

The ASIAN BULLETIN OF BIG DATA MANAGMENT Vol. 3. Issue 1 (2023)



https://doi.org/ 10.62019/abbdm.v3i1.35.

ASIAN BULLETIN OF BIG DATA MANAGEMENT ISSN (Print): 2959-0795 http://abbdm.com/

Data-driven Artificial Intelligence at the Crossroads: Investigating the Role of Affective Job Insecurity in the relationship between Artificial Intelligence Identity Threat and Employee Well-Being

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Chronicle

Article history Received: Sept 17, 2023 Received in the revised format: October 7, 2023

Accepted: October 7, 2023 Available online: 10.10. 2023

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Abstract

We developed a model based on Social Identity Theory, in which the identity threat posed by artificial intelligence (AI) has a negative impact on well-being of workers by increasing their feelings of job insecurity. This model is based on the observation that AI has the potential to displace jobs. The findings are supported by information obtained from a sample of 273 workers drawn from a variety of Pakistani businesses and industries and gathered over a period of time. We used a Confirmatory Factor Analysis to investigate the proposed model, and we used PROCESS MACRO model 4 to investigate direct and indirect effects of model's variables. It was ascertained that AI Identity Threat exerts an adverse impact on employees' well-being. Affective job insecurity was identified as a mediating factor in the relationship between AI Identity Threat and employee well-being. The empirical evidence derived from our study supports the assertion that an affective sense of job insecurity operates as a mediator, ameliorating the detrimental effects of Al identity threats on employee well-being. The findings imply that companies should implement training programmes to help employees positively adapt to AI technologies. Our study's findings further necessitate a discussion of both its conclusions and potential avenues for future research.

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Keywords: Artificial Intelligence (AI), Affective Job Insecurity, Employee Well-being.

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BACKGROUND

Artificial Intelligence (AI) has emerged as a significant source of innovation, swiftly expanding across a wide range of service industries (Mahroof, 2019; Rust & Huang, 2014). This technology is able to handle issues that are related to humans because it combines the efficacy of machines with characteristics that are similar to those of people (Aghaei et al., 2012; Lu et al., 2019). Development of artificial intelligence creates some problems, most notably in the fields of ethics and employment. It can be devastating to one's sense of self-worth and identity when one's professional experiences are inconsistent with one's self-conception (Petriglieri, 2011). The extensive presence of information technology in the workplace has affected the entire notion of labor, and as a result, how employees define themselves and show themselves in the workplace has also changed. Companies need to have a solid understanding of these dynamics in order to facilitate the adaptation of their workforce to the contemporary digital age and ensure that their employees are happy in their jobs (Marabelli et al., 2021).

The phrase "Al identity threat" was developed by researchers in the field of academia to refer to "the prediction of harm to an person's self-beliefs, induced by employment of an Al" (Craig et al., 2019). It is more necessary than ever before to investigate the threat that Al poses to individual privacy, particularly in light of the ever-evolving nature of digital teamwork, Traditional information technology (IT) tools are being quickly supplanted by artificial intelligence (AI) systems for duties such as decision making and data processing (Carter et al., 2020). As artificial intelligence continues to advance, issues regarding its potential impact on the labor market and degree to which employees will feel secure in their jobs continue to surface (Frey & Osborne, 2017). When workers believe their employment are under danger, it can be detrimental to their morale and productivity at work (Cheng & Chan, 2008). One of the most often accepted definitions of job insecurity is "one's expectations for continuity in a job arrangement," although researchers have developed a wide range of definitions for job insecurity (Davy et al., 1997). Distinction between "objective" and "subjective" job insecurity is an essential first step in the investigation of this subject matter. Borg (1992) discovered a cognitive-affective contrast in order to have a better understanding of work insecurity (Borg, 1992). There is ongoing debate on how to differentiate between cognitive job insecurity (CJI) and affective job insecurity (AJI) (Jiang & Lavaysse, 2018).

