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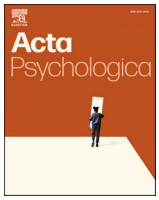

Understanding the reasons to avoid seeking mental health professionals: Validation of the MITOS-MENTAL questionnaire in Peru population

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ABSTRACT

There is still much resistance, myths, beliefs, and misconceptions regarding the seeking of mental health services for diagnosis and treatment. The objective was to validate an instrument to determine why Peruvian workers would not seek mental health professionals. In an instrumental study, literature was searched, and mental health professionals were asked about the most common reasons for not attending consultations. An expert panel undertook exploratory and confirmatory factor analyses (CFA), which were applied to a large population. Descriptive and instrumental statistics were used for the data. The 20 experts gave excellent ratings to the initial questions. In the pilot (250 people), it was confirmed that all questions had saturations >0.40. The item modification technique was also performed, eliminating six questions. With the CFA in 1312 respondents, it was seen that the goodness-of-fit indices were not adequate for three questions, then the index modification technique was used, achieving a satisfactory factorial structure model ($\chi 2 = 61.497$; df = 9; $p < 0.001$; RMR = 0.015; TLI = 0.984; CFI = 0.990, and RMSEA = 0.067). A scale of six questions was validated to measure the most important reasons why Peruvian workers do not want to attend mental health consultations.

1. Introduction

The COVID-19 pandemic left many sequelae on the mental health of the population, which has strongly affected health systems, the economy, and lifestyles in general. The population is currently more anxious, experiencing tension and other mental problems to varying degrees, generating many psychosocial implications (Aziz et al., 2025; Seighali et al., 2024). Post-traumatic stress disorder (PTSD) is one of the main sequelae left by the pandemic, especially if a family member died (Baqir et al., 2024; Weeks et al., 2025); added to the other consequences brought about by the social isolation experienced for many months, such as anxiety (Al-Taie et al., 2024), depression (Matta et al., 2024), loneliness (Park & Park, 2024), insomnia (Ding et al., 2024), sadness (Baser et al., 2024), desperation (Ortiz-Prado et al., 2023), and suicidal ideation (Dobrin-De Grace et al., 2023; Madigan et al., 2023) often experienced, which was more evident in countries like Peru, which had an alarming number of infections and a high mortality rate, as one of the most affected populations in the world (Ramírez-Soto & Ortega-Cáceres, 2022).

Given this context, the population needs to become aware of these afflictions and seek mental health services for proper diagnosis and treatment (Muthumuni et al., 2024); however, this often is not optimal,

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and there are reports that mental health in Peru is very neglected, with only 15–25 % of those in need of mental support receiving it (Ministry of Health of Peru, 2018). Added to this is the estimate of <700 psychiatrists in all of Peru, of which 80 % work in the capital, Lima; this is a rate of just over two psychiatrists per 100,000 inhabitants (Toyama et al., 2017). However, the problem of mental health not only lies in the small number of specialists but also in geographical, financial, and institutional barriers, as well as the significant stigma surrounding mental health in the environment (Krystallidou et al., 2024; Miller et al., 2024). These attitudes encompass many myths, misconceptions, and prejudices that prevent patients from seeking care, generating a stereotype that people who go to mental health specialists have psychological problems that make them incompetent or lacking in problem-solving skills, as well as prejudices and significant discrimination that generates rejection towards people who seek a psychologist or psychiatrist for their mental health (Evans et al., 2024; Murphy & Mackenzie, 2024; Qiu et al., 2024; Yang et al., 2024). It was found that the relevant reason for not attending mental health consultations was a lack of information, followed by the social rejection caused by seeking help from a professional in this area (Patte et al., 2024), which could generally bring about significant problems to public health, as it is anticipated that by 2030 mental illnesses, such as depression or anxiety, will be the leading causes of morbidity (Kotsis et al., 2024).

