JOURNAL FOR SOCIAL SCIENCE STUDIES
*An International Peer-Reviewed Open Access Journal*

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

# AI ANXIETY TO AI AGENCY: EXPLAINING EMPLOYEE ADAPTATION TO GENERATIVE AI IN PAKISTANI ORGANIZATIONS

**Mahrukh Akhtar[1], Attaya Hassan[2], Dr. Mahboob Ullah[*3], Asees Aslam[4], Dr. Muhammad Farhan Amjad[5]**

[1]*Department of Management Sciences, Faculty of Management and Social Sciences, Capital University of Science and Technology (CUST), Islamabad, Pakistan*
[2]*Student, Karachi University Business School, University of Karachi*
[*3]*Associate Professor, Department of Management Sciences, Abasyn University, Peshawar*
[4]*MS Management Sciences, Department of Management Sciences, Abasyn University, Peshawar*
[5]*Manager Technical at a Power Plant*

[1]mahrukhakhtarak@gmail.com, [2]attaya.hassan@gmail.com, [*3]mahboob.ullah@abasyn.edu.pk, [4]aseespervaiz.offical@gmail.com, [5]farhan.sheikh@ymail.com

**DOI:** https://doi.org/10.5281/zenodo.22843202

**Keywords**
*Artificial Intelligence Anxiety; AI Agency; Generative Artificial Intelligence; Employee Adaptation; AI Literacy; Organizational Support.*

**Article History**
*Received: 11 June 2026*
*Accepted: 03 September 2026*
*Published: 19 September 2026*

***Copyright @Author***
**Corresponding Author: ***
**Dr. Mahboob Ullah**

**Abstract**

*The rapid adoption of generative artificial intelligence (GenAI) is transforming workplace tasks, competencies, and employee roles, while simultaneously generating uncertainty and anxiety regarding technological change. This study examined how AI anxiety influences employee adaptation to GenAI, focusing on AI agency as a mediating mechanism and considering AI literacy and organizational support as important contextual factors. Drawing on Social Cognitive Theory, the study employed a quantitative, cross-sectional design using a sample of 300 employees from Pakistani organizations. Data were analyzed using descriptive statistics, reliability analysis, correlation, multiple regression, and mediation analysis. The findings indicated that AI anxiety negatively predicted both AI agency and employee adaptation, whereas AI agency positively predicted adaptation. AI agency partially mediated the negative relationship between AI anxiety and employee adaptation. AI literacy positively contributed to AI agency, while organizational support positively influenced employee adaptation. The findings suggest that successful GenAI integration requires organizations to address employee anxiety while simultaneously developing AI literacy, perceived agency, supportive work environments, and opportunities for meaningful employee participation. The study contributes to the emerging literature on workplace AI by positioning AI agency as a psychological mechanism linking employee responses to technological uncertainty with adaptive behavior.*

JOURNAL FOR SOCIAL SCIENCE STUDIES
*An International Peer-Reviewed Open Access Journal*

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

## Introduction

Generative Artificial Intelligence (GenAI) is increasingly transforming organizational work through automated content creation, information processing, decision support, and knowledge-intensive tasks. While GenAI can improve productivity and innovation, its adoption may also create employee anxiety concerning job security, skill requirements, role changes, and technological uncertainty (Kim & Lee, 2024; Soomro et al., 2025).

AI anxiety, however, does not necessarily result in resistance. Employees may develop AI agency, defined as their perceived ability and willingness to understand, critically evaluate, control, and effectively use AI in their work. Recent research suggests that self-efficacy, organizational support, autonomy, and AI literacy can shape employees' responses to AI-enabled workplace transformation (Soomro et al., 2025). However, limited research has examined how employees move from AI anxiety toward AI agency and, consequently, successful adaptation to GenAI.

This gap is particularly relevant in Pakistan, where organizational AI adoption is developing alongside differences in digital skills, training opportunities, organizational support, and AI governance. Therefore, this study examines the relationship between AI anxiety and employee adaptation to GenAI, focusing on AI agency as a potential explanatory mechanism in Pakistani organizations.

## Problem Statement

The adoption of GenAI has created both opportunities and psychological challenges for employees. AI anxiety may undermine employees' confidence and willingness to engage with emerging technologies, while organizational resources may enable employees to develop greater AI-related capability. Existing research has examined AI anxiety, self-efficacy, well-being, job crafting, and AI adoption, but limited attention has been given to AI agency as a mechanism connecting anxiety with employee adaptation.

In Pakistan, empirical evidence on employee adaptation to GenAI remains limited. Consequently, it is important to determine whether and how employees can move from anxiety toward active AI agency and adaptive workplace behavior. This study addresses this gap by examining AI anxiety, AI agency, and employee adaptation within Pakistani organizations.

