











ORIGINAL

## Influence of Attitude toward Artificial Intelligence (AI) on Job Performance with AI in Nurses

### Influencia de la actitud hacia la inteligencia artificial (IA) en el desempeño laboral con IA en enfermeras

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#### ABSTRACT

AI has revolutionized the workplace, significantly impacting the nursing profession. Attitudes toward AI, defined as workers' perceptions and beliefs about its utility and effectiveness, are critical for its adoption and efficient use in clinical settings. Factors such as age, marital status, and education level may influence this relationship, affecting job performance. This study examines the influence of attitude toward AI on job performance with AI among Peruvian nurses, while also assessing how sociodemographic characteristics moderate this relationship. A descriptive cross-sectional design was used with a sample of 249 Peruvian nurses aged 24 to 53 years ( $M = 35,58$ ,  $SD = 8,3$ ). Data were collected using two validated scales: the Brief Artificial Intelligence Job Performance Scale (BAIJPS) and the Attitude toward Artificial Intelligence Scale (AIAS-4). Descriptive statistics, Pearson correlations, and multiple linear regression were applied. A significant positive correlation was found between attitude toward AI and job performance with AI ( $r = 0,43$ ,  $p < 0,01$ ). Age ( $\beta = -0,177$ ,  $p < 0,05$ ), divorced marital status ( $\beta = -8,144$ ,  $p < 0,01$ ), and having a bachelor's degree ( $\beta = -3,016$ ,  $p < 0,05$ ) were negatively associated with job performance, while being from the Selva region had a positive effect ( $\beta = 4,182$ ,  $p < 0,05$ ). A favorable attitude toward AI positively influences nurses' job performance, highlighting the need for interventions that enhance AI perception. Age, marital status, and education moderate this relationship, suggesting AI adoption strategies should be tailored to different demographic groups.

**Keywords:** Attached Growth; Biological Wastewater Treatment; Biofilm; Rotating Biological Contactors.

#### RESUMEN

La IA ha revolucionado el lugar de trabajo, impactando significativamente la profesión de enfermería. Las actitudes hacia la IA, definidas como las percepciones y creencias de los trabajadores sobre su utilidad y eficacia, son fundamentales para su adopción y uso eficiente en entornos clínicos. Factores como la edad, el estado civil y el nivel de educación pueden influir en esta relación, afectando el desempeño laboral. Este estudio examina la influencia de la actitud hacia la IA en el desempeño laboral con IA entre enfermeras peruanas, al mismo tiempo que evalúa cómo las características sociodemográficas moderan esta relación.

Se utilizó un diseño descriptivo transversal con una muestra de 249 enfermeras peruanas de 24 a 53 años ( $M = 35,58$ ,  $SD = 8,3$ ). Los datos se recopilieron utilizando dos escalas validadas: la Escala breve de desempeño laboral con inteligencia artificial (BAIJS) y la Escala de actitud hacia la inteligencia artificial (AIAS-4). Se aplicaron estadísticas descriptivas, correlaciones de Pearson y regresión lineal múltiple. Se encontró una correlación positiva significativa entre la actitud hacia la IA y el desempeño laboral con IA ( $r = 0,43$ ,  $p < 0,01$ ). La edad ( $B = -0,177$ ,  $p < 0,05$ ), el estado civil divorciado ( $B = -8,144$ ,  $p < 0,01$ ) y tener un título universitario ( $B = -3,016$ ,  $p < 0,05$ ) se asociaron negativamente con el desempeño laboral, mientras que ser de la región de la Selva tuvo un efecto positivo ( $B = 4,182$ ,  $p < 0,05$ ). Una actitud favorable hacia la IA influye positivamente en el desempeño laboral de las enfermeras, lo que destaca la necesidad de intervenciones que mejoren la percepción de la IA. La edad, el estado civil y la educación moderan esta relación, lo que sugiere que las estrategias de adopción de la IA deben adaptarse a diferentes grupos demográficos.

**Palabras clave:** Crecimiento Adherido; Tratamiento Biológico de Aguas Residuales; Biofilm; Contactores Biológicos Rotativos.

