

**Alishba Iqbal¹, Hussain Mithaiwala¹, Mahnoor Farooqui²**

1. Student, IPP, Bahria University, Karachi, Pakistan.
2. Lecturer, IPP, Bahria University, Karachi, Pakistan.

Cite This Article: Iqbal, A., Mithaiwala, H. & Farooqui, R. (2026). Employees' Attitudes Towards Artificial Intelligence and Job Insecurity. *Journal of Social Sciences Research & Policy*. 4 (02), 239-246.

DOI: <https://doi.org/10.71327/jssrp.42.239.246>

ISSN: 3006-6557 (Online)

ISSN: 3006-6549 (Print)

Vol. 4, No. 2 (2026)

Pages: 239-246

Key Words:

Artificial Intelligence, Job Insecurity, Attitudes towards AI

Corresponding Author:

Alishba Iqbal

Email: iqbalalishba311@gmail.com

License:



Abstract: *The current paper analyzed the connection between the attitudes of employees towards Artificial Intelligence (AI) and job insecurity in Pakistan's organizations. Artificial intelligence is the use of different automated systems in workplace which assist, perform, or replace human beings by taking decisions and doing tasks. This created job insecurity among employees as they think that they are replaceable anytime sooner. Basing the research on the TAM model, the JD-R model, and the study was quantitative and cross-sectional in design. It was hypothesized that negative attitudes towards AI would result in higher perceived job insecurity. A purposive sampling method was adopted to collect data from 300 employees employed in five different departments (HR, Marketing, Management, Finance, IT). Standardized tools included the Attitudes Towards Artificial Intelligence at Work (AAAW) Scale, with job insecurity measured by section A5 of the AAAW Scale. Results revealed a significant correlation between employee attitudes towards AI and job insecurity, with more negative attitudes towards AI related to higher perceived job insecurity. These findings indicate that organizational support serves as a psychological buffer during technological transition periods. The current research offers the recommendations for the future researches along with the organizations as well.*

Introduction

Technological transformation in the modern workplace has accelerated the integration of Artificial Intelligence (AI) across organizational systems, reshaping employee experience, responsibilities, and expectations. As AI becomes more influential in decision making, task execution, and performance evaluation, employees increasingly interpret these technological shifts through emotional and cognitive lenses. This reaction is referred to as employees' attitude towards AI—a construct capturing whether individuals view AI as supportive or threatening. Employees who perceive AI as a complex job replacement develop negative attitudes grounded in fear and uncertainty (Chung et al., 2025). Alternatively, employees who view AI as helpful and efficient display more positive responses. These attitudes form the psychological foundation of how employees respond to AI-driven organizational changes.

In developing countries like Pakistan, the adoption of AI-driven systems has gained attention as organizations strive to remain competitive in a rapidly digitalizing and globalized business environment. Pakistani organizations, particularly within the private sector, are beginning to deploy AI-based tools in areas such as employee recruitment, performance appraisal, customer analytics, financial forecasting, and strategic planning. However, employees often face limited training, inconsistent communication, and economic pressure on job stability, making them more sensitive to perceived job threats posed by AI (Gull et al., 2023).

Literature Review

(DR. JOLLY MASIH, 2023) examined how Industry and AI transform business functions such as HR, marketing, and sales. They emphasized that while AI enhances efficiency, data generation, and customer engagement, successful adoption hinges on employee acceptance. The study warns that inadequate organizational support can fuel job displacement fears and negative attitudes toward AI, making employees insecure about their jobs.