It is known that depression is present in the majority of chronic diseases (Ma et al., 2021) and that these diseases do not allow us to fulfill the prerequisite of the Sustainable Development Goals (SDG), which mention that adequate mental health acts as a factor in reducing poverty and improve the quality of life in the world (Oikonomou et al., 2024); this is because there is a direct relationship between mental health pathologies and poverty, family dysfunction, unemployment, and underemployment (Franke et al., 2024). That underlies the global need to enhance societies with peaceful and inclusive characteristics, guaranteeing justice and resilience to conflicts (Kohrt et al., 2012), as well as sustainable economic growth, knowing that people with problems in their mental health have a higher risk of unemployment (Virgolino et al., 2022). In summary, it is said that people who do not enjoy good mental health, which can manifest in psychiatric disorders, do not contribute much to societal wealth; on the contrary, they increase school dropout rates, spending on health human resources, and increase the unemployment rate in their respective countries (Bartram et al., 2024). For all these reasons, the objective was to validate an instrument to determine why Peruvian workers may not seek mental health professionals.

2. Methodology

2.1. Design

The study was designed as instrumental research with the objective of validating a scale that measures the reasons why Peruvian workers avoid seeking mental health care. The methodological process was developed in several stages.

2.2. Construction of the initial instrument

For the questionnaire's development, a literature review was conducted in the scientific databases Scopus, PubMed and SciELO, identifying the main barriers to seeking mental health care. In addition, mental health professionals (psychiatrists and psychologists) were consulted to identify the most common myths and prejudices. From this information, 15 preliminary items were formulated and evaluated by a panel of experts. After an initial review, redundant or unrepresentative items were eliminated, reducing the scale to nine questions.

2.3. Expert judgment

The nine questions entered the expert judgment evaluation. The twenty professionals who supported this stage had an average of 15 years of general/professional experience and 11 years of specific mental or occupational health experience. Ten were experts in occupational health issues, eight were either psychiatrists or had experience in mental health care, and the other two were involved in organizational issues. Each expert evaluated the questions for relevance, representativeness, and clarity; each response had four alternatives (from strongly disagree to strongly agree). With these responses, an initial average assessment was obtained.

2.4. Data collection

2.4.1. Pilot test

Adults currently employed and residing in Peru were included. For the pilot stage, 250 people were surveyed, to whom the nine questions were applied, and with their responses, primary statistics were obtained. It was also possible to evaluate that in participants who took an average of <12 min to respond, there were no significant doubts (the highest number of doubts was about how to respond). There were no problems with the general understanding of the premises. After this, the questions were submitted to a large working population in various parts of Peru, reaching 1312 individuals (there were >145 respondents for each question of the initial test).

2.4.2. Application to the main sample

After the pilot test, the preliminary version of the questionnaire was applied to a larger sample of 1312 Peruvian workers in different regions of the country. The data collection was conducted between May and July 2023. The final version in Spanish is in Appendix 1.

2.5. Data analysis

For expert judgment, the mean, standard deviation, and Aiken's V were calculated (with their 95 % confidence intervals); then, the kurtosis and skewness of the initial scale were obtained. Exploratory Factor Analysis (EFA) was performed using the unweighted least squares method after analyzing Bartlett's test and the Kaiser-Meyer-Olkin (KMO) coefficient. The parallel analysis suggested a 1-factor model. These analyses were obtained using the FACTOR Analysis program (version 10.1). Then, a Confirmatory Factor Analysis (CFA) was executed using version 21 of AMOS statistical software. The goodness-of-fit of the model was evaluated, and structural equation modeling (SEM) was employed. Absolute and incremental fit goodness was calculated by the Tucker-Lewis index (TLI), the comparative fit index (CFI), the root mean square residual (RMR), and the root mean square error of approximation (RMSEA). GFI, CFI, and TLI should have values $\geq$0.9 and RMR and RMSEA values $\leq$0.08, according to Hu and Bentler (Qiu et al., 2024). Cronbach's alpha coefficient was used to establish the reliability by version 21.0 of the SPSS program.

2.6. Ethical issue

Prior to its implementation, the research project was presented to the ethics committee of the Universidad Privada Antenor Orrego, obtaining approval under Resolution No. 0063–2023-UPAO. The confidentiality and anonymity of the participants were guaranteed, ensuring each one's informed consent.

3. Results

3.1. Demographic information

Table 1 shows information about sex, education, and the job sector of the workers in the study.

Table 1
Demographic information.