## INTRODUCTION

The impact of AI in the workplace has captured the attention of the scientific and professional communities due to its ability to transform the nature of work and the dynamics between workers and technology (Bankins et al., 2024). AI has been adopted across various sectors to optimize processes, automate repetitive tasks, and enhance decision-making through advanced data analysis, leading to a technological revolution in the workplace. However, the implementation of these technologies is not without challenges, as employees' adaptation and acceptance of AI play a crucial role in the success of its integration. In this context, attitude toward AI, defined as employees' perceptions, beliefs, and emotions regarding its use, has become a key determinant of job performance in environments where AI has been implemented (Dwivedi & Kochhar, 2023). Attitude toward AI is especially relevant in areas where this technology not only complements but profoundly transforms routine tasks, allowing workers to focus on more creative and strategic activities (Malamin, 2024). Despite the evident benefits of AI, such as increased productivity and improved work quality, concerns persist regarding job security and the reconfiguration of necessary skills. Specifically, worries about potential job loss due to the automation of tasks previously performed by humans have generated resistance in various sectors (Hasan et al., 2024). These perceptions directly influence attitudes toward AI and ultimately affect job performance, underscoring the importance of a balanced approach that considers both the benefits and the legitimate concerns of employees (Morandini et al., 2023).

A positive attitude toward AI is generally associated with a faster and more effective adoption of this technology in the workplace, contributing to better job performance. Recent studies have shown that employees who perceive AI as a useful and reliable tool are more willing to learn and adapt to the changes this technology imposes on their work routines (Sharip et al., 2023). This relationship has been clearly observed in highly dynamic sectors, such as healthcare, where rapid and accurate decision-making can have a direct impact on clinical outcomes (Topol, 2019). In the healthcare sector, AI is being rapidly integrated into hospital systems with the promise of improving efficiency and service quality through the automation of routine tasks and assistance in patient diagnosis, treatment, and follow-up (Topol, 2019; Wen & Huang, 2022). In this scenario, nurses, who constitute a critical part of the healthcare team, are among the groups most impacted by the adoption of AI technologies. Their ability to manage and effectively use AI not only influences their job performance but also the quality of patient care (Lambert et al., 2023; Sharip et al., 2023; Williams et al., 2024). Nurses interact directly with technological tools that facilitate patient management and clinical decision-making, making their attitude toward AI crucial to maximizing the benefits of its implementation (Sharip et al., 2023).

The Technology Acceptance Model (TAM), widely used in studies on the adoption of new technologies, posits that attitudes toward a technology directly influence its use and, consequently, job performance (Venkatesh & Davis, 2000). In nursing, a positive attitude toward AI can translate into a greater willingness to learn and use technological tools, which directly impacts the efficiency and accuracy of clinical work (Abuzaid et al., 2022; Glauberman et al., 2023; Seibert et al., 2021). Conversely, a negative or skeptical attitude toward AI can inhibit its effective integration into daily activities, limiting the potential for improved job performance and, ultimately, compromising the quality of patient care (Wang et al., 2024). Various factors can influence nurses' attitudes toward AI. These include knowledge about the technology, previous experience with digital tools, and perceptions of AI's usefulness in their clinical practice (Kelly et al., 2023). These factors moderate nurses' willingness to adopt new technologies and affect their job performance. Nurses with more experience using digital technologies tend to be more receptive to AI and, therefore, more effective in implementing it

in clinical settings (Morales-García et al., 2024). On the other hand, those who lack prior training or have a negative perception of AI may struggle to adapt to its use, which can affect both their performance and the quality of care they provide (Jiang et al., 2017; Reddy et al., 2019).

In Peru, AI has begun to be introduced into hospitals and clinics as part of an effort to improve the efficiency and quality of healthcare services, a particularly critical aspect in a system facing significant challenges, such as staff shortages and high patient volumes (Morales-García et al., 2024). In this context, nurses play a central role in patient care, regularly interacting with technological tools designed to optimize clinical processes. However, attitudes toward AI in the Peruvian clinical setting can vary significantly, depending on factors such as knowledge, perceived usefulness, and trust in the technologies among healthcare personnel. The successful use of AI in Peruvian hospitals largely depends on nurses' ability to adapt to new digital tools and incorporate technological applications into their daily practice. Thus, understanding how attitude toward AI influences the performance of Peruvian nurses could have important implications for operational efficiency and patient satisfaction in the country's hospitals (Morales-García et al., 2024; Rony et al., 2024). As nurses represent a substantial proportion of the healthcare workforce in Peru, this research aims to evaluate the influence of attitude toward AI on job performance with AI use in Peruvian nurses.

## METHOD

### Design and participants

This study employed a descriptive, cross-sectional design to identify the influence of attitude toward AI on nurses' job performance. The participants were Peruvian nurses working in one hospital and two clinics. The inclusion criteria were: (a) nurses with at least six months of work experience in healthcare institutions that use AI tools, and (b) nurses who regularly use AI tools.

