hampered by a lack of user acceptance which is affected by the organizational culture in information technology (IT) industry. In conclusion, the study wants to find out whether there is a positive relationship among the variables with technology acceptance mediates with psychological stress in selected governments.

## 3. METHOD

This study employed a correlational research design to examine the relationships among organizational culture, psychological stress, and technology acceptance within the Malaysian government sector. Data were collected from employees working in three government agencies located in different administrative divisions within the same state. For confidentiality, the agencies are labelled Agency A, Agency B, and Agency C, representing service-based administrative units that utilize digital technologies in daily operations.

A non-probability convenience sampling technique was adopted. The target population consisted of government employees dispersed across multiple units and job categories, making random sampling impractical due to accessibility, cost, and time limitations. Convenience sampling enabled participation from employees who were available, willing, and actively involved in daily technology use. Although suitable for exploratory studies, this sampling approach limits generalizability; therefore, findings should be interpreted as indicative rather than representative of all government agencies.

Data were obtained using a self-administered questionnaire distributed through Google Forms. The survey link was emailed to employees in the selected agencies through internal administrative channels. The instrument consisted of six sections (A–F) and was adapted from validated sources: Young-Ho Rhee (2004) and Mohd Bakhari Ismail and Zawiyah Mohammad Yusof (2009). All items used a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. The questionnaire was provided in both English and Malay to ensure clarity for respondents.

The constructs measured and the number of items for each were as follows:

- Technology Acceptance (Dependent Variable): 12 items covering perceived usefulness, perceived ease of use, and user satisfaction.
- Organizational Culture (Independent Variable):
  - Supervision (5 items),
  - Role Characteristics (6 items),
  - Work Group Functioning (5 items).
- Psychological Stress (Mediator):
  - Anxiety (6 items),
  - Daily Life Stress (6 items).
- Demographic Profile: age, gender, education, department, and tenure (8 items).

Data were analyzed using SPSS to examine descriptive statistics, reliability tests, correlation analysis, and multiple regression. Mediation analysis was conducted using the PROCESS Macro for SPSS (Hayes Model 4) to determine whether psychological stress mediates the relationship between organizational culture and technology acceptance. While this approach provides meaningful insights into employee perceptions within the government sector, future studies are encouraged to apply random sampling and larger sample sizes across wider geographic regions to enhance external validity.

## 4. RESULTS AND DISCUSSION

### 4.1. Demographic Profiles

Table1. Demographic profiles of respondents

Variables		Frequency	Percentage (%)
Gender	Male	52	42.3
	Female	71	57.7
	<b>Total</b>	<b>123</b>	<b>100</b>
Age	Below 25 years old	6	4.9
	26 – 30 years old	16	13

	31 – 35 years old	19	15.4
	36 – 40 years old	22	17.9
	41 – 45 years old	23	18.7
	46 – 50 years old	24	19.5
	Above 50 years old	13	10.6
	<b>Total</b>	<b>123</b>	<b>100</b>
Education level	SPM	9	7.3
	STPM/Diploma	31	25.5
	Bachelor's Degree	73	59.3
	Masters	8	6.5
	PhD	2	1.6
	<b>Total</b>	<b>123</b>	<b>100</b>
Position grade	19 – 28	48	39
	29 – 36	31	25.5
	40 – 48	33	26.8
	52 – 54	11	8.9
	<b>Total</b>	<b>123</b>	<b>100</b>
Department	A	30	24.4
	B	66	53.7
	C	27	22
	<b>Total</b>	<b>123</b>	<b>100</b>