One definition of critical job impairment is the experience of worry as a result of concerns about particular aspects of one's position in the workplace or one's job security (Shoss, 2017). On the other hand, Affective Job Impact Inventory (AJI) summarizes the variety of feelings one has as a result of contemplating the possibility of losing one's job (Huang et al., 2010). The health and happiness of workers in modern companies is a topic that is receiving a lot of attention. Everything that is significant to the way that we think and live (Rath & Harter, 2010). Employees' dysfunctional well-being on the job has been related to a number of adverse health consequences, including but not limited to depression, high blood pressure, and substance abuse (Quick et al., 1997). When we talk about the well-being of employees, what we actually mean can and will continue to be influenced by a variety of factors and points of view. Research has also been conducted on employees' well-being from the perspectives of job satisfaction and other emotions associated to their place of employment (Zheng et al., 2015). Well-being encompasses not just the apparent components of physical and mental health, but also career opportunities, management problems, and the environment of the workplace (Juniper et al., 2011). Based on the above discussion, the following research objectives have been formulated: -

- To investigate the direct effect of the AI identity threat on employee well-being.
- To examine the mediating role of affective job insecurity on the relationship between AI identity threat and employee well-being.

LITERATURE REVIEW

Social Identity Theory

According to Tajfel, a person's social identity consists of the definition that "recognising his membership in particular social groups along with a personal investment in being a part of this community" (Tajfel, 1972). Social identities also critically demonstrate how the

in-group in a given social context differs from pertinent out-groups (Hogg, 2016). Al identity is considered as an out-group in employees' perspective which threaten the social identity of employees which they maintain through in-group. Group behavior in various intergroup contexts can be variously characterized as attempts to flee or avoid situations that pose a threat to one's esteem, to redefine those situations in a way that benefits the ingroup, or to lessen uncertainty (Brown, 2000).

Al Identity Threat and Employee Well-being

This study's objective is to evaluate how AI identity threat influences the mental health of the workforce in order to better understand these dynamics. It suggests that the use of Al in the workplace could have a harmful impact on employees' mental health due to worries about their own job security and social standing (Johnson et al., 2020). The presence of artificial intelligence (AI) in the workplace exacerbates these tensions since Al takes on tasks that were historically performed by humans, so posing a challenge to the well-established identities and positions held by people inside the organisation (Tajfel & Turner, 2004). As Al technologies grow more prevalent in the workplace, individuals may experience emotional and identity-related stress as they attempt to adapt to these new technology (Coombs et al., 2020). According to SIT, social groups provide its members with a shared identity that evaluates, defines, and ranks them based on the ideas, values, and behaviours that they hold (Hogg, 2016). There is a possibility that superordinate re-categorization campaigns would be interpreted as an identity threat and will be addressed with staunch opposition (e.g., (Hogg & Hornsey, 2007)). It is possible that employees who have come to identify with their positions will experience friction as a result of introduction of AI into the workplace (Carter & Grover, 2015). Workers who believe that the advent of artificial intelligence places either their professional or personal identities at jeopardy may be hesitant to embrace the technology (Craig et al., 2019). When AI impersonation assaults are avoided head-on, it helps create a safe workplace, which is beneficial for both the company and the employees' mental health. The increasing ubiquity of AI in the workplace has a substantial impact on workers' wellbeing, which is significantly impacted by the widespread use of technology in workplace (Jia et al., 2023). Because of this, we propose that:

H1. There is a negative relationship between AI identity threat and employee well-being.

Al Identity Threat and Affective Job Insecurity

Because workers believe that artificial intelligence poses a risk to their individuality, they are more likely to report sentiments of job insecurity (Khogali & Mekid, 2023). Employees felt that AI posed a danger to their professional identity; as a result, their sentiments of job insecurity were heightened. This finding shows that workers who believe that their jobs could be automated are more likely to be anxious about their future employment opportunities (Koo et al., 2021). There is a possibility that AI will pose a direct danger to social position of employees. As a consequence of this, the level of authority and prestige held within the workplace may experience a decline as a result of these threats (Jussupow et al., 2018). Uncertainty and anxiety can be brought on by the worry that one might lose their job as a result of the introduction of artificial intelligence into the working environment (Miana et al., 2011). They are possible to experience heightened feelings of

