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New psychometric evidence of the labor commitment scale in Peruvian teachers

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We live in a highly competitive environment where work commitment has a crucial advantage within educational organizations, given its direct link to performance, productivity, and employee well-being. This study aims to validate the ESCOLA work commitment scale in Peruvian secondary school teachers. The study was approached from an instrumental methodology, applying the survey to 598 teachers in public secondary schools in Peru. Descriptive analyses, scale statistics, and confirmatory factor analysis were performed to determine the structure of the construct. The results indicate that the ECSOLA maintains a reliability in each of its items; its Cronbach's index ranges between 0.804 and 0.825, whose indices (CFI = 0.927, TLI = 0.901, and RMSEA = 0.076) indicate an adequate adjustment and a one-dimensional scale of 10 items valid to be applied in this context. In conclusion, the findings support the applicability of the scale in the Peruvian educational field, providing a reliable tool to measure teacher engagement and facilitating research on well-being and performance in the educational context.

KEYWORDS

scale, factor analysis, work commitment, teachers, validity and reliability, psychometrics

1 Introduction

We live in a highly competitive environment where work commitment is a crucial advantage within educational organizations, given its direct link to performance, productivity, and employee well-being. Organizations often seek improvement in competitiveness and efficiency; in that sense, employee engagement is essential to ensure a balance and a pleasant environment in organizations. Employees must be actively involved in daily tasks; this not only affects their professional development but also contributes to institutional success. However, despite its importance, commitment is a very complex concept that needs more attention and precision in measurement. This has led to the development of several scales that aim to measure this concept rigorously and reliably.

Work commitment has been approached from various perspectives. One of the most used in the academic field is the Utrecht Work Engagement Scale (UWES), which divides engagement into three important areas: (a) vigor, (b) dedication, and (c) absorption (Cancino et al., 2024; Mangai and Jaffer Ali Khan, 2020). In addition, in various work contexts and countries, it has been addressed solely to demonstrate its reliability and validity (Extremera et al., 2012; Shrotryia and Dhanda, 2020). However, some research shows a need to adapt or develop new scales that help measure the concept more accurately, considering the economic environment in which the organization is developed, and the cultural aspects (DeNunzio et al., 2024; Gwamanda et al., 2024). Contemporary research has explored the applicability of UWES in various work areas, from health to safety, and certain limitations have been identified in its

factorial structure, as well as its interpretation in various contexts (Houle et al., 2022; Kulikowski, 2023).

Despite enormous efforts to measure work engagement, gaps remain in the validity of existing scales for specific contexts such as education. In the Peruvian context, the gap is even more evident, as there are not enough validated tools to measure this construct with scientific rigor. This gap limits both research and the implementation of educational policies aimed at strengthening teachers' well-being and motivation.

Despite enormous efforts in measuring work commitment, there are still gaps in the validity of existing scales for specific contexts such as education. Along the same lines, there is an inherent need for a valid and reliable scale that is a useful tool for researchers and organizations (Prieto-Díez et al., 2021). In addition, it is necessary to explore new ways of measuring the concept of work commitment to better capture the dynamism and effects it can produce on teacher performance and well-being (Balgui, 2022; Tomása et al., 2018). This study aims to fill this gap in the literature by providing a comprehensive analysis of the psychometric properties of the work commitment scale (ESCOLA) and its applicability in the Peruvian educational context.

This research analyzes the psychometric properties of the ESCOLA to measure work commitment and validates its factor structure and reliability in a sample of Peruvian secondary school teachers. In the same way, this study contributes to the field of organizational behavior by providing a consistent tool for measuring work commitment, and its application can be carried out both in the organizational context and in the academic field.

2 Literature review

Work commitment is an important aspect of the field of people management in organizations and has a close link with motivation, productivity, and staff retention. In recent times, studies have explored this concept, emphasizing its causes in the current scenario and the consequences, contributing to the theoretical and empirical development to understand how employees connect with organizations (Mazzetti et al., 2016; Saks, 2019; Viljevac et al., 2012a).