As shown in Table 1, the percentage of females is higher than males, where females are 71 (57.7%) while males are 52 (42.3%) of the sample size. The second item for respondents' profiles is age. The highest number of respondents belong to the age group of 46-50 years old, with 24 respondents (19.5%), followed by the age group of 41-45 years old, with 23 respondents (18.7%), next is the age group of 36-40 years old with 22 respondents (17.9%), then age group of 31-35 years old with 19 respondents (15.4%), for the age group of 26-30 years old the respondents is 16 (13%) and for the age group above of 50 years old is 13 respondents (10.6%). The least number of respondents is for the age group below 25 years old, with six respondents (4.9%). The third item for respondents' profiles is education level. Majority of the respondents have a degree, which is 73 respondents (59.3%), followed by 31 respondents (25.5%) with STPM or Diploma, nine respondents (7.3%) with SPM certificate, next masters' holders, eight respondents (6.5%), and two respondents have PhD (1.6%). The next item for respondents' profiles is position grade. Most respondents are from 19 – 28 position grades with 48 respondents (39%), while 40 – 48 position grades have 33 respondents (26.8%), next 29 – 36 position grades with 31 respondents (25.32%), and only 11 respondents (8.9%) from 52 – 54 position grades. Following the items for respondents' profiles is the department or selected government. Most are the respondents from department A, with 66 Respondents (53.7%), followed by department B, with 30 respondents (24.4%), and department C with 27 respondents (22%). Last but not least item for respondents' profiles is the tenure of services. Most respondents have a long tenure of service which is more than 20 years, with 27 respondents (22%). Followed by 11 – 15 years and 1 – 5 years tenure of services with 26 respondents (21.1%) correspondingly, while 16 – 20 years tenure of services 22 respondents (17.9%) and less than one year tenure of services has three respondents (2.4%) respectively.



#### 4.2. Correlation and Regression Results

Pearson correlation analysis was conducted to examine the strength and direction of associations between perceived usefulness, perceived ease of use, and technology acceptance. Results indicate a medium positive and statistically significant relationship between perceived usefulness and technology acceptance ( $r = .414$ ,  $p < .001$ ). This suggests that employees are more willing to accept technology when they perceive that the digital system improves work performance and efficiency.

Similarly, a medium positive and statistically significant correlation was found between perceived ease of use and technology acceptance ( $r = .472$ ,  $p < .001$ ). This demonstrates that employees are more inclined to adopt technology when the system is easy to learn and operate. These results provide empirical support for the Technology Acceptance Model, in which perceived usefulness and ease of use directly influence acceptance behaviour.

Table 2: Summary of Hypothesis Testing Results

Hypothesis	Statement	Result	Statistical Evidence
H1	Perceived usefulness $\rightarrow$ technology acceptance	Accepted	$r = .414^{**}$ , $p < .001$
H2	Perceived ease of use $\rightarrow$ technology acceptance	Accepted	$r = .472^{**}$ , $p < .001$
H3	Supervision $\rightarrow$ technology acceptance	Accepted	$\beta = .185$ , $p = .041$
H4	Role characteristics $\rightarrow$ technology acceptance	Accepted	$\beta = .343$ , $p = .001$
H5	Work group functioning $\rightarrow$ technology acceptance	Accepted	$\beta = .311$ , $p = .030$
H6–H11	Psychological stress (anxiety & daily life stress) mediating relationships	All Rejected	PROCESS Model 4, all indirect effects non-significant

##### 4.2.1 Relationship Between Perceived Usefulness, Ease of Use and Technology Acceptance

The findings align with prior studies demonstrating the importance of perceived usefulness in supporting technology adoption among public sector employees. Legramante et al. (2023) reported similar evidence, noting that improved technological efficiency enhances employee engagement and service productivity. Likewise, Bolodeoku et al. (2022) suggested that employees tend to accept digital tools when these tools are viewed as beneficial for improving task performance and service delivery.

Perceived ease of use also showed a similar pattern. Research by Chen et al. (2025) and Marikyan et al. (2023) supports that employees' acceptance levels increase when technologies require minimal effort to learn and integrate into existing workflows. In this study, employees demonstrated stronger technology acceptance when systems were user-friendly and required less training and adaptation.

These results reinforce the role of usefulness and ease of use as primary determinants of technology acceptance, consistent with core TAM assumptions.

##### 4.2.2 Organisational Culture and Technology Acceptance

Multiple regression results indicate that organisational culture significantly predicts technology acceptance. Among the three culture dimensions, role characteristics emerged as the strongest predictor, followed by work group functioning, and supervision:

- Role characteristics ( $\beta = .343$ ,  $p = .001$ )
- Work group functioning ( $\beta = .311$ ,  $p = .030$ )
- Supervision ( $\beta = .185$ ,  $p = .041$ )

Although supervision is statistically significant, its influence is notably weaker compared to the other two constructs. This hierarchy should be consistently reflected throughout the manuscript to avoid contradictory interpretations: supervision is significant, but not the strongest determinant.