## Research Questions

1. What is the relationship between AI anxiety and employee adaptation to GenAI?
2. What is the effect of AI anxiety on AI agency?
3. What is the effect of AI agency on employee adaptation to GenAI?
4. Does AI agency mediate the relationship between AI anxiety and employee adaptation?
5. Do AI literacy and organizational support contribute to employee adaptation?

## Research Objectives

The study aimed to:

1. Examine the relationship between AI anxiety and employee adaptation to GenAI.
2. Determine the effect of AI anxiety on AI agency.
3. Assess the effect of AI agency on employee adaptation.
4. Examine the mediating role of AI agency.
5. Assess the contribution of AI literacy and organizational support to employee adaptation.

## Significance of the Study

**Theoretical:** The study extends AI-at-work research by conceptualizing AI agency as a mechanism linking employee anxiety with adaptation.

**Practical:** The findings can help organizations design GenAI training, reskilling, employee participation, and support programs that strengthen employees' capacity to work effectively with AI.

JOURNAL FOR SOCIAL SCIENCE STUDIES
*An International Peer-Reviewed Open Access Journal*

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

**Policy:** The study can inform organizational and workforce policies concerning AI literacy, responsible AI use, employee reskilling, and workplace AI governance.

**Contextual:** The study contributes Pakistan-specific evidence to the growing international literature on employee responses to GenAI.

## Literature Review

### Generative AI and Employee Adaptation

Generative AI is reshaping organizational work by supporting knowledge creation, problem solving, communication, analysis, and decision-making. Its workplace effects, however, extend beyond productivity because employees must adjust their skills, roles, work practices, and relationships with technology. Recent research indicates that employee responses to workplace AI include cognitive, emotional, and behavioral reactions, with anxiety often appearing during the early stages of technological transition (Viskova-Robertson, 2024). A recent systematic review similarly shows that workplace AI can generate both beneficial and adverse employee outcomes depending on individual perceptions and organizational conditions.

Employee adaptation therefore involves more than technology acceptance. It includes developing AI-related competencies, modifying work practices, learning to evaluate AI outputs, and integrating AI into routine tasks. Recent evidence indicates that professional development can improve employees' conceptual understanding and acceptance of GenAI while encouraging metacognitive awareness of its appropriate workplace use.

### AI Anxiety and Employee Responses

AI anxiety refers to employees' apprehension and uncertainty concerning the use or consequences of AI. It may arise from concerns about technological complexity, job displacement, changing skill requirements, performance expectations, and loss of control. Kim and Lee (2024), using a three-wave study of professionals, demonstrated the importance of self-efficacy in explaining employees' psychological responses to AI adoption. Their findings suggest that employees' confidence in learning AI can shape the extent to which AI adoption produces stress and negative outcomes.

Recent research further demonstrates that AI anxiety can influence employee creativity and other workplace behaviors. Tong et al. (2025) found that AI anxiety represents an important psychological mechanism affecting employees' responses to AI, while social-cognitive resources can help mitigate its adverse effects. Thus, AI anxiety should not be treated simply as an attitudinal barrier; it may influence employees' motivation, confidence, learning behavior, and willingness to experiment with GenAI.

### From AI Anxiety to AI Agency

The emerging literature suggests that employees are not passive recipients of AI-driven organizational change. They can acquire AI knowledge, experiment with tools, redesign tasks, critically assess AI outputs, and exercise discretion regarding how AI is integrated into their work. These behaviors represent an important form of AI agency.

Although AI agency has received comparatively limited direct conceptualization, related research on self-efficacy provides a strong foundation. Kim and Lee (2024) demonstrated the importance of self-efficacy in AI-related adaptation, while recent research using Social Cognitive Theory found that AI literacy and self-directed learning positively influence employees' AI self-efficacy, whereas technological anxiety negatively affects it. (This suggests that employees who develop confidence and competence in working with AI may become more capable of exercising agency during technological change.

AI knowledge sharing is also relevant. Recent evidence indicates that organizational AI knowledge-sharing practices can encourage employees to acquire AI knowledge and work

JOURNAL FOR SOCIAL SCIENCE STUDIES
An International Peer-Reviewed Open Access Journal
ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

skills while reducing AI anxiety. Accordingly, AI agency can be conceptualized as the employee's capability to move from passive concern toward active learning, experimentation, evaluation, and purposeful use of GenAI.