Artificial Intelligence (AI) has significantly enhanced the effectiveness and efficiency of information technology (IT) function by automating complex processes, improving system reliability, and enabling data driven decision making. Within IT, AI tools are widely used for system monitoring, predictive maintenance, and cybersecurity threat detection. Machine learning algorithms can analyze large volumes of system logs and network traffic to identify bugs and predict system failure, preventing security issues before they occur. This proactive approach reduces system downtime, enhances data protection, and minimizes operational risk allowing IT departments to move from reactive problem solving to preventive strategic movement (Jarrahi, 2018)

Artificial Intelligence has operational benefits to organizations but the integration of AI within organization has raised several ethical and psychological concerns including bias, transparency, privacy, and accountability. AI system trained on biased data may cause discrimination in hiring, evaluation, and promotion decisions, thereby undermining the perception of fairness. (Morandini et al., 2023) has conducted a study in which it was researched how Artificial intelligence has created a need for new mastery among employees in organizations. It discusses how AI has reduced the workload, as well as providing means to fast tract laborious tasks in the workplace. However, it also leads to developing job insecurity. In order to adapt to these ever-changing demands of the workplace, employees will need to be formally trained into adapting to new ways of interacting with AI in the workplace. This research emphasizes the significance of positive attitude towards AI. The researcher also emphasized that employee's attitude towards AI shaped their willingness towards upskilling and reskilling. When AI is perceived as a supportive tool, employees' performance will be enhanced, and they will demonstrate a more positive attitude towards AI. However, negative impressions lead to resistance and disagreements. The researcher also linked with job insecurity as employees have a fear of job displacement, such insecurity can undermine confidence and reduce openness towards AI-Driven changes.

Akyazi explored the link between employees' AI attitudes and organizational culture, finding that supportive, flexible, and innovation-oriented cultures encourage positive AI perceptions. In contrast, unsupportive cultures breed resistance and uncertainty.

(Lichtenthaler, 2019) investigated the polarized nature of AI attitudes, identifying extremes of optimism and resistance. The study stresses the need for balanced AI acceptance through clear organizational communication, leadership, and support mechanisms.

(Raisch & Krakowski, 2021) analyzed the automation–augmentation paradox, noting that AI can both replace and enhance human tasks, creating ambivalent employee attitudes. They highlight that strategic

training, role design, and supportive leadership are crucial in shaping AI responses.

One of the contemporary research projects focused on Pakistani service and manufacturing sectors, revealing that negative AI perceptions correlate with higher career anxiety, with job insecurity mediating this relationship. Their findings emphasize that in the Pakistani context, employee attitudes significantly influence perceived job threats.

Others have studied AI integration in Pakistani organizations, demonstrating that AI awareness and training positively affect employee performance. The research reinforces the importance of organizational support in shaping engagement and attitudes toward AI-driven systems.

Theoretical Framework

The Technology Acceptance Model (TAM) proposed by (Davis, 1989) posits that employees form attitudes about technological systems based on perceived usefulness and perceived ease of use. Negative evaluations along these dimensions lead to resistance, fear, and low acceptance, which heighten job-related anxieties. (Bakker & Demerouti, 2007a)provides insight into how these negative attitudes translate into job insecurity. AI introduces job demands such as upskilling pressure, task restructuring, and performance comparisons, which elevate strain when employees lack resources.

The integration of TAM, and JD-R provides a comprehensive explanation of employees' attitudes towards AI. TAM explains how attitudes towards AI are formed, and JD-R explains why job insecurity harms those attitudes. Together, these theories suggest that AI acceptance is not solely a technological issue, but a psychological and organizational one.

Significance of the Study

This study holds significant importance as it explores the dynamic relationship between employees' attitude towards AI and job insecurity in Pakistani organizations. In the context of rapidly evolving workplaces, AI adoption is often emphasized to improve efficiency and competitiveness, while employees' perception and psychological well-being may receive less attention. AI has increasingly changed the job structures and workplace roles. This research will help the audience understand how technological advancements are impacting the employees' perception about job stability, employees' feelings and their level of stress. For example, if employees perceive AI as a threat so they would be stressful, their motivation will be low, and they will have reduced job satisfaction. This will help the organization to make strategies to work on the mental health of employees and reduce the fear of job insecurity.