job insecurity (affective JI and Cognitive JI), showing a positive relation between them. When employees believe that AI poses a threat to their professional identity (AI identity threat), they are more likely to experience heightened feelings of job insecurity (Telo, 2023). To this day, vast majority of research on job insecurity (JI) has regarded it as a cognitive phenomenon (Huang et al., 2010). As a result, there has been limited conceptual development of work insecurity (Staufenbiel & König, 2011). As a result, in response to the question posed by Sverke and Hellgren (2002), meta-analysis conducted in Study 1 demonstrates that CJI-AJI distinction can be considered genuine. CJI and AJI should not have an excessively high correlation with one another (Campbell & Fiske, 1959). We discovered that AJI had a far stronger correlation with vast majority of theoretically important outcomes than CJI did (Jiang & Lavaysse, 2018). As a result, here is what we suggest:

H2. There is a positive relationship between AI identity threat and Affective Job Insecurity

Affective Job Insecurity and Employee Well-being

In recent years, one of the topics that has garnered a significant amount of interest is association between the well-being of employees and job insecurity. The certainty of one's employment is a factor that, when considered positively, can have a beneficial effect on an person's emotional toughness and overall mental health (Claussen et al., 1993). Research conducted by Modini and colleagues looked into how long-term employment affected employees' mental health in a variety of different fields of business. According to the findings of their research, there is a direct correlation between having a secure employment and lower levels of stress and anxiety among workers. According to the findings of Paul and Moser, mental health problems are frequently a consequence of being unemployed, which shows that job uncertainty may have detrimental impacts on an individual's psychological condition (Paul & Moser, 2006). In addition, if a person loses their work, they are deprived of the valuable relationship interactions that they once had, which can lead to feelings of loneliness and despair (Blustein et al., 2019; Wanberg, 2012). According to findings of a recent study by Mannerstrom et al., negative evaluation of economic uncertainty and job insecurity might lead to an increase in both psychological discomfort and absenteeism from work. On the basis of the previous extensive body of material, the following hypothesis was suggested by us:

H3. There is a negative relationship between Affective Job Insecurity and employee well-being.

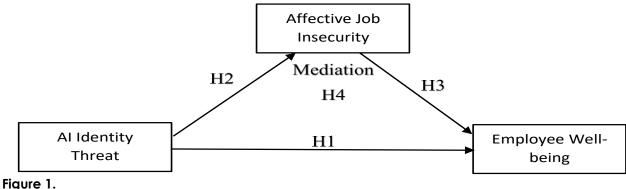


Figure 1.
Theoretical Framework

Mediating role of Affective Job Insecurity

It is impossible to ignore the influence that the development of AI has had on the labour market, given that AI development has greatly contributed to increased economic growth and efficiency (Wang & Wang, 2022). The coming automation of certain job functions by artificial intelligence (AI) adds pressures into modern workplaces, which in turn affects the career paths of people (Brougham & Haar, 2020). Brougham and Haar are the ones who first presented the idea of artificial intelligence awareness, which refers to employees' opinions of how AI technology can affect their job chances (Brougham & Haar, 2018). There is a correlation between artificial intelligence and work insecurity, burnout, depression, decreased vocational competency, and decreased organisational identity and career happiness (Lingmont & Alexiou, 2020; Nam, 2019). Uncertainty regarding an employee's future employment is likely to have profound effects on their overall well-being. This is because it may give rise to the perception that various essential aspects of life, such as economic and social dimensions, are in jeopardy. This can have a negative impact on an employee's ability to focus on their own health and well-being (Ashford et al., 1989; Hartley et al., 1990).