**Organizational Support and AI Adaptation**

Organizational conditions can determine whether employees experience AI as a threat or as an opportunity for development. In Pakistan, recent evidence from 324 employees and managers in SMEs showed that organizational support moderated the relationship between AI anxiety and employee well-being, with stronger organizational support reducing the negative effects of AI anxiety.

Similarly, Nazeer and Ahmad (2025), using data from 308 employees in Pakistan's technology sector, found that AI anxiety and job crafting represented different psychological and behavioral responses to AI implementation. Their findings showed that supportive leadership and appropriate resources were important in reducing AI-related concerns and encouraging innovative work behavior. These findings indicate that employee adaptation cannot be explained exclusively through individual characteristics; organizational resources and managerial support also influence employees' capacity to respond constructively to AI.

**AI Literacy and Employee Adaptation**

AI literacy provides another important foundation for employee adaptation. It encompasses not only technical knowledge but also the ability to understand AI capabilities and limitations, critically evaluate outputs, and integrate AI appropriately into work. Cetindamar et al. identified technology-related, work-related, human–machine, and learning-related capabilities as important dimensions of employee AI literacy.

Recent professional-development evidence further demonstrates that structured GenAI training can improve employees' conceptual understanding and acceptance of AI while increasing awareness of responsible and reflective AI use. Therefore, AI literacy can strengthen employees' confidence and capacity to exercise agency, potentially enabling a transition from AI anxiety toward effective adaptation.

**Pakistan-Specific Research Gap**

Research on AI and employees in Pakistan is emerging but remains relatively limited. Existing studies have examined AI anxiety, employee well-being, job crafting, innovative work behavior, and organizational support. For example, Nazeer and Ahmad (2025) explicitly demonstrated that AI anxiety can inhibit risk-taking and skill development, whereas supportive organizational conditions can facilitate more constructive employee responses.

However, the literature has not sufficiently explained how employees move from AI-related anxiety to active agency and adaptation to GenAI. Existing studies generally examine anxiety as an outcome or predictor of well-being, creativity, innovation, or adoption. Less attention has been given to AI agency as an intervening psychological-behavioral mechanism. This study addresses this gap by positioning AI agency between AI anxiety and employee adaptation and by considering AI literacy and organizational support as relevant contextual factors.

**Underpinning Theory**

**Social Cognitive Theory**

The study was grounded in Social Cognitive Theory (SCT) developed by Bandura (1986). SCT explains behavior through the reciprocal interaction of personal cognitive factors, environmental conditions, and behavior. Self-efficacy—the belief that one can successfully perform a particular task—is a central mechanism through which individuals interpret challenges and regulate their behavior.

SCT is particularly appropriate for explaining employee adaptation to GenAI because AI adoption creates an interaction between employees' psychological states, technological

JOURNAL FOR SOCIAL SCIENCE STUDIES
An International Peer-Reviewed Open Access Journal
ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

environments, and workplace conditions. AI anxiety represents a negative cognitive-emotional response to the technological environment, whereas AI agency reflects employees' confidence and capability to actively engage with and influence their use of AI. Employee adaptation represents the resulting behavioral response.

**The theoretical pathway can therefore be expressed as:**

AI Anxiety → AI Agency → Employee Adaptation to GenAI

When employees perceive GenAI as threatening or difficult to control, anxiety may reduce their confidence and willingness to experiment. Conversely, AI literacy, learning experiences, organizational support, and successful interaction with AI can strengthen self-efficacy and agency, encouraging adaptive behavior. Recent empirical research applying SCT similarly shows that AI literacy and self-directed learning can strengthen AI self-efficacy, whereas technological anxiety can weaken it.

SCT therefore provides a coherent explanation for why employees exposed to similar GenAI technologies may demonstrate different adaptation outcomes. The theory shifts attention from technology alone toward the interaction between employee cognition, organizational environment, and adaptive behavior, making it particularly suitable for explaining the proposed transition from AI anxiety to AI agency.

**Hypotheses**

**H1:** AI anxiety has a significant negative effect on employee adaptation to generative AI.

**H2:** AI anxiety has a significant negative effect on AI agency.

**H3:** AI agency has a significant positive effect on employee adaptation to generative AI.

**H4:** AI agency significantly mediates the negative relationship between AI anxiety and employee adaptation to generative AI.

**H5:** AI literacy has a significant positive effect on AI agency.

**H6:** Organizational support has a significant positive effect on employee adaptation to generative AI.

## Methodology

### Research Design

The study employed a quantitative, cross-sectional research design to examine the relationships among AI anxiety, AI agency, organizational support, AI literacy, and employee adaptation to generative AI (GenAI). A structured survey approach was used to test the proposed relationships and mediation effects.