The sample size was calculated using G\*Power 3.1.9.7 (Erdfelder et al., 2009). For the multiple linear regression analysis with six explanatory variables, an effect size of 0,05, a statistical power of 0,90 ( $1 - \beta$ ), and a significance level ( $\alpha$ ) of 0,05 were assumed. Based on these parameters, the minimum required sample size was 123 participants. Anticipating potential dropouts, digital surveys were distributed via email and specific WhatsApp groups for nurses, following an internet-based methodology (Hoerger & Currell, 2011). A total of 249 valid responses were analyzed, with five surveys excluded due to incomplete data.

### Procedure

The study was approved by the Ethics Committee of a Peruvian university under code 2024-CEUPeU-0056. Between February and April 2024, participants were invited to complete an online questionnaire through Google Forms. Prior to data collection, confidentiality was assured, and ethical principles outlined in the Declaration of Helsinki were followed. All participants were informed about the study objectives and provided informed consent before starting the survey.

### Instruments

*Demographic Questionnaire:* Demographic characteristics included gender, age, education level, marital status, employment status, and region of origin.

*Artificial Intelligence Job Performance:* The Brief Artificial Intelligence Job Performance Scale (BAIJPS) assesses job performance in the context of AI among nurses (Morales-García & Sairitupa-Sanchez, 2024). The 10-item, unidimensional scale was validated with Peruvian nurses and showed excellent reliability (Cronbach's  $\alpha = 0,96$ , McDonald's  $\omega = 0,96$ ). Responses were rated on a 5-point Likert scale ranging from "never" (1) to "always".

*Attitude toward Artificial Intelligence:* The Attitude toward Artificial Intelligence Scale (AIAS-4) evaluates general attitudes toward AI among Peruvian nurses (Morales-García et al., 2024). The scale consists of four items measuring perceptions of AI's utility and impact on daily life, work, and humanity. Validated in Peruvian nurses, it demonstrated high reliability (Cronbach's  $\alpha = 0,94$ , McDonald's  $\omega = 0,91$ ). Responses were rated on a 10-point Likert scale, where 1 indicates "strongly disagree" and 10 "strongly agree."

### Statistical Analysis

Statistical analysis was performed using R 4.1.1. Descriptive statistics were used to describe participants' characteristics, with means and standard deviations presented for the variables of job performance with AI and attitude toward AI. The Kruskal-Wallis test (KW) was applied to compare differences in these variables according to gender, education level, marital status, employment status, and region of origin. Pearson correlation analysis revealed a significant positive correlation between job performance with AI and attitude toward AI. Lastly, multiple linear regression analysis was conducted to identify predictors of attitude toward AI, with categorical variables like marital status and region coded as dummy variables.

## RESULTS

### Sociodemographic Variables in AI Job Performance and Attitude toward AI in Nurses

Nurses ranged in age from 24 to 53 years ( $M = 35,58$ ,  $SD = 8,3$ ). The results showed no statistically significant differences in AI job performance based on gender ( $W\text{-}KW = 7388$ ,  $p > 0,05$ ), education level ( $KW = 0,87$ ,  $p > 0,05$ ), or employment status ( $KW = 6,10$ ,  $p > 0,05$ ). However, marital status did show significant differences in AI job performance ( $KW = 18,50$ ,  $p < 0,001$ ), with single nurses performing better than married, cohabiting, and divorced nurses. In terms of attitude toward AI, no significant differences were found across gender ( $W\text{-}KW = 7002$ ,  $p > 0,05$ ), education level ( $KW = 0,37$ ,  $p > 0,05$ ), marital status ( $KW = 4,78$ ,  $p > 0,05$ ), or region of origin ( $KW = 1,67$ ,  $p > 0,05$ ).