Sex	
Man	631 (48.1 %)
Woman	681 (51.9 %)
Education	
University studies	58.9 %
Post-graduate studies	18.3 %
Technical studies	3.0 %
Others	19.8 %
Job sector	
Health sector	25.8 %
Education sector	17.9 %
Self-employed	11.1 %
Others	46.2 %

3.2. Expert judgment evaluation

Very good values of relevance (means: 2.1–2.8; Aiken's V: 0.7–0.9), representativeness (means: 2.1–2.8; Aiken's V: 0.7–0.9), and clarity (means: 2.1–2.9; Aiken's V: 0.7–1.0) were found; all these results were obtained from the scores provided by the twenty experts (Table 2).

The kurtosis, skewness, standard deviation, and mean are shown in Table 3. Item 2 has the highest average score (mean = 2.739), and item 4 presents the greatest dispersion (SD = 0.85). The skewness and kurtosis scores are within acceptable values. It is noted that all items of the scale show commonalities and corrected item-total correlations >0.30.

3.3. Analysis of the main sample

3.3.1. Exploratory factor analysis (EFA)

An EFA was conducted after analyzing the Kaiser-Meyer-Olkin (KMO = 0.949) and Bartlett's test (10,588.3; df = 36; $p < 0.001$). The unweighted least squares method with oblique Promin rotation was used, and parallel analysis was used for factor determination, revealing that there is one underlying factor for the nine items. The rotated solution of the nine items explains 72.5 % of the total explained variance. Items reported loadings >0.40, and the reliability level was good (Table 4).

3.3.2. Confirmatory factor analysis (CFA)

CFA was used to examine the internal structure of the scale; however, initial results indicated that the goodness-of-fit indices were not adequate through the technique of index modification. There were removed items 4, 5, and 6, resulting in a satisfactory factorial structure model ($\chi2 = 61.497$; df = 9; $p < 0.001$; TLI = 0.984; CFI = 0.990; RMR = 0.015; and RMSEA = 0.067) (Table 5).

In Fig. 1, the model of 6 items distributed in a single factor is satisfactory.

Table 3
Initial analysis of items of the MITOS-MENTAL scale.

Variable	Media	SD	Asymmetry	Kurtosis
Item 1	2.232	1.058	0.510	−0.464
Item 2	2.739	1.181	0.159	−0.981
Item 3	2.559	1.127	0.337	−0.688
Item 4	2.532	1.135	0.299	−0.751
Item 5	2.478	1.096	0.352	−0.632
Item 6	2.305	1.078	0.561	−0.337
Item 7	2.333	1.094	0.495	−0.452
Item 8	2.358	1.076	0.467	−0.467
Item 9	2.372	1.097	0.470	−0.448

SD = standard deviation.

Table 4
Exploratory factor analysis of the MITOS-MENTAL scale.

Items	F1	h
Why they don't want to attend mental health consultations		
1. Because they would think I am crazy.	0.784	0.614
2. Because I can solve my problems on my own.	0.698	0.487
3. Because I distrust the honesty and capability of the healthcare system.	0.819	0.671
4. Because exposing my intimate life and problems is shameful.[a]	0.870	0.757
5. Because no one else should know what happens to me.[a]	0.893	0.798
6. Because they would perceive me as a violent person	0.858	0.736
7. Because it is a waste of time.	0.878	0.771
8. Because I fear not recovering.	0.820	0.672
9. Because it is spending in vain, they just want to be paid.	0.866	0.750
% Variance	72.49	
Reliability	0.952	

F1: Unidimensional factor, h = Communalities.
[a] Item eliminated.

3.4. Final MITOS-MENTAL scale

Therefore, the final survey consisted of six items, and all questions were based on a single factor. As it is to be applied, following the structure as shown in Table 6 is recommended. Suppose we want to have a final post-application result and thus be able to determine who has more resistance/myths/barriers to seeking mental health consultation. In that case, it is suggested that for each "strongly disagree" response, 1 point be assigned, and so on, up to 5 points for each "strongly agree" response, with a possible range of 6 to 30 points. Then, the responses can be divided into percentiles, with the top percentile scores indicating those who have more resistance to seeking mental health consultation.