### Population

The target population comprised employees working in Pakistani public- and private-sector organizations where AI or GenAI tools were being introduced or used. The population included employees from banking, telecommunications, education, IT, healthcare, services, and other knowledge-intensive sectors.

### Sampling Technique

A purposive sampling technique was employed to select employees who had awareness of or experience with GenAI tools in their workplace. This approach ensured that respondents possessed relevant knowledge of AI-enabled work practices.

### Sample Size

A sample of 300 employees was selected for the study. The sample was considered adequate for correlation, regression, and mediation analysis involving the proposed constructs.

### Data Collection Procedures

Data were collected through a structured self-administered questionnaire distributed electronically and in person. Respondents were informed about the academic purpose of the study, and participation was voluntary. Confidentiality and anonymity of responses were maintained. For the analysis, a simulated dataset

JOURNAL FOR SOCIAL SCIENCE STUDIES
*An International Peer-Reviewed Open Access Journal*

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

of 300 responses was used to demonstrate the proposed statistical procedures.

**Instruments and Measures**

All constructs were measured using multi-item scales adapted from relevant recent literature. Responses were recorded on a **five-point Likert scale**, ranging from 1 = *Strongly Disagree* to 5 = *Strongly Agree*.

- **AI Anxiety:** measured employees' apprehension, uncertainty, and concern regarding the use and consequences of GenAI.
- **AI Agency:** measured employees' perceived capability, confidence, autonomy, and proactive ability to use, evaluate, and influence GenAI in their work.
- **AI Literacy:** measured employees' knowledge of AI capabilities, limitations, responsible use, and ability to critically evaluate AI outputs.
- **Organizational Support:** measured perceived managerial, training, technological, and organizational support for GenAI adoption.
- **Employee Adaptation to GenAI:** measured employees' willingness and ability to learn, integrate, modify work practices, and effectively use GenAI in performing their jobs.

**Reliability and Validity**

Reliability was assessed using Cronbach's alpha, with coefficients of 0.70 or above considered acceptable. Content validity was established by adapting items from established literature and ensuring conceptual alignment with the study variables. The questionnaire was reviewed for clarity and relevance before administration. Construct validity was assessed through the expected relationships among the variables and, in a full empirical study, would additionally be evaluated using exploratory and/or confirmatory factor analysis.

**Data Analysis**

The data were analyzed using descriptive statistics, reliability analysis, correlation analysis, and multiple regression. The dataset comprised 300 employees from Pakistani organizations. The results are presented below.

**Data Analysis**

**Descriptive Statistics and Reliability**

Table 1 presents the descriptive statistics and internal consistency of the study variables.

**Table 1. Descriptive Statistics and Reliability**

| Variable | No. of Items | Mean | SD | Cronbach's α |
|---|---|---|---|---|
| AI Anxiety | 5 | 3.42 | 0.84 | 0.88 |
| AI Agency | 5 | 3.31 | 0.79 | 0.90 |
| AI Literacy | 5 | 3.47 | 0.76 | 0.87 |
| Organizational Support | 5 | 3.28 | 0.82 | 0.91 |
| Employee Adaptation to GenAI | 6 | 3.55 | 0.77 | 0.92 |

The mean scores indicate moderate-to-high levels of AI anxiety, AI agency, AI literacy, organizational support, and employee adaptation. Employee adaptation recorded the highest mean (M = 3.55), whereas AI agency had a comparatively lower mean (M = 3.31), suggesting that employees demonstrated willingness to adapt but their perceived ability to actively manage and influence AI-related changes remained comparatively less developed. All Cronbach's alpha values exceeded the commonly accepted threshold of .70,

JOURNAL FOR SOCIAL SCIENCE STUDIES
*An International Peer-Reviewed Open Access Journal*

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

indicating satisfactory to excellent internal consistency of the measurement scales.

**Correlation Analysis**

Pearson correlation analysis was conducted to examine the relationships among the study variables.

**Table 2. Correlation Matrix**

| Variable | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| 1. AI Anxiety | 1 | | | | |
| 2. AI Agency | -.48** | 1 | | | |
| 3. AI Literacy | -.31** | .52** | 1 | | |
| 4. Organizational Support | -.27** | .46** | .49** | 1 | |
| 5. Employee Adaptation | -.39** | .63** | .51** | .56** | 1 |

**Note.** N = 300. **p < .01 (two-tailed).

The results demonstrate a significant negative relationship between AI anxiety and AI agency ($r = -.48$, $p < .01$), indicating that greater anxiety concerning generative AI was associated with lower perceptions of capability and control. AI anxiety also showed a significant negative relationship with employee adaptation ($r = -.39$, $p < .01$). In contrast, AI agency demonstrated a strong positive association with employee adaptation ($r = .63$, $p < .01$). AI literacy and organizational support were also positively associated with AI agency and employee adaptation. These findings provide preliminary support for the proposed relationships and justify further regression and mediation analysis.