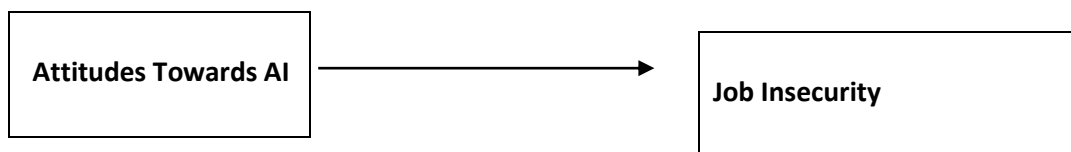


Figure 1: Theoretical Framework of the Study

Research Objectives

1. To investigate the relationship between Employees' Attitudes towards AI and Job Insecurity.

Research Questions

1. Is there any relationship between Employees' Attitudes towards AI and Job Insecurity?

Research Hypotheses

H0: There is no association between Employees' Attitudes towards AI and Job Insecurity.

H1: Employees' Attitudes towards AI is negatively associated with Job Insecurity—Positive Attitude towards AI would predict lower perceived job insecurity.

Methodology

Research Design

The research adopted a quantitative approach and a causal research design to investigate the relationship between attitudes towards AI, and job insecurity. A structured questionnaire was used to gather data from employees in Karachi.

Participants

Participants were employees currently working in private or public organizations in Karachi, selected from five departments: IT, Management, Marketing, HR, and Finance. A purposive non-probability sampling technique was used, with a sample size of 300.

Inclusion Criteria

- Employees currently holding an active position in a private or public organization
- Employees from IT, Management, Marketing, Human Resource Management, and Finance departments
- Employees aged 20–45 years
- Employees working in organizations impacted by AI integration
- Employees who have first-hand experience with AI adoption in their workplace

Exclusion Criteria

- Unemployed individuals
- Interns
- Employees not working with AI tools in their workplace
- Self-employed individuals or business owners
- Employees outside the age range of 20–45 years

Measures

1. Demographic Form

Collected information on age, gender, education, job position, department, organization type, AI use, experience, and AI training.

2. Attitudes towards Artificial Intelligence at Work (AAAW) Scale

Developed by (Park et al., 2024), 25 items, 5-point Likert scale, measures six dimensions including job insecurity (sub-section A5). Cronbach's alpha values indicate strong internal consistency.

3. Job Insecurity Scale

Job insecurity was measured using Sub-Section A5 of the Attitudes towards Artificial Intelligence at Work (AAAW) Scale, capturing employees' concerns about career stability and replacement by AI, with high internal validity.

Procedure

Data was collected via paper-based questionnaires. Participants were approached in person, informed about the study, and provided written consent. Surveys took approximately 20 minutes to complete. Data was analyzed using IBM SPSS Version 22.

Ethical Considerations

Informed consent was obtained, confidentiality and anonymity were maintained, and participants could withdraw at any time without consequence.

Results & Discussion

Table 1: Demographic Characteristics of Respondents (N = 300)

Variable	Category	Frequency	Percentage
Age (years)	20–25	101	33.7
	26–30	82	27.3
	31–35	50	16.7
	36–40	25	8.3
	41–45	42	14.0
Gender	Male	157	52.3
	Female	143	47.7
Education Level	Intermediate	20	6.7
	Bachelor's	179	59.7
	Master's	98	32.7
	Doctorate	3	1.0
Job Position	Non-Managerial	30	10.0
	Junior Managerial	141	47.0
	Mid-Managerial	47	15.7
	Senior Managerial	58	19.3
	Top Management	24	8.0
Department	HR	74	24.7
	Marketing	64	21.3
	Management	58	19.3
	Finance	55	18.3
	IT	49	16.3
Type of Organization	Private	274	91.3
	Public	14	4.7
	Multinational	12	4.0
Use of AI at Work	Yes	226	75.3
	No	74	24.7
Experience in Current Organization	Under 3 years	155	51.7
	3–6 years	77	25.7
	7–10 years	37	12.3
	More than 10 years	31	10.3
AI Training Received	Yes	105	35.0
	No	195	65.0
Total Work Experience	Under 3 years	117	39.0
	3–6 years	84	28.0
	7–10 years	49	16.3
	More than 10 years	50	16.7

Note: Frequency = n, Percentage = %

This section is an outline of the demographics of the respondents who took part in the study. The analysis consists of data about the age of participants, their gender, educational level, job role,

department, organizational type, the usage of the artificial intelligence at work, the length of work experience at the organization, the AI-related training, and the workplace experience in general. Table 1 summarizes the findings.