In addition to ensuring one's financial well-being, having a job not only encourages the formation of meaningful interpersonal relationships and the acceleration of one's own personal development but also confers the benefit of (Furnham, 1983). Individuals put themselves at jeopardy of not meeting their essential economic, social, and personal demands when they have the impression that their employment situation is precarious (Witte, 1999). In the body of research that has been compiled, numerous repercussions that can flow from feelings of job insecurity have been extensively documented. These implications include negative effects on a person's physical health, their sense of well-being, their dedication to their organisation, their level of job satisfaction, and their likelihood of quitting their job or engaging in other activities associated with withdrawal (Cheng & Chan, 2008). When we see insecurity as a danger, we resort to unhealthy coping mechanisms, which is detrimental to our well-being (Lazarus & Folkman, 1984). As a result, our suggestion was that:

Hypothesis 4: Affective Job Insecurity mediates the relationship between AI Identity Threat and Employee Well-being.

METHODOLOGY

Participants and Procedure

Sample of study included Pakistani employees from a variety of industries. Among these industries were banking, education, and freelancing. Workers who were familiar with the concept of artificial intelligence (AI) in the workplace were surveyed. This study utilized convenience sampling, a non-probability sampling technique. It is advantageous to use convenience sampling because, compared to other sampling techniques, it is not only less expensive but also requires less time (Stratton, 2021). Therefore, individuals with knowledge of artificial intelligence were surveyed. This method has a number of advantages, one of which is that it makes it simpler to investigate the subject at hand (Cooper et al., 2003).

Data were collected from employees working in multiple organizations belonging to a variety of fields in Pakistan such as banking, education, telecommunication and freelancing agencies who were aware of Artificial Intelligence usage (N=273). Sample size for exploratory factor analysis is best calculated using the sample-to-item ratio, which takes into account the total number of study items. Five responses to one question are the minimum acceptable ratio (Gorsuch, 1988; Hatcher, 2013; Suhr, 2006). The research was conducted using a time-lagged design. At time 1, data were collected on Al Identity Threat. Affective Job Insecurity was collected at time 2 (4 weeks after Time 1) and finally, responses were collected for Employee Well-being at time 3 (4 weeks after Time 2). Total time for data collection and compilation was three months. We used an online link to collect data and email IDs of respondents were used to identify respondents at each point of time. Only those respondents were contacted at T2 who responded at T1 and at T3 we contacted only those respondents who had participated in both T1 and T2 surveys. The final participation rate in this survey was 79% percent as total 345 individuals were contacted through the online link.

There were approximately 77.7 percent more male employees than female employees among those who responded to the survey. In terms of the educational attainment of the respondents, 31.9 percent of employees held bachelor's degrees, 44.7 percent held master's degrees, 19.4 percent held doctoral degrees, and 4 percent of the employee respondents held professional doctorates. In addition, the respondents with the high ratio have an average work experience of 1-3 years, which accounts for 25.6 percent, followed by 4-6 years, which accounts for 23.1 percent. The majority of respondents, or 49.8 percent of the total, were employed in some kind of managerial capacity. The highest ratio among other groups was found in the respondents whose monthly income fell between PKR 26,000 and 50,000. These respondents made up 37 percent of the sample.

Measures

Artificial Intelligence Identity Threat. For AI Identity Threat, a 12-item scale implemented from (Craig et al., 2019) was selected and all items were rated on a 5-point Likert scale (1= Strongly Disagree to 5=Strongly Agree). Sample items included: "Using AI makes me feel that I do things poorly" and "Using AI makes me feel less like the person I want to be". Employee Well-being. Employee well-being was measured using the 12-item scale was adopted from (Goldberg & Hillier, 1979) and all items were rated on a 5-point Likert scale (1= Strongly Disagree to 5=Strongly Agree). Sample items included "I have recently lost much sleep over worry" and "I have recently felt constantly under tension". Affective Job Insecurity. A 10-item scale was adopted from (Huang et al., 2012) was used to measure affective job insecurity. All items were rated on a 5-point Likert scale (1= Strongly Disagree to 5=Strongly Agree). Sample items included: "I am scared by the thought of losing my job" and "I am worried that this company will fire me any time".