In the changing context in which we live, globalization and the labor market have changed the way we manage work commitment. The structure of employment and digitization has redesigned the link between worker and institution (Khanna and Prusty, 2024; Rothmann and Baumann, 2014; Sahrah and Wijaya, 2023). In addition, automation brought enormous challenges concerning employee retention, requiring more appropriate strategies for loyalty (Bapna et al., 2023; Durczak et al., 2022; Kazmi and Javaid, 2022). In addition to this, work commitment is closely related to sustainability practices in institutions (Zilahy and Huisinigh, 2009). Aligning employees' personal values with institutional objectives can strengthen the emotional and cognitive bond with the organization, positively impacting their commitment and, at the same time, work performance (Carnegie and Drencheva, 2019; Lacy and Hayward, 2011; Smith et al., 2018).

Work commitment can be conceptualized as a positive state of connection of the employee with their work, characterized by vigor, dedication, and absorption (Mangai and Jaffer Ali Khan, 2020; Xanthopoulou et al., 2012). This theory is closely related to the exhaustion and well-being of workers, proposing various models for its measurement (Asiwe et al., 2017; Rothmann and Baumann, 2014; Rothmann and Pieterse, 2007). The literature highlights the lack of a

consensus on the concept; this has generated inconsistencies in its measurement. To compensate for this situation, a multidimensional tool has been developed that seeks to unify theory and practice, describing factors such as alignment, effectiveness, and action orientation (Shrotryia and Dhanda, 2020).

On the other hand, commitment is a concept that encompasses three important aspects: the emotional, cognitive, and behavioral link of the collaborator with the institution, which undoubtedly influences the performance of the collaborator. This is how the commitment takes center stage when it is divided into three essential aspects: (a) affective commitment, which is related to the identification of the collaborator with the institution and their desire to remain in the institution; (b) the normative commitment, linked to the obligations of the collaborator and (c) the commitment of continuity, related to the identification of the associated costs if there were an abandonment of the institution (Meyer and Allen, 1991). On the other hand, academics have agreed on the concept that work commitment receives, indicating that it is a positive state and is structured by vigor, dedication, and absorption in the workplace (Shaufeli et al., 2002).

Some factors are related to work commitment (the model of work demands and resources that analyzes the relationship between commitment and work resources, for example), finding that autonomy and cooperation are predictors of employee work commitment (Borst et al., 2019). Likewise, the relationship between performance and commitment in the public sector is explored, in which moderate relationships between both variables are evidenced (Maake et al., 2021). Also, the impact of perceived investments in the development of employees on work commitment in workers from India is analyzed, with findings that highlight that work commitment maintains strong correlations with other variables related to business management (Jha et al., 2019).

2.1 Work engagement scales

According to the literature, the Work Engagement Scale (UWES) has been the most used tool by the academy to explore work engagement (see Table 1). The Spanish version of this scale was made by Extremera et al. (2012), who confirmed a three-dimensional scale in a sample of multioccupations. Likewise, the applicability of UWES-17 in health sector workers in Chile has been explored, demonstrating its reliability and a similar factorial structure (Cancino et al., 2024). In addition, its validity was tested on a sample in Zimbabwe with satisfactory results concerning factor adjustment (Gwamanda et al., 2024).

However, parallel to the advancement of UWES, contemporary studies have emerged that have proposed highly efficient alternative measures. One study explores the ideal Point Work Engagement Scale (IPWES), arguing that the model improves the distribution of information compared to other traditional scales (DeNunzio et al., 2024). Also, a scale has been developed that allows capturing the personal perspective of work commitment. Self-assessment could be a complementary measure to the traditional measures used in the organizational context (Kulikowski, 2023). On the other hand, a scale called the Techno-Work Engagement Scale (TechnoWES-9) has been developed, which includes technology in Romanian employees, highlighting its close relationship with subjective well-being and satisfaction (Balgui, 2022).