Table 1. Sociodemographic Variables in AI Job Performance and Attitude toward AI in Nurses

Characteristic	n	%	M ± DS	AI Job Performance			Attitude toward AI		
				W-KW	p	M ± DS	W-KW	p	
Gender	Female	154	61,8	23,58 ± 9,547	7388	0,9	25,12 ± 10,263	7002	0,57
	Male	95	38,2	23,84 ± 10,691			26,02 ± 8,945		
Education Level	Specialty	68	27,3	23,16 ± 10,897	0,87	0,64	25,93 ± 10,510	0,37	0,83
	Bachelor	128	51,4	23,91 ± 9,586			25,64 ± 9,464		
	Postgraduate	53	21,3	23,77 ± 9,848			24,43 ± 9,641		
Marital Status	Married	78	31,3	22,41 ± 7,944	18,5	< ,001	23,40 ± 10,123	4,78	0,19
	Cohabiting	23	9,2	22,87 ± 11,463			27,43 ± 8,867		
	Divorced	17	6,8	16,12 ± 8,788			24,18 ± 13,947		
	Single	131	52,6	25,56 ± 10,427			26,51 ± 8,926		
Employment Status	CAS Contract (temporary)	51	20,5	23,18 ± 9,391	6,1	0,19	23,33 ± 10,705	6,1	0,19
	728 Contract (permanent)	34	13,7	26,56 ± 10,793			25,79 ± 9,237		
	Appointed	81	32,5	21,91 ± 9,172			27,09 ± 10,126		
	Substitute	23	9,2	27,61 ± 12,191			27,13 ± 8,693		
	Outsourced	60	24,1	23,35 ± 9,683			24,25 ± 8,900		
Region of Origin	Coastal	132	53	22,85 ± 9,722	3,48	0,18	26,09 ± 10,674	1,67	0,43
	Jungle	34	13,7	27,03 ± 11,637			25,29 ± 9,574		
	Highland	83	33,3	23,63 ± 9,481			24,53 ± 8,270		

Note: W = Wilcoxon, KW = Kruskal-Wallis

### Correlation Analysis

Table 2 shows that AI job performance is significantly positively correlated with attitude toward AI ( $r = 0,43$ ,  $p < ,01$ ). This suggests that nurses with a more favorable attitude toward AI tend to have better job performance when using this technology.

Table 2. Correlation between AI Job Performance and Attitude toward AI in Nurses

Variable	M	SD	1	2
1. AI Job Performance	23,68	9,98	-	
2. Attitude toward AI	25,46	4,22	0,43**	-

### Multiple Linear Regression Analysis on AI Job Performance

The regression analysis revealed several significant factors influencing AI job performance. Age had a significant negative effect ( $\beta = -0,177$ ,  $p < ,05$ ), indicating that older workers tend to perform less well with AI. Being divorced was also negatively associated with AI job performance ( $\beta = -8,144$ ,  $p < ,01$ ), and having a bachelor's degree was linked to lower performance ( $\beta = -3,016$ ,  $p < ,05$ ). Conversely, being from the Selva region had a positive effect on performance ( $\beta = 4,182$ ,  $p < ,05$ ). Additionally, attitude toward AI had a strong positive influence ( $\beta = 0,463$ ,  $p < ,001$ ), highlighting the importance of a favorable attitude for improving job performance. The model explained 30,3 % of the variability in AI job performance (Adjusted  $R^2 = 0,285$ ).



Predictor	Estimate	Std. Error	t	p	
(Intercept)	19,78444	3,34963	5,906	< ,001	***
Age	-0,17717	0,07498	-2,363	< ,05	*
Marital Status (Divorced)	-8,14392	2,63443	-3,091	< ,01	**
Education Level (Bachelor)	-3,0156	1,28487	-2,347	< ,05	*
Region (Selva)	4,18181	1,8807	2,224	< ,05	*
Attitude toward AI	0,46262	0,06021	7,683	< ,001	***
F (p)	17,08 (<,001)				
R2	0,303				
Adjusted R2	0,285				
<b>Note:</b> <sup>a</sup> Dummy coded, t = Test statistic, p = Probability. Dependent variable: AI Job Performance. p < ,001*, p < ,01, *p < ,05					

## DISCUSSION

AI has significantly transformed the workplace, particularly in key sectors like healthcare, where its use is optimizing processes and improving clinical decision-making. However, employees' attitudes toward AI play a crucial role in its adoption and successful implementation. In the healthcare sector, nurses who interact directly with technological tools are among the most impacted. A positive attitude toward AI facilitates its integration, improving job performance and care quality. Conversely, negative perceptions can create resistance, limiting the benefits of technology. In Peru, the implementation of AI in hospitals faces challenges due to the varying attitudes of nurses toward these tools. This research aims to evaluate how attitudes toward AI influence job performance among Peruvian nurses in clinical settings.