4. Discussion

In many countries, there is still significant resistance among the population to seek mental health services (Yonemoto & Kawashima, 2023), which is why a large part of the population still faces many issues, as they have just lost family members and friends and were exposed to

Table 2
Relevance, representativeness, and clarity of the items of the MITOS-MENTAL scale using Aiken's V.

Items	Relevance (n = 20)				Representativeness (n = 20)				Clarity (n = 20)			
	M	SD	V	CI 95 %	M	SD	V	CI 95 %	M	SD	V	CI 95 %
Item 1	2.6	0.6	0.9	0.7–1.0	2.5	0.7	0.8	0.7–0.9	2.6	0.8	0.9	0.7–0.9
Item 2	2.8	0.4	0.9	0.8–1.0	2.8	0.4	0.9	0.8–1.0	2.9	0.4	1.0	0.8–1.0
Item 3	2.1	1.1	0.7	0.5–0.8	2.1	1.0	0.7	0.5–0.8	2.1	1.1	0.7	0.5–0.8
Item 4	2.8	0.6	0.9	0.8–1.0	2.7	0.6	0.9	0.7–1.0	2.6	0.7	0.9	0.7–1.0
Item 5	2.3	0.7	0.8	0.6–0.9	2.4	0.8	0.8	0.6–0.9	2.6	0.6	0.9	0.7–0.9
Item 6	2.4	0.8	0.8	0.6–0.9	2.5	0.8	0.8	0.7–0.9	2.6	0.6	0.9	0.7–1.0
Item 7	2.4	0.9	0.8	0.6–0.9	2.4	0.9	0.8	0.6–0.9	2.6	0.8	0.9	0.7–1.0
Item 8	2.5	0.7	0.8	0.7–0.9	2.5	0.6	0.8	0.7–0.9	2.6	0.6	0.9	0.7–1.0
Item 9	2.2	1.0	0.7	0.5–0.9	2.2	0.9	0.7	0.6–0.9	2.5	0.8	0.8	0.7–0.9

SD: standard deviation; M: mean; V: Aiken's V; CI 95 %: 95 % confidence interval.

Table 5
Goodness-of-fit indices of the factorial model of the MITOS-MENTAL scale.

Model	χ^2	df	p	TLI	CFI	RMR	RMSEA	CMIN/DF
9 items	427.287	27	<0.001	0.950	0.962	0.0937	0.106	15.825
6 items	61.497	9	<0.001	0.984	0.990	0.0155	0.067	6.833

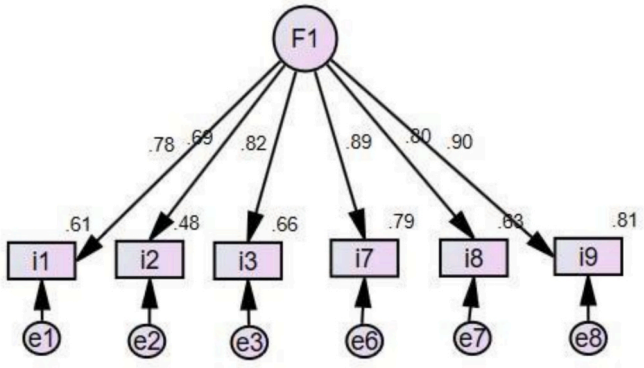

Fig. 1. The internal structure of the MITOS-MENTAL scale (top of form).

Table 6
Final MITOS-MENTAL scale.

Why they do not want to attend mental health consultations	Strongly disagree	Disagree	Indifferent	Agree	Strongly agree
Because they would think I am crazy					
Because I can solve my problems on my own					
Because I distrust the honesty and capability of the healthcare system					
Because it is a waste of time					
Because I fear not recovering					
Because it is spending in vain, they just want to be paid					

the context of the COVID-19 pandemic (Kaubisch et al., 2022; Sekowski et al., 2021). Therefore, the main objective of the research and research goal was to create a scale that would allow the identification of the most common myths, prejudices, and barriers that Peruvian workers might have in seeking mental health consultation.