DATA ANALYSIS

Using descriptive statistics, we initially investigated demographic characteristics of the sample before moving on to testing the study's hypotheses. Using AMOS, a Confirmatory Factor Analysis was performed on study's measurement model, and results confirmed its accuracy. An investigation into items' dependability was carried out as part of a reliability

analysis in order to determine how accurate the data that had been gathered for the study were. Cronbach Alpha values were utilized in order to discuss the issue of reliability. After that, a correlation analysis was performed to determine linearity that existed between variables of study in addition to degree of significance that the relationships held. We used PROCESS MACRO V4.2 to carry out a regression analysis in order to determine whether or not the direct and indirect hypotheses were supported by the data. Model 4 was used for mediation.

RESULTS

Confirmatory Factor Analysis

The measurement model consists of 3 latent variables: Al Identity Threat, Affective Job Insecurity, and Employee Well-being. These three factors were considered to be the most important. Confirmation of the measurement model was achieved through the application of a wide variety of fit indices. Chi-square, comparative fit index (CFI), incremental fit index (IFI), Trucker-Lewis' index (TLI), and root mean square error of approximation are some of the other terms that fall into this category (RMSEA). The critical value for the chi-square test is less than 3. Values greater than 0.95 are considered to indicate a satisfactory fit for CFI, IFI, and TLI (Kline, 2005). Less than 0.05 is considered to be an acceptable value for RMSEA (Kline, 2005). When compared to the model with only one factor, the measurement model shown in Table 1 indicates a satisfactory fit to the model. This is due to the fact that all of the values fall within a suitable range. Chi square is equal to 1.64, CFI is equal to .942, TLI is equal to .937, IFI is equal to .943, and RMSEA is equal to .045. Because these values demonstrated that there is no problem with the model's fitness, the data provided were suitable for the testing of hypotheses.

Table 1.
Measurement Model

Model	CMIN	DF	CFI	TLI	IFI	RMSEA
Hypothesized Model One Factor Model (All variables were combined together)	1879.338 3970.78		0.942	0.937 .151	0.943 .217	0.045 .196

Convergent and Discriminant Validity

Average Variance Extracted was computed in order to establish the convergent and discriminant validity (Fornell & Larcker, 1981). For an excellent convergent validity, AVE value must exceed 0.50 (Igbaria et al., 1995), and the composite reliability value must exceed 0.70 (Igbaria, 1992). Table 2 displays the results.

Table 2.

Convergent and Discriminant Validity

S.No	Variables	1	2	3
1	Al Identity Threat	(.757)		
2	Affective Job Insecurity	.242***	(.816)	
3	Employee Well-being	060	.152*	(.809)
AVE		0.573	0.667	0.655
CR		0.942	0.953	0.959

N=273, AVE = Average Variance Extracted, CR = Composite Reliability, Sqaure root of AVE are represented in bold in parenthesis (Off diagnols are the squared correlation among latent variables)

HTMT Analysis

In order to provide further evidence of discriminant validity of test, the Heterotrait-Monotrait Ratio (HTMT) was computed. If the HTMT value is less than 0.90, then it is considered to be acceptable (Henseler et al., 2015). Values are presented in Table 3, and they demonstrate that every construct falls within the acceptable range of values.

Table 3. HTMT Ratio

S.No	Variables	1	2	3	
1	Al Identity Threat	1			
2	Affective Job Insecurity	.239	1		
3	Employee Well-being	.062	.116	1	

Descriptive Statistics

The table 4 provides a descriptive summary of all the variables that were considered in the modelling process. In addition to the means and standard deviations, these also include the minimum and maximum values to each category.

Table 4.

Descriptive Statistics

Variables	Sample	Min	Max	Mean	STD
Al Identity Threat	273	1.00	5.00	2.62	0.87
Affective Job Insecurity	273	1.00	5.00	3.88	0.71
Employee Well-being	273	1.75	5.00	3.53	0.61

Reliability Analysis

An investigation into internal consistency of all of the variables was undertaken in the form of a reliability analysis. Values of the Cronbach alpha statistic range from 0 to 1, and they indicate reliability of the constructs. Values closer to one another indicate a greater degree of internal consistency. The results are listed in Table 5 which can be found below.