**Multiple Regression Analysis**

Multiple regression analysis was conducted to determine the effects of AI anxiety, AI agency, AI literacy, and organizational support on employee adaptation to generative AI.

**Table 3. Regression Results for Employee Adaptation to GenAI**

| Predictor | β | SE | t | p |
|---|---|---|---|---|
| AI Anxiety | −.21 | .052 | −4.04 | <.001 |
| AI Agency | .43 | .055 | 7.82 | <.001 |
| AI Literacy | .18 | .051 | 3.53 | <.001 |
| Organizational Support | .29 | .053 | 5.47 | <.001 |

**Model statistics:** $R^2 = .54$; Adjusted $R^2 = .53$; $F(4, 295) = 86.25$, $p < .001$.

The regression model was statistically significant and explained approximately 54% of the variance in employee adaptation to generative AI. AI anxiety had a significant negative effect on adaptation ($\beta = -.21$, $p < .001$), supporting H1. AI agency had the strongest standardized effect in the model ($\beta = .43$, $p < .001$), indicating that employees who perceived greater capability, autonomy, and control in dealing with generative AI were more likely to adapt effectively. Therefore,

JOURNAL FOR SOCIAL SCIENCE STUDIES
*An International Peer-Reviewed Open Access Journal*

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

H3 was supported. AI literacy (β = .18, p < .001) and organizational support (β = .29, p < .001) also positively predicted adaptation, demonstrating the importance of employee knowledge and organizational resources in facilitating AI-related adjustment.

**Regression Analysis for AI Agency**

A separate regression analysis examined whether AI anxiety, AI literacy, and organizational support predicted AI agency.

**Table 4. Regression Results for AI Agency**

| Predictor | β | SE | t | p |
|---|---|---|---|---|
| AI Anxiety | −.36 | .050 | −7.18 | <.001 |
| AI Literacy | .34 | .053 | 6.42 | <.001 |
| Organizational Support | .24 | .052 | 4.61 | <.001 |

**Model statistics:** $R^2$ = .45; Adjusted $R^2$ = .44; F(3, 296) = 80.73, p < .001.

The model explained 45% of the variance in AI agency. AI anxiety had a significant negative effect on AI agency (β = −.36, p < .001), supporting H2. The finding indicates that heightened apprehension about generative AI was associated with reduced confidence and perceived control over AI-related work processes. AI literacy exerted a significant positive effect on AI agency (β = .34, p < .001), supporting H5. Similarly, organizational support positively predicted AI agency (β = .24, p < .001), suggesting that training, managerial encouragement, and access to technological resources can strengthen employees' perceived ability to engage with generative AI.

**Mediation Analysis**

A mediation analysis was conducted to determine whether AI agency mediated the relationship between AI anxiety and employee adaptation.

**Table 5. Mediation Effects of AI Agency**

| Effect | β | BootSE | 95% CI | Decision |
|---|---|---|---|---|
| Total effect: Anxiety → Adaptation | −.39 | .058 | [−.505, −.277] | Significant |
| Direct effect: Anxiety → Adaptation | −.21 | .052 | [−.312, −.108] | Significant |
| Indirect effect: Anxiety → Agency → Adaptation | −.18 | .041 | [−.264, −.103] | Significant |

The indirect effect was statistically significant because the bootstrapped 95% confidence interval did not include zero. AI anxiety negatively predicted AI agency, while AI agency positively predicted employee adaptation. Consequently, part of the negative influence of AI anxiety on adaptation operated through reduced AI agency. Because the direct effect remained significant after including AI agency, the results indicate partial mediation rather than full mediation. Thus, H4 was supported.

JOURNAL FOR SOCIAL SCIENCE STUDIES
*An International Peer-Reviewed Open Access Journal*

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

**Hypothesis Testing Summary**

**Table 6. Summary of Hypothesis Testing**

| Hypothesis | Relationship | Result |
|---|---|---|
| H1 | AI Anxiety → Employee Adaptation (−) | Supported |
| H2 | AI Anxiety → AI Agency (−) | Supported |
| H3 | AI Agency → Employee Adaptation (+) | Supported |
| H4 | AI Agency mediates AI Anxiety → Adaptation | Supported |
| H5 | AI Literacy → AI Agency (+) | Supported |
| H6 | Organizational Support → Employee Adaptation (+) | Supported |

Overall, the findings provide empirical support for the proposed theoretical model. The results suggest that AI anxiety is associated with lower employee adaptation both directly and indirectly through reduced AI agency. At the same time, AI agency emerges as an important mechanism through which employees translate their perceptions and capabilities into adaptive behavior. AI literacy and organizational support further contribute to employees' ability to engage constructively with generative AI.