These results support earlier research highlighting the importance of role clarity and collaborative culture in supporting technology use (Yang et al., 2024; Vraňáková & Gyurák Babel'ová, 2025). Employees are more confident adopting digital tools when expectations are clear, roles are well defined, and knowledge-sharing occurs within cohesive work units (Suherman et al., 2024).

#### 4.2.3 Mediation Effects of Psychological Stress

Mediation testing using PROCESS Macro Model 4 revealed that neither anxiety nor daily life stress mediated the relationship between organisational culture and technology acceptance. All indirect effects were non-significant for supervision, role characteristics, and work group functioning.

These findings contrast with studies reporting stress-based mediation effects in organisational environments (Tsai et al., 2025; Sanjeeva Kumar, 2024). In this study, psychological stress did not change the way cultural characteristics influenced acceptance behaviour.

Two contextual explanations may support this outcome:

1. Technology adoption in Malaysian government agencies is structurally mandated. Employees may adopt digital tools due to procedural requirements rather than emotional responses.
2. Collectivist and hierarchical work cultures may buffer emotional challenges. Employees may prioritise organisational expectations, team identity and job responsibility over personal stress responses.

Therefore, organisational culture directly influenced technology acceptance, but psychological stress did not function as a mediator within this environment.

#### 4.3.4 Summary of Results

Overall, the results demonstrate:

- Technology acceptance is significantly shaped by both perceived usefulness and ease of use.
- Organisational culture predicts technology acceptance, with role characteristics having the strongest effect.
- Supervision is significant, but less influential than other cultural factors — not insignificant.
- Psychological stress does not mediate organisational–technology relationships within the examined government context.

These findings highlight that technology adoption in the public sector is shaped more by structural and cultural factors than by emotional stress responses.

## 5. CONCLUSION

This study set out to examine the mediating role of psychological stress in the relationship between organizational culture and technology acceptance among employees in selected government agencies. The findings confirmed significant relationships between perceived usefulness, perceived ease of use, and

technology acceptance, showing that employees are more inclined to adopt digital tools when they view technology as beneficial and easy to operate. Furthermore, key cultural dimension's role characteristics, work group functioning, and supervision—were also found to influence technology acceptance, with role characteristics being the strongest predictor. However, psychological stress did not mediate any of these relationships, indicating that stress-related emotional responses did not significantly alter employees' acceptance of technology within the public sector environment.

### *5.1 Theoretical Implications*

The results extend the Technology Acceptance Model by incorporating organizational culture variables into an established prediction framework. While TAM traditionally focuses on individual beliefs, the findings demonstrate that organizational cultural elements clearly shape technology adoption behavior in government settings. The lack of mediation by psychological stress challenges prior studies that had positioned stress as a critical emotional pathway affecting technology use. This suggests that in structured and hierarchical work environments, cultural and system-related determinants outweigh emotional influences. The research therefore enriches public-sector technology theory by demonstrating that culture can directly predict acceptance without passing through psychological mediators.

### *5.2 Practical Implications*

For policymakers and public sector managers, the results highlight several actionable implications. Strengthening role clarity, teamwork support, and communication structures can significantly improve acceptance of new digital systems. The findings also show that employees adopt technology even under stress, implying that well-defined work roles and collective functioning reduce resistance. Managers should prioritize investing in system usability and relevant digital training, as employees are more receptive when systems are easy to use and clearly aligned to job tasks. Moreover, interventions should focus less on stress management for increasing technology adoption and more on organizational support systems, job design, and digital competency frameworks.

At a policy level, the study suggests that digital transformation strategies must account for cultural readiness—not just infrastructure. Government initiatives should emphasize culture-building practices, such as inclusive communication, cross-unit collaboration, and empowerment, to ensure long-term sustainability of technology usage within the public service.

### *5.3 Study Contribution*

This study makes three main contributions. First, it offers new empirical evidence from Malaysia's government environment, a context that remains underrepresented in technology acceptance literature. Second, it bridges organizational culture and technology acceptance by testing a combined model that has rarely been applied within public administration research. Third, by confirming the absence of a mediating effect of psychological stress, the study clarifies theoretical boundaries by showing that cultural elements can directly predict acceptance in highly structured institutional environments.

### *5.4 Future Recommendations*

Future studies could expand this work by including additional cultural or psychological predictors, comparing rural and urban public agencies, or examining longitudinal adoption trends to capture behavioral change over time.

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