The scale created underwent a solid validation process, with stages that ensure an adequate process. It includes items that are crucial for the final construct. For example, the first item is very common among the population, as many people believe that going to a psychologist or psychiatrist means that they are considered "crazy." This has been documented in research conducted in primary care settings in Lima, Peru, where the opinions of users, psychologists, and other service providers were collected. It was found that people with mental health problems often suffer abuse from some individuals providing psychological support or similar services, but it was also found that some users in need of mental health services never seek attention because they perceive these services as only for "crazy" individuals (Cavero et al., 2018). It has also been postulated that the conception that psychiatrists only treat "crazy" people is deeply rooted and widespread (McSpadden, 2022), which has even been reported in cases where patients seem to have physical symptoms of another pathology, but when trying to refer them to mental health services, patients did not wish to continue their treatment due to fear/possibility of being "crazy," revealing the significant stigmatization, shame, prejudices, and other barriers that prevent timely treatment by a mental health professional (Scamvougeras & Howard, 2020), that illustrates a very common reality in our environment, which may also occur in other countries, where prejudice and stereotypes prevent the population from seeking specialized consultations to treat common pathologies such as depression, anxiety, and even more severe mental health afflictions (Corrigan & Rüsch, 2002).

Other questions imply that the patient believes they "can solve their problems alone" or have a "fear of not recovering." Both express prejudices that survey respondents may have about downplaying the illness or having underlying fear that they may be told they have something they cannot resolve, which is seen in the analysis conducted by the Pan American Health Organization (PAHO) on barriers to accessing mental health care based on the Tanahashi model, which was applied to research on the topic in the Americas and adopted in the World Health Organization (WHO) manual on Barrier Analysis to Adolescent Health Services. According to this model, one barrier to access is the lack of acceptability by the population to seek mental health care services, as observed in survey results from an Indigenous population, where 40 % of the population distrusts doctors and/or fears mistreatment by health professionals. This idea arose from experiences of mistreatment, negative attitudes, stigma in medical care, and discrimination by health personnel against indigenous people and low-income users (Hamed et al., 2022; Joseph et al., 2023).

On the other hand, in a study that evaluated fear in patients and their companions before medical consultations in primary care, it was found that 78 % of patients experience anxiety during healthcare attendance, which is related to the fear people have of the unknown, especially if it means the future loss of a loved one. Therefore, both patients and their companions experience fear and anxiety both before and after the consultation. These levels of anxiety and fear often decrease after the visit. That is why patients prefer to solve their health problems by self-medicating, usually ignoring or letting them pass, all stemming from the fear of not recovering from a serious medical or psychological diagnosis (Boucher et al., 2022; Rogozea et al., 2020).

Pattee et al. and the present study agree that both studies identify self-sufficiency ("I can solve my problems alone," Item 2 of the MYTH-MENTAL MYTH) as a reason for avoiding professional care; they also agree that social stigma is a key barrier (Patte et al., 2024). Toyama et al. and our study address the lack of access to mental health services in Peru, including the shortage of professionals and geographic barriers; they also agree on the need for public policies to reduce stigma (Toyama et al., 2017). However, Toyama et al. proposed a theoretical framework for reforming the mental health system, whereas the current study validates a quantitative instrument to measure specific barriers; moreover, the current study incorporates empirical data from workers, whereas Toyama et al. relies on policy analysis. There is content that measures similar aspects in the Hammer et al. study and ours (Hammer et al., 2018). In the case of Hammer et al., a range was used, from disempowering to empowering. At the same time, in our study, more concrete aspects were raised that could be discouraging, such as "Why they don't want to attend mental health consultations - Because they would think I am crazy". There is also an overlap in usefulness. While Hammer mentions useless to useful as an option, our study posed the item, "Why don't they want to attend mental health consultations?

Because I'm afraid I won't recover."

4.1. Theoretical implications

The present study contributes significantly to the literature on barriers to mental health access by validating a scale specific to the Peruvian working population. It reinforces the notion that stigma and myths surrounding mental health continue to be determinant factors in individuals' decision-making regarding seeking professional care; furthermore, it aligns with previous theoretical models indicating that perceived self-efficacy and distrust in health systems affect workers' willingness to receive treatment. From a methodological perspective, the validation of the MITOS-MENTAL questions the universal applicability of measurement instruments developed in other contexts. It highlights the importance of adapting psychometric tools to specific populations. The study also reinforces the unidimensional approach to resistance to seeking mental health care, suggesting that the different barriers identified may be part of an overall avoidance construct. These findings can be integrated into public health models that analyze the gap between the need for and access to mental health services, providing a basis for future interventions. The validation of this scale expands knowledge about the phenomenon in Latin America and also allows comparisons with other countries with similar barriers.