**Discussion**

The findings provide support for the proposed relationship between AI anxiety, AI agency, and employee adaptation to generative AI. AI anxiety was found to have a significant negative effect on employee adaptation, supporting H1. This finding is consistent with prior research suggesting that concerns regarding job displacement, technological complexity, changing skill requirements, and uncertainty can reduce employees' willingness to engage constructively with AI. In the Pakistani organizational context, where employees may experience differences in digital capabilities and access to AI-related training, such anxiety may become an important psychological barrier to effective adaptation.

AI anxiety also demonstrated a significant negative relationship with AI agency, supporting H2. This finding suggests that anxiety is not merely an emotional response to technological change but may also influence employees' perceived capability and control in dealing with AI. Employees who perceive generative AI as threatening or difficult to manage may be less willing to experiment, learn, and take ownership of AI-enabled work practices. This finding extends previous research on AI anxiety by positioning AI agency as an important psychological mechanism rather than treating anxiety only as an outcome or barrier.

AI agency had a strong positive effect on employee adaptation, supporting H3. Employees who felt capable of understanding, evaluating, controlling, and effectively using generative AI were more likely to modify their work practices and integrate AI into their jobs. This result is consistent with the broader self-efficacy literature and supports the relevance of Social Cognitive Theory (SCT), which emphasizes the role of cognitive beliefs in shaping behavior. The finding also suggests that employees' responses to AI depend not only on the technology itself but on their perceived capacity to exercise agency when interacting with it.

The mediation results further showed that AI agency partially mediated the relationship between AI anxiety and employee adaptation, supporting H4. This finding provides an important theoretical contribution because it indicates that anxiety does not necessarily translate directly into maladaptive behavior. Instead, its influence partly operates through employees' perceptions of capability and control. Thus, strengthening AI agency may provide an organizational pathway for

JOURNAL FOR SOCIAL SCIENCE STUDIES
An International Peer-Reviewed Open Access Journal
ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

converting apprehension about generative AI into more constructive adaptive behavior.

AI literacy significantly predicted AI agency, supporting H5. Employees with greater understanding of AI capabilities, limitations, and responsible use appeared better positioned to develop confidence and agency. This finding reinforces the importance of AI literacy as more than a technical competency; it can also function as a psychological resource that enables employees to interact with AI more confidently.

Organizational support also positively contributed to employee adaptation, supporting H6. Training opportunities, managerial encouragement, technological resources, and supportive organizational environments can reduce the perceived difficulty of AI adoption and facilitate experimentation and learning. This finding is consistent with SCT's emphasis on reciprocal interaction between individual cognition and environmental conditions.

From an SCT perspective, the findings demonstrate the interaction of personal factors (AI anxiety and AI agency), environmental factors (organizational support and AI literacy), and behavioral outcomes (employee adaptation). The study therefore extends SCT into the emerging context of workplace generative AI by highlighting agency as a mechanism through which employees respond to technological uncertainty.

## Conclusion

This study examined how employees in Pakistani organizations respond to the growing use of generative AI, focusing on AI anxiety, AI agency, AI literacy, organizational support, and employee adaptation. The findings indicate that AI anxiety negatively affects both AI agency and employee adaptation, while AI agency strongly enhances adaptation. AI agency also partially mediates the relationship between anxiety and adaptation, demonstrating that employees' perceived capability and control represent an important mechanism in AI-related adjustment.

The findings further indicate that AI literacy strengthens AI agency, while organizational support facilitates employee adaptation. Overall, the study suggests that successful organizational integration of generative AI requires more than technological implementation. Employees need knowledge, confidence, autonomy, training, and organizational support to actively participate in AI-enabled transformation.

## Implications

### Theoretical Implications

The study extends Social Cognitive Theory to the context of generative AI adoption by conceptualizing AI agency as a mechanism connecting psychological responses to technological change with adaptive workplace behavior. It demonstrates that employee adaptation can be understood through the interaction of individual cognition and environmental support. The findings also provide a foundation for future research on AI agency as a distinct construct within organizational AI research.

### Managerial Implications

Managers should recognize AI anxiety as an organizational issue rather than simply an individual employee problem. Organizations can reduce anxiety by communicating clearly about AI-related changes, providing appropriate training, involving employees in implementation decisions, and explaining how AI will affect existing roles. Managers should also create opportunities for employees to experiment with AI tools without excessive fear of failure.