Table 5.

Reliability Analysis

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Variables	Reliability	Items	
Al Identity Threat	.946	12	_
Affective Job Insecurity	.955	10	
Employee Well-being	.957	12	

Correlation Analysis

In order to comprehend connection between variables under investigation, a correlation analysis was carried out. Relationships between the variables are displayed in Table 6.

Table 6.

Correlation Analysis

Variables	1	2	3
Al Identity Threat	1		
Affective Job Insecurity	.026	1	
Employee Well-being	226**	204**	1
	Al Identity Threat Affective Job Insecurity	Al Identity Threat 1 Affective Job Insecurity .026	Al Identity Threat 1 Affective Job Insecurity .026 1

Note. N = 273; * p < .05, ** p < .01

Al identity threat was positively correlated but not significantly so with affective job insecurity (r = 0.026, p > 0.05), and it was negatively correlated but significantly so with employee well-being (r = -0.226, p < 0.01). Both of these correlations were significant. On other hand, a positive and statistically significant correlation was found between affective job insecurity and employee well-being (r = 0.204, p < 0.01).

HYPOTHESIS TESTING

Direct effects

Direct effects investigated in this study are outlined in Table 7. The first hypothesis stated that the Al identity threat does not have a significant relationship with the well-being of employees. In the second hypothesis, it was stated that the relationship between Al identity threat and affective job insecurity is positive and significant. In the third hypothesis, it was stated that the relationship between affective job insecurity and employee well-being is negative. The findings showed that the relationship between Al identity threat and employee well-being was significant (β =-.2626; p < 0.001 significant); regarding hypothesis 2, Al identity threat had a positive and significant link with affective job insecurity (β =.2527; p < 0.01 significant); and regarding hypothesis 3, affective job insecurity has significant influence over employee well-being (β =-.2933; p < 0.01 significant).

Table 7.
Direct and Mediation Hypothesis

Hypothesis	В	SE	T	P	LLCI	ULCI	
Al Identity Threat Employee Well-being	2626	.0547	4.4358	.0001	.1479	.3812	
Al Identity Threat Affective Job Insecurity	.2527	.0668	3.8242	.0003	.1231	.3824	
Affective Job Insecurity Affective Job Insecurity Employee Well-being	→ 2933	.0438	6.8330	.0001	.2071	.3776	

Bootstrapped Indirect effect results: Mediating role of Affective Job Insecurity Between the Relationship of AI Identity Threat and Employee Well-being

	Effect	SE	BootLLCI	BootULCI
Al Identity Threat Affective Job Insecurity Employee well-being	.0746	.0245	.0285	.1256

N=273, B= Beta, SE= Standard Error, P= Significance Level, ULCI= Upper-Level Confidence Interval, LLCI= Lower Level of Confidence Interval

Indirect effects

Table 7 also displays the findings related to the indirect effects that were observed. Affective job insecurity was hypothesized to be a mediator between the relationship between AI identity threat and employee well-being, which was the fourth hypothesis

tested in the study. Because the indirect effects were found to be significant, the hypothesis was validated. This is the case due to the fact that the signs of both the upper and lower confidence intervals are the same (0.0285, 0.1256), which indicates that the confidence interval did not contain any zeros. As a result, the connection between the threat posed by AI identity and the well-being of employees is mediated by Affective job insecurity.

DISCUSSION

First, this study's findings provide specifics regarding the connection between AI Identity Threat and Employee Well-Being. Our research indicates a positive relationship between AI Identity threat and employee well-being. However, results support this hypothesis. Previous research indicates that job stability, job satisfaction, and a healthy balance between work and personal life have an impact on employee well-being (Judge & Bono, 2001; Kahneman et al., 2004). As Grobbelaar et al., (2021) argue that the introduction of AI technology into the workplace frequently causes individuals to feel uneasy about their jobs. In conclusion, the hypothesis was supported by the current research.