Table 2: Descriptive Statistics of Study Variables (N = 300)

	M	SD	N
AS5	11.2167	4.33733	300
AS1	9.8367	3.86261	300
AS2	14.5067	3.58041	300
AS3	15.5833	3.81202	300
AS4	9.8300	3.64491	300
AS6	13.0767	3.69001	300

Note: M=Mean, SD= Standard Deviation

The statistical measures relate to moderate mean values of all constructs, which implies equal respondent perceptions. The standard deviations indicate that there is a reasonable dispersion, which proves that there is enough variability to conduct an inferential statistical analysis.

Table 3: Correlation Matrix of Study Variables

Variables	AS1	AS2	AS3	AS4	AS5	AS6
AS1	1					
AS2	.209**	1				
AS3	.252**	.288**	1			
AS4	.246**	-.044	.079	1		
AS5	.147*	.148*	.086	.417**	1	
AS6	.129*	.312**	.355**	.022	.262**	1

Note: * $p < .05$ ** $p < .01$

Pearson correlation analysis was done to study the relationship between the study variables. The results obtained indicate that a number of positive correlations between the variables are statistically significant. The positive relationship between AS5 and AS4 is strong ($r = .417, p < .01$) which means that in case of the increase of AS4, the score of AS5 also increases. In general, the results indicate that there are interrelationships between the variables of the study.

Table 4: Regression Analysis of the Study Variables

Predictor	B	SE	t	P
AS4	.678	.350	1.94	.054
AS6	.889	.340	2.61	.009
AS2	.617	.344	1.80	.074

Note: B =Regression Coefficient, SE =Standard Error, t = B/SE, $p < .01$

A multiple regression analysis was done in order to determine significant predictors of AS5. The regression equation was statistically significant with a high level of explaining the variance of AS5 at about 18.8. AS6 became a major predictor ($p < .01$) which means that it contributes positively to AS5. These results indicate that AS6 is a critical factor to the effect of AS5.

Discussion

In the modern Pakistani organizational environment, technological progress, specifically the adoption of Artificial Intelligence (AI), is gradually becoming more influential in how workers view job security and professional survival (Khan,). The Pakistani labor market is also defined by economic uncertainty, a lack of mobility in the job market, and comparatively low levels of reskilling, which results in the employees being particularly vulnerable to technological change. Within this context, AI may not be simply viewed as a productivity-increasing tool, but it can be considered as a threat to occupational relevance and long-term employability. As a result, the attitude of employees towards AI becomes one of the key psychological factors that determine job insecurity.

The findings confirm a significant negative correlation between employees' attitudes towards AI and job insecurity, supporting Hypothesis 1. Positive perceptions of AI were associated with lower job insecurity, consistent with the Technology Acceptance Model (TAM), which suggests that perceived usefulness reduces resistance and fear (AL-Qahtani, 2025). Employees viewing AI as augmentative rather than substitutive felt more secure. Conversely, negative attitudes—marked by fear of replacement—heightened insecurity. The Job Demand-Resources (JD-R) model further explains these results: AI-related changes act as a job demand, and without adequate resources, increase psychological strain (Bakker & Demerouti, 2007). This is particularly relevant in Pakistan, where economic uncertainty, limited job mobility, and low reskilling amplify vulnerability to technological change.

These observations can also be explained by the theory of Job Demand Resources (JD-R), according to which the process of AI-related change can be described as a type of a job demand, which, when accompanied by insufficient resources, amounts to psychological pressure (Bakker & Demerouti, 2007b). Negative perceptions toward AI in this study acted as an internal requirement, which led to the worsening of stress and job insecurity. This phenomenon seems to be highly relevant in Pakistani institutions, where workers are frequently at the edge of poverty because of economic and social unpredictability, casual employment, and a low level of organizational safety nets. Therefore, AI implementation is likely to increase existing weaknesses unless adequate psychological and organizational capabilities are provided.