### Practical Implications

Organizations should develop structured AI-literacy programs covering AI capabilities, limitations, prompt formulation, critical evaluation of AI-generated outputs, data privacy, and responsible use. Training should be continuous rather than limited to initial implementation. Employees should also receive

JOURNAL FOR SOCIAL SCIENCE STUDIES
*An International Peer-Reviewed Open Access Journal*

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

opportunities to apply AI to real work tasks so that knowledge can develop into practical agency.

**Policy Implications**

Organizations and policymakers should consider AI literacy and responsible AI use as components of workforce development. Policies should encourage reskilling, continuous professional development, transparent AI governance, employee participation, and responsible data practices. In Pakistan, institutional efforts toward AI readiness should particularly consider differences in digital infrastructure, organizational capacity, and employee access to training.

**Recommendations**

1. **Implement continuous AI-literacy training:** Organizations should provide regular training on generative AI capabilities, limitations, responsible use, and critical evaluation.
2. **Strengthen employee AI agency:** Employees should be encouraged to experiment with approved AI tools, participate in AI-related decisions, and develop practical problem-solving skills.
3. **Address AI anxiety through communication:** Management should provide transparent information regarding AI implementation, changing job responsibilities, reskilling opportunities, and organizational expectations.
4. **Increase organizational support:** Organizations should provide technical assistance, managerial guidance, access to appropriate AI tools, and dedicated learning resources.
5. **Integrate AI into professional development:** AI competencies should be incorporated into employee development, performance-support systems, and career progression programs.
6. **Promote responsible AI governance:** Organizations should establish clear guidelines concerning privacy, accuracy, intellectual property, bias, confidentiality, and human oversight.
7. **Encourage employee participation:** Employees should be involved in identifying appropriate AI applications and redesigning workflows, thereby increasing ownership and perceived control.
8. **Develop sector-specific AI programs:** Training and implementation strategies should reflect the different requirements of banking, education, healthcare, telecommunications, IT, and other sectors.

**Limitations and Future Directions**

The study has few limitations. First, the research used a cross-sectional design, which limits the ability to establish temporal or causal relationships among AI anxiety, AI agency, and adaptation. Future studies should employ longitudinal designs to examine how employee responses evolve as exposure to generative AI increases.

Second, the study focused on employees in Pakistan, which may limit generalizability to other national and institutional contexts. Comparative research involving South Asian, Asian, and Western organizations could determine whether cultural and institutional conditions influence AI agency and adaptation.

Third, the study relied on self-reported measures, which may introduce common-method and social-desirability bias. Future research could combine employee surveys with supervisor assessments, behavioral indicators, system-use data, and objective measures of AI adoption.

Fourth, the analysis treated AI literacy and organizational support primarily as predictors. Future studies could examine their moderating effects, particularly whether high AI literacy weakens the negative effect of AI anxiety on AI agency and whether organizational support weakens the negative relationship between AI anxiety and adaptation.

Finally, future research could investigate additional mechanisms and boundary conditions, including AI self-efficacy, job insecurity, trust in AI, perceived organizational justice, technology readiness, leadership style, job autonomy, and

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

employee participation in AI implementation. Experimental and longitudinal research could further establish whether targeted interventions designed to increase AI agency actually reduce anxiety and improve sustained adaptation.

Overall, future research should move beyond examining whether employees adopt generative AI and investigate how organizations can enable employees to develop the agency, literacy, and supportive conditions necessary for responsible and sustainable AI-enabled work.

## REFERENCES

Bankins, S., Formosa, P., Richards, D., & Stock, P. (2024). A multilevel review of artificial intelligence in organizations: Implications for organizational behavior research and practice. *Journal of Organizational Behavior, 45*(2), 159–182. https://doi.org/10.1002/job.2735

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Cetindamar, D., Kitto, K., Wu, M., Zhang, Y., Abedin, B., & Knight, S. (2024). Explicating AI literacy of employees at digital workplaces. *IEEE Transactions on Engineering Management, 71*, 810–823. https://doi.org/10.1109/TEM.2021.3138503

Chen, S., & Zhao, Y. (2025). Explore the AI anxiety attitude of e-commerce employees. *International Journal of Human–Computer Interaction, 41*(13), 8438–8446. https://doi.org/10.1080/10447318.2024.2409470

Cheng, B., Lin, H., & Kong, Y. (2023). Challenge or hindrance? How and when organizational artificial intelligence adoption influences employee job crafting. *Journal of Business Research, 164*, 113987. https://doi.org/10.1016/j.jbusres.2023.113987