The findings of hypothesis 2 demonstrated a significant positive correlation between Al Identity Threat and Affective job insecurity. Our findings corroborate previous research on affective job insecurity, which suggests that employees' subjective fears of job loss or diminished job quality may have a substantial impact on their emotional states (Witte, 1999). Shoss (2017), who studied the psychological and social effects of increased computerization and automation on workers, uncovered the following: (Shoss, 2017).

The current study also examined the mediating role of affective job insecurity in the relationship between AI Identity Threat and Employee Well-being and found that Affective job insecurity mediates this relationship. Affective job insecurity has previously been used as a mediator in employee well-being studies, such as those by Nazareno and Schiff, who reported similar findings and emphasized the importance of affective factors such as anxiety and uncertainty in establishing the relationship between AI Identity Threat and decreased well-being (Nazareno & Schiff, 2021). Moreover, Chirumbolo and Areni discovered that the uncertainties associated with the implementation of AI in the workplace resulted in elevated levels of affective job insecurity, which had a substantial impact on employee well-being (Chirumbolo & Areni, 2010).

IMPLICATIONS, LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Theoretical Contributions

This study makes a contribution to the field of Social Identity Theory by presenting artificial intelligence as a novel component that, when present in the workplace, can challenge or endanger social identities. Specifically, the study focuses on how these effects can occur. This study has the potential to add to an understanding of how employees may strive to reorganize their social identities in response to perceived challenges posed by AI technology. This understanding could be added as a result of the study.

Practical implications

The findings of this study have a wide variety of important implications that can be drawn from them. These implications can be deduced from the findings. The findings imply that businesses should implement training programmes to help employees adapt to Al technologies, thereby minimizing identity threat and job insecurity. These programmes would help employees adapt to Al technologies in the workplace. Companies could provide their staff with these types of programmes to assist them in adjusting to the new Al technology.

Limitations and Future directions

While the current study has its limitations, it does pave the way for future researchers to explore new avenues of inquiry. First, it is predicated on a self-report questionnaire, which, despite removing Common Method Variance (CMV) (Podsakoff et al., 2003), can occasionally be biased. Furthermore, it is based on a much smaller sample size than comparable studies (Podsakoff et al., 2012). It's also possible that the findings don't apply to other groups because of differences in organizational culture, education, and geographic location. In the future, the study can go in a variety of directions. Research should employ a longitudinal methodology, for instance, to establish a connection between the two variables and explore their long-term impacts. Future research with a larger and more representative sample could test the generalizability of these results. To get a fuller picture, it would be helpful to expand the study to include other possible mediators (such as job satisfaction and organisational commitment). Finally, it may be useful to conduct in-depth interviews or focus groups with workers to learn about their individual perspectives, as this can shed light on the phenomenon under study in a more nuanced manner.

CONCLUSION

The objective of this study was to determine the circumstances under which the identity threat posed by AI could impact the health and safety of workers. In addition, the study examined the role that job insecurity plays as a mediator in this complex relationship. The emotional and mental well-being of employees is affected by the presence of AI identity threat in the workplace, according to our findings. However, as anticipated, affective job uncertainty is confirmed as a key mediator between AI identity threat and well-being. Higher levels of affective job insecurity were reported by workers who believed that the introduction or presence of AI posed a threat to their jobs. In conclusion, it is crucial to comprehend the human impact of artificial intelligence technologies as they continue to advance and integrate into a wide range of industries. This study contributes to the growing body of research demonstrating that the effects of AI integration are not only economic, but also profoundly social and psychological.

DECLARATIONS

Acknowledgement: We appreciate the generous support from all the supervisors and their different affiliations.

Funding: No funding body in the public, private, or nonprofit sectors provided a particular grant for his research.

Availability of data and material: In the approach, the data sources for the variables are stated.

Authors' contributions: Each author participated equally to the creation of this work.

Conflicts of Interests: The authors declare no conflict of interest.

Consent to Participate: Not Applicable

Consent for publication and Ethical approval: Because this study does not include human or animal data, ethical approval is not required for publication. All authors have given their consent.

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