In general, the paper emphasized the fact that the issue of AI acceptance is not only technological, but also psychological and organizational. The attitudes of employees to AI influence the interpretation of the technological change.

Limitations and Recommendations of the Research

This study has several limitations. First, the cross-sectional design prevents causal inference. Second, self-reported measures may introduce common method and social desirability biases. Third, the sample was restricted to urban organizations, limiting generalizability to rural, informal, or small-scale sectors.

Organizations should foster positive AI beliefs through AI literacy training, reskilling initiatives, and clear role definitions. HR should integrate psychological support systems—such as counseling and participative decision-making—with AI adoption. Future research should employ longitudinal and mixed-method designs to better capture evolving employee perceptions. Expanding studies to diverse sectors and regions within Pakistan would improve external validity.

Conclusion

This study investigated the relationship between employee attitudes towards AI and job insecurity. The results confirm that positive AI perceptions reduce perceived job insecurity, while negative attitudes increase it. The research fills a gap in the literature on AI-induced job insecurity, integrating TAM, and JD-R. It underscores that successful AI integration requires not only technological preparedness but also

attention to employee attitudes. In Pakistan's context of economic instability and limited employment opportunities, cultivating resilience through employee development, open communication, and psychological reassurance is crucial. Organizations that balance innovation with employee well-being are more likely to achieve long-term effectiveness and workforce stability.

References

- AL-Qahtani, R. (2025). Adoption of Generative AI Technologies and Their Impact on Employee Well-being in Universities: An Empirical Study Using the Technology Acceptance Model (TAM). *Academic Journal of Research and Scientific Publishing*, 7(79), 5–32. <https://doi.org/10.52132/Ajrsp.e.2025.79.1>
- Bakker, A. B., & Demerouti, E. (2007a). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., & Demerouti, E. (2007b). The Job Demands-Resources model: state of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Chung, Y. W., Im, S., Kim, J. E., & Yun, J. K. (2025). Artificial intelligence awareness, career resilience, job insecurity and behavioural outcomes. *Australian Journal of Psychology*, 77(1). <https://doi.org/10.1080/00049530.2025.2559910>
- Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
- DR. JOLLY MASIH, DR. A. J. (2023). Enhancing Employee Efficiency And Performance In Industry 5.0 Organizations Through Artificial Intelligence Integration. *European Economic Letters (EEL)*, 13(4), 300–315. <https://doi.org/10.52783/eel.v13i4.589>
- Gull, A., Ashfaq, J., & Aslam, M. (2023). AI in the Workplace: Uncovering Its Impact on Employee Well-being and the Role of Cognitive Job Insecurity. *International Journal of Business and Economic Affairs*, 8(4). <https://doi.org/10.24088/IJBEA-2023-84007>
- Jarrahi, M. H. (2018). Artificial intelligence and the future of work: Human-AI symbiosis in organizational decision making. *Business Horizons*, 61(4), 577–586. <https://doi.org/10.1016/j.bushor.2018.03.007>
- Lichtenthaler, U. (2019). Extremes of acceptance: employee attitudes toward artificial intelligence. *Journal of Business Strategy*, 41(5), 39–45. <https://doi.org/10.1108/JBS-12-2018-0204>
- Morandini, S., Fraboni, F., De Angelis, M., Puzzo, G., Giusino, D., & Pietrantonio, L. (2023). The Impact of Artificial Intelligence on Workers' Skills: Upskilling and Reskilling in Organisations. *Informing Science: The International Journal of an Emerging Transdiscipline*, 26, 039–068. <https://doi.org/10.28945/5078>
- Park, J., Woo, S. E., & Kim, J. (2024). Attitudes towards artificial intelligence at work: Scale development and validation. *Journal of Occupational and Organizational Psychology*, 97(3), 920–951. <https://doi.org/10.1111/joop.12502>
- Raisch, S., & Krakowski, S. (2021). Artificial Intelligence and Management: The Automation–Augmentation Paradox. *Academy of Management Review*, 46(1), 192–210. <https://doi.org/10.5465/amr.2018.0072>