Another case is the development of the Job Engagement Scale (JES-18), based on the theory of Kahn (1990), adapted to a reduced

TABLE 1 The most relevant scales in the literature.

Name of the scale	Author(s)	Dimensions	No. Items	Country	Findings highlights
UWES-17	Extremera et al. (2012)	Vigor	17	Spain	Confirmation of structure three-dimensional
		Dedication			
		Absorption			
UWES-17	Cancino et al. (2024)	Vigor	17	Chile	Reliability and factor structure similar
		Dedication			
		Absorption			
UWES-17	Gwamanda et al. (2024)	Vigor	17	Zimbabwe	Good factorial fit
		Dedication			
		Absorption			
UWES-17	Tomása et al. (2018)	Vigor	17	Caribbean	Internal consistency and correlation with exhaustion
		Dedication			
		Absorption			
UWES-17	Lathabhavan et al. (2017)	Vigor	17	India	Validation and reliability adequate
		Dedication			
		Absorption			
TechnoWES-9	Balgiu (2022)	Technological	9	Romania	Relationship with well-being subjective and satisfaction
		Psychological			
		Emotional			
JES-18 / JES-9	Houle et al. (2022)	Physics	18/9	Canada	Consistency psychometric in both versions
		Cognitive			
		Emotional			

version of 9 items and applied to a sample of Canadian armed forces (Houle et al., 2022). These results highlight the solid psychometric consistency of both versions (JES9 - JES18) for organizations and academics. On the other hand, the UWES in the Caribbean is examined, with a sample of Spanish speakers, finding adequate indices of internal consistency and strong correlations with other variables, such as exhaustion and working conditions (Tomása et al., 2018). Finally, in India, in the banking sector, adequate validation and reliability have been demonstrated (Lathabhavan et al., 2017).

3 Materials and methods

3.1 Research design

The present research is narrated from a quantitative methodological approach with an instrumental design (Ato et al., 2013), considered as the most appropriate design to evaluate the psychometric properties of the work commitment scale. On the other hand, this process guarantees validity and adequate reliability, allowing strict evaluation of the internal, factorial structure and invariance of the scale in secondary school teachers.

3.2 Participants

The sample consisted of Peruvian teachers from regular secondary education institutions. Both men and women who teach different

subjects participated. The participants were diverse in terms of their personal situations, as there were married, single, divorced, and widowed teachers. There was also heterogeneity in terms of academic background, as certified teachers participated alongside others who had completed postgraduate studies, such as master's and doctoral degrees (see Table 2).

3.3 Instruments

For the validation of the work commitment scale, or better known by the authors Prieto-Díez et al. (2021) as ESCOLA, the recommendations of Churchill (1979) and other contemporary researchers have followed (Ellinger and Kim, 2014; Hagen and Peterson, 2015; Pratoom, 2010). The one-dimensional scale consists of 10 items designed to assess teachers' commitment to work activities. It offers five response options, ranging from 1 (completely disagree) to 5 (completely agree). For an adequate understanding, the ESCOLA underwent a content validation with seven experts in human resource management and organizational behavior, who evaluated criteria such as clarity, congruence, context, and mastery of the construct (Cruz-Tarrillo et al., 2022).

3.4 Data collection

The data was collected between March and July 2025 and included 598 secondary school teachers from public and private schools. The

TABLE 2 Demographic data of the participants.

Variables	Categories	Frequency	Percentage
Participants age	Mean = 41; Minimum = 23; Maximum = 65		
Sex	Female	323	53.4%
	Male	282	46.6%
Marital status	Single	161	26.6%
	Married	376	62.1%
	Divorced	57	9.4%
	Widowed	11	1.8%
Educational level	Bachelor	49	8.1%
	Graduated	353	58.3%
	Master	177	29.3%
	Doctor	26	4.3%

scale was developed *online* in Microsoft Forms, structured in two parts. The first part comprised sociodemographic questions, and the second part comprised work commitment questions. Then, with a non-probabilistic sampling for convenience, each of the schools was visited, requesting authorization from the campus director to interview each teacher who was available and who wished to participate in the filling of the instrument voluntarily. On the other hand, this research has the approval of the ethics committee of the Universidad Peruana Unión, whose code is 2024-CEEPG-00080; and the ethical criteria of the Declaration of Helsinki have been met, thus guaranteeing a responsible study that promotes integrity and respect for human beings.