The results indicate that age has a significant negative relationship with job performance when using AI, as does being divorced. These findings suggest that older workers and those who are divorced tend to have lower performance in tasks involving advanced technologies like AI. These results align with previous studies, which also highlight the inverse relationship between age and adaptability to new technologies. Older workers often show more difficulty in adapting to technological environments, potentially due to slower cognitive processing and less familiarity with digital tools (Czaja et al., 2006). Similarly, Hedge et al. (2006) point out that older individuals face greater challenges in adopting complex technologies due to differences in technological self-efficacy and motivation to learn new tools. However, our findings differ from studies that suggest the generational gap in technology use could be reduced with focused training programs, indicating that poor performance among older adults is not an irreversible phenomenon (Morris & Venkatesh, 2000). This highlights a potential area for intervention to mitigate age-related performance differences. Regarding marital status, our finding that divorce negatively impacts AI performance aligns with research suggesting that the stress associated with personal difficulties, such as divorce, can negatively affect job performance, especially in areas requiring high levels of concentration and adaptation (Lähdepuro et al., 2019), such as AI-related tasks. Divorced individuals may experience emotional and psychological distractions, reducing their ability to focus on the technological demands of their work. The negative relationship between age and AI performance may be due to reduced technological familiarity and an increased risk aversion commonly seen in older employees. Studies have shown that older individuals, while not incapable of adapting to new technologies, tend to resist change, preferring familiar methods and tools (Charness & Boot, 2009). This creates a barrier to adopting AI, which requires a willingness to replace traditional routines with automated or technology-assisted processes. Additionally, the negative influence of divorce on AI performance may be related to increased emotional stress, which impacts the cognitive capacity and focus required to adopt new technologies. The psychological effects of divorce can create emotional dysfunctions that impact overall job performance, particularly in contexts that require precise mental focus (Sbarra, 2015), such as AI use in healthcare.

The study also found that having a bachelor's degree was negatively associated with AI job performance, while being from the Selva region had a positive impact on AI performance. These findings provide a more nuanced view of how contextual and educational factors influence the adoption and effectiveness of advanced technologies like AI in clinical work environments. The negative association between having a bachelor's degree and AI job performance contrasts with previous research, which typically links higher education levels to greater capacity for adopting and using advanced technologies. For example, studies in other industries have shown that higher education often facilitates the understanding and application of new technological tools (Venkatesh & Bala, 2008). However, this result could be related to the fact that AI technology, despite its sophistication,

requires more specific technical and practical skills that may not be covered in bachelor's degree programs, especially traditional nursing curricula that might not include deep training in AI use (Deranty & Corbin, 2024; Taşgit et al., 2023). Conversely, the superior performance of workers from the Selva region in using AI may stem from adaptability and resilience factors observed in populations operating in more challenging environments. Nurses in rural and semi-rural areas tend to be more willing to adopt new technologies due to resource scarcity and the need to optimize practices. This aligns with research showing that people in environments with less access to traditional resources are more receptive to technologies that improve work efficiency (Czaja et al., 2006). The lower performance of nurses with a bachelor's degree may be related to "cognitive saturation" or resistance to adopting new technologies due to overconfidence in traditional methods. Previous studies have shown that nurses with higher educational experience may be more reluctant to adopt new technologies if they perceive them as a threat to their professional expertise (Altmiller & Pepe, 2022). This phenomenon is observed in settings where technological innovations challenge established professional practices, leading to resistance or less efficient use of technology (Barchielli et al., 2021). In contrast, the superior performance of nurses from the Selva region may be driven by their exposure to more dynamic and challenging clinical environments. Nurses in rural and semi-urban areas often need to compensate for staff and resource shortages by using technologies that improve productivity and care accuracy (Mlambo et al., 2021). AI, by providing decision support and automating routine tasks, may be seen by these nurses as essential for improving care quality in high-demand settings. Research also suggests that healthcare professionals in less developed areas are more likely to embrace AI due to its potential to alleviate workload and improve clinical outcomes (Božić, 2024).