4.2. Managerial implications

For health institutions and public policymakers, the results of this study have key strategic implications. Validation of the MITOS-MENTAL allows for the identification of specific factors that influence workers' refusal to seek mental health help, which facilitates the design of more effective awareness campaigns. Healthcare organizations can use these findings to develop workplace wellness programs tailored to the concerns of their employees. The perception that psychological consultation is a sign of weakness or a waste of time could be addressed through initiatives that normalize seeking professional help, such as educational talks, mentoring programs, and incorporating mental health services into the benefits package. In addition, health organizations can use this scale to assess the level of resistance of different groups and design segmented interventions. Awareness campaigns could focus on demystifying the idea that going to a specialist implies being "weak" or "incapable." In turn, the public sector could develop incentives to reduce the perception of financial inaccessibility and distrust in the health system.

4.3. Limitations and future studies

The sample was composed exclusively of Peruvian workers, which precludes a direct generalization to other populations, especially those who are not part of the economically active sector or who belong to rural areas. Future research could replicate the study in different regions and cultural contexts to evaluate the applicability of the scale in more diverse populations. Another limitation lies in the cross-sectional nature of the study, which prevents the establishment of causal relationships between the variables analyzed. Future research could employ longitudinal designs to examine how beliefs and barriers evolve, especially in response to awareness campaigns and changes in mental health policies; also, although the MYTH-MENTAL provides a valid measure of the main perceived barriers, it does not delve into the interaction between these factors or the influence of sociodemographic variables such as age, educational level, and type of employment. Future studies could incorporate more detailed analyses to explore how different groups perceive and experience these barriers.

From a methodological perspective, the exclusion of three items in the validation process suggests the need for further refinement of the scale. Further research could evaluate whether the reintegration of certain items improves the predictive capacity of the instrument or whether more specialized versions can be developed for different population segments. It is recommended that the effectiveness of interventions designed on the basis of the results of this study be explored. Randomized controlled trials could evaluate the impact of strategies such as information campaigns, subsidies for psychological consultations, and workplace mental health programs. In addition, future research could examine how advances in telepsychology and digital tools can mitigate some of the barriers identified, especially in populations with limited access to face-to-face services.

5. Conclusion

The validated instrument provides a valuable tool for understanding barriers to mental health services among Peruvian workers. This study's findings can inform policies and strategies to reduce resistance to seeking care. By identifying key obstacles, targeted interventions can be developed to promote mental health awareness. Future research can expand on these insights to refine workplace mental health initiatives. Ultimately, fostering a culture of openness may improve access to essential psychological support.

CRediT authorship contribution statement

Christian R. Mejia: Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Medally C. Paucar:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation, Conceptualization. **Oscar Mamani-Benito:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation. **Tatiana Requena:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation. **Nino Castillo-Vilela:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation. **Aldo Alvarez-Risco:** Writing – review & editing, Writing – original draft, Visualization, Validation, Data curation. **Jose Armada:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation. **Teresa Ramos-Quispe:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation. **Victor Palomino-Vargas:** Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Investigation. **Neal M. Davies:** Writing – review & editing, Writing – original draft, Visualization, Validation, Data curation. **Shyla Del-Aguila-Arcentales:** Writing – review & editing, Writing – original draft, Visualization, Validation, Data curation. **Jaime A. Yáñez:** Writing – review & editing, Writing – original draft, Visualization, Validation, Data curation.

Ethical statement

All steps followed the ethical standards of the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. In the present study, it was not considered necessary to request approval from an ethics committee because the research did not involve direct physical or psychological interventions on the participants or manipulation of sensitive or private data. The study design was based exclusively on the collection of publicly available, anonymous data, which do not allow the subjects to be individually identified.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.actpsy.2025.104858.

Data availability

The datasets generated and/or analyzed during the current study are available from the corresponding author on reasonable request.

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