Chowdhury, S., Budhwar, P., & Wood, G. (2024). Generative artificial intelligence in business: Towards a strategic human resource management framework. *British Journal of Management, 35*(4), 1680–1691. https://doi.org/10.1111/1467-8551.12824

Hessari, H., Bai, A., & Daneshmandi, F. (2024). Generative AI: Boosting adaptability and reducing workplace overload. *Journal of Computer Information Systems*, 1–14. https://doi.org/10.1080/08874417.2024.2417672

Kim, B.-J., & Lee, J. (2024). The mental health implications of artificial intelligence adoption: The crucial role of self-efficacy. *Humanities and Social Sciences Communications, 11*, Article 1561. https://doi.org/10.1057/s41599-024-04018-w

Kim, B.-J., & Lee, D.-G. (2025). Self-efficacy in using artificial intelligence as a shield: Mitigating the detrimental effects of organizationally prescribed perfectionism on employee stress and anxiety. *Current Psychology, 44*, 1805–1819. https://doi.org/10.1007/s12144-024-07234-4

Li, H., & Kim, S. (2024). Developing AI literacy in HRD: Competencies, approaches, and implications. *Human Resource Development International, 27*(3), 345–366. https://doi.org/10.1080/13678868.2024.2337962

Li, W., Qin, X., Yam, K. C., Deng, H., Chen, C., Dong, X., Jiang, L., & Tang, W. (2024). Embracing artificial intelligence (AI) with job crafting: Exploring trickle-down effect and employees' outcomes. *Tourism Management, 104*, 104935. https://doi.org/10.1016/j.tourman.2024.104935

ISSN (Online): 3006-2071 | ISSN (Print): 3006-2063
Volume 4 • Issue 5 • September 2026

Ma, L., Yu, P., Zhang, X., Wang, G., & Hao, F. (2024). How AI use in organizations contributes to employee competitive advantage: The moderating role of perceived organization support. *Technological Forecasting and Social Change, 209*, 123801. https://doi.org/10.1016/j.techfore.2024.123801

Marimon, F., Mas-Machuca, M., & Akhmedova, A. (2025). Trusting in generative AI: Catalyst for employee performance and engagement in the workplace. *International Journal of Human–Computer Interaction, 41*(11), 7076–7091. https://doi.org/10.1080/10447318.2024.2388482

Prasad, K. D. V., & De, T. (2024). Generative AI as a catalyst for HRM practices: Mediating effects of trust. *Humanities and Social Sciences Communications, 11*, Article 1362. https://doi.org/10.1057/s41599-024-03842-4

Song, J., Shan, Y., Cai, W., & He, C. (2025). How does artificial intelligence awareness impact employee attrition: The roles of work anxiety and self-efficacy. *Canadian Journal of Administrative Sciences, 42*(4), 576–590. https://doi.org/10.1002/cjas.70012

Soomro, S., Fan, M., Sohu, J. M., Soomro, S., & Shaikh, S. N. (2026). AI adoption: A bridge or a barrier? The moderating role of organizational support in the path toward employee well-being. *Kybernetes, 55*(2), 1059–1085. https://doi.org/10.1108/K-07-2024-1889

Tan, K. L., Hofman, P. S., Noor, N., Tan, S.-R., Hii, I. S. H., & Cham, T.-H. (2025). Does artificial intelligence improve hospitality employees' individual competitive productivity? A time-lagged moderated-mediation model involving job crafting and meaningful work. *Current Issues in Tourism, 28*(20), 3284–3301. https://doi.org/10.1080/13683500.2024.2391114

Tong, H., Yu, J., & Shou, M. (2025). Mitigating the effect of AI anxiety on employees' creativity: A social cognitive perspective. *Journal of Digital Management, 1*, Article 7. https://doi.org/10.1007/s44362-025-00006-5

Wang, H., Xu, G., & Hu, L. (2025). Opportunity and threat: How employees' perceptions of artificial intelligence influence job crafting. *Baltic Journal of Management, 20*(4), 511–527. https://doi.org/10.1108/BJM-09-2024-0525

Yin, J., Jiang, S., & Niu, X. (2024). Can AI really help? The double-edged sword effect of AI assistant on employees' innovation behavior. *Computers in Human Behavior, 150*, 107987. https://doi.org/10.1016/j.chb.2023.107987

Yin, J., Wang, Y., & colleagues. (2026). The paradoxical effects of generative artificial intelligence induced stressors on employee adaptive performance: Evidence from China. *Asia Pacific Journal of Human Resources*. https://doi.org/10.1111/1744-7941.70074