Finally, the study's results showed a significant positive influence of attitude toward AI on job performance with AI in nurses. This finding is consistent with previous studies that emphasize the crucial role of attitude in the acceptance and use of new technologies in work settings (Davis, 1989; Venkatesh et al., 2003). The Technology Acceptance Model (TAM) posits that positive attitudes toward technology particularly perceptions of usefulness and ease of use are closely linked to successful adoption and improved job performance (Venkatesh & Davis, 2000). Consistent with this theory, our study suggests that a favorable attitude toward AI facilitates more effective integration into clinical tasks, resulting in better job performance. This aligns with findings from other healthcare studies, which also indicate that workers who perceive technology as useful are more willing to adopt and use it effectively (Lambert et al., 2023; Lomis et al., 2021). However, it is important to note the differences between our study and other research. Unlike previous studies that identified factors like age or education level as significant determinants of attitudes toward technology (Barnard et al., 2013; Czaja et al., 2006), our study found no statistically significant differences in attitude toward AI based on gender, education level, or marital status. This finding may reflect the particularities of the clinical environment in which the study was conducted, where nurses, regardless of these characteristics, must adapt to technologies to maintain high levels of care and performance. In settings where AI is already well integrated into clinical practices, attitudes toward technology may depend more on direct experience with AI than on demographic factors, as seen in recent research on technology adoption in hospitals (Zhang, 2023). In this context, the positive relationship between attitude toward AI and job performance can be explained by the impact of beliefs and perceptions about technology on the willingness to use it. Studies have shown that when healthcare professionals perceive that AI enhances the efficiency and accuracy of their tasks, their willingness to integrate it into daily practices increases, which in turn translates into better performance (Xu et al., 2023). Thus, a favorable attitude toward AI may be associated with greater confidence in the technology's ability to facilitate clinical work, promoting more efficient and effective use of AI tools. This is particularly relevant in healthcare, where quick and accurate decisions can have a direct impact on patient outcomes.

### Implications

The results suggest that a positive attitude toward AI is a key determinant of job performance among nurses. This highlights the need for interventions aimed at improving nurses' perceptions of AI's usefulness in their daily practice. Training nurses in AI-based technologies and promoting an understanding of their benefits could increase not only their willingness to adopt these tools but also their effectiveness in clinical work. Continuous training and professional development programs focused on AI usage are recommended, incorporating practical sessions that address both the technical aspects and clinical applications of the technology. Additionally, institutional support for reskilling and fostering a work environment that encourages innovation and adaptability is essential to maximize the benefits of AI in healthcare.

At the public policy and organizational levels, the findings point to the need for strategies that promote the effective adoption of AI in healthcare. This includes not only providing the necessary technological infrastructure but also creating policies that address potential barriers to adoption, such as resistance to change and inadequate training. Healthcare institutions should prioritize staff training in AI, ensuring that all workers, regardless of age or marital status, have access to equal training opportunities. Moreover, the research suggests that nurses in rural areas or with limited access to traditional resources may be more inclined to adopt

AI due to its potential to optimize work in high-demand settings. Thus, public health policies should focus on providing equitable access to AI tools in various regions, particularly in rural areas where the technology could have a greater impact on improving care quality.

From a theoretical perspective, the results reinforce the Technology Acceptance Model (TAM), emphasizing the critical role that attitude toward technology plays in its adoption and job performance. The finding that nurses with a positive attitude toward AI exhibit better performance supports the idea that perceived usefulness and ease of use are fundamental to technology acceptance. However, the findings that a bachelor's degree is negatively associated with AI job performance suggest the need to expand existing theories to consider how cognitive saturation or resistance based on prior knowledge might affect technology adoption. These results also suggest the possibility of a "learning curve," where more highly trained professionals initially experience difficulties adapting to new technologies that challenge their established practices. Future research should explore this phenomenon further to refine theoretical models of technology acceptance in healthcare.

### Limitations

This study has several limitations. First, the cross-sectional design prevents establishing causality between attitude toward AI and job performance. Longitudinal studies could clarify this relationship. Additionally, the sample, limited to one hospital and two clinics in Peru, reduces the generalizability of the results. Future studies should include more institutions and regions. The use of self-reports may have introduced social desirability bias, so it is suggested to complement the study with objective performance measures. Lastly, variables such as prior experience with technology, which could influence attitudes toward AI, were not considered. Future research should address these limitations to gain a more comprehensive understanding of the phenomenon.

### CONCLUSION

The findings of this study highlight the relevance of a positive attitude toward AI as a crucial determinant of job performance with AI among nurses. The significant positive relationship between attitude and AI performance suggests that the successful adoption of this technology depends not only on its technical implementation but also on the perceptions and beliefs of healthcare staff. However, factors such as age, marital status, and education level moderate this relationship, showing that adaptation to AI varies depending on personal and educational contexts. Limitations include the focus on a specific sample, which restricts the generalizability of the results to other settings. Future research could explore educational and emotional support interventions that foster a more positive attitude toward AI across different demographic groups, thus improving job performance and the quality of clinical care.

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