3.5 Data analysis

After collecting the data, they were analyzed using two statistical software packages: JAMOV for descriptive data analysis and AMOS, a SPSS V28 package, for both exploratory and confirmatory structural analysis. The 605 data were entered into the software; subsequently, data cleaning was carried out, following the Mahalanobis distance criteria (De Maesschalck et al., 2000), removing 7 data points considered atypical and leaving 598 data points for analysis. To analyze the sociodemographic profile of teachers, personalized tables were necessary; for the descriptive analysis, measures of central tendency and dispersion, and confidence interval were used; in addition, the use of scale statistics with Cronbach's alpha coefficient, item-test correlation, was necessary. To verify the factorial structure of work commitment in teachers, the use of exploratory factor analysis through the principal axis factorization method was necessary (Byrne and Byrne, 2006). To verify the construct's validity and invariance, a multigroup confirmatory factor analysis was carried out (Hair et al., 2010).

3.6 Ethics committee approval

This research was approved by the Ethics Committee of the Graduate School of the Universidad Unión Peruana, with issue number 2024-CEEPG-00080, dated May 29, 2024. This approval

process ensured that the study complies with the fundamental ethical principles of respect, beneficence, and justice established to protect participants. Likewise, informed consent was obtained from all participants formally and voluntarily. This guarantees transparency, data confidentiality, and the ethical validity of the study.

4 Results

4.1 Sociodemographic profile of teachers

Table 2 provides an adequate understanding of the demographic profile of the units of study. In this sense, the average age is 41, with an age range of 23 to 65 years. On the other hand, there is a balanced gender distribution, with 53.4% being female teachers and 46.6% being male teachers. Regarding marital status, the majority are married (62.1%); however, there is a relevant group of single teachers (26.6%), divorced (9.4%), and widowed (1.8%). In addition, 58.3% are graduates with postgraduate studies (master's degree 29.3%; doctorate 4.3%). This suggests that teachers have the necessary professional training to perform their tasks effectively, which may impact their commitment to their work.

4.2 Descriptive analysis

Table 3 presents the descriptive statistics of the scale, whose means of the items range between 4.46 and 4.72, considering that the scale has 5 response options, which indicates a tendency to assess high scores of work commitment, this could be because a positive image was presented at the time of sampling and may not necessarily be representative when applied in the same context. The standard deviation ranges between 0.476 and 0.608, which shows a moderate dispersion in terms of responses. Likewise, the Aiken coefficient had perfect scores (1.000) in all the items, where the experts evaluated the clarity, congruence, context, and mastery of the construct; aspects in which there was an absolute consensus among the judges, hence the importance of each of the items to measure work commitment. On the other hand, the item-test correlations, ranging from 0.395 to 0.607, are considered acceptable, as all items significantly contribute to the construct's measurement. The internal consistency is optimal because Cronbach's alpha ranges between 0.804 and 0.825; internal stability is reinforced by a McDonald's Omega ranging between 0.806 and 0.827. In addition, the exploratory factor analysis was carried out with a factorization of principal axes and the Varimax rotation; this reported a KMO = 0.863 with a chi-square = 1,597 and a *p*-value = 0.000, whose ten items are grouped in a single dimension. Confidence intervals in all items are short, showing stability in responses and adequate perception of the construct (Figure 1).

4.3 Confirmatory factor analysis

In Table 4, the adjustment indices of the confirmatory factorial model are shown. The Chi-square statistic is 147.032 with 33 degrees of freedom ($\chi^2/df = 4.456$) and a *p*-value = 0.000; in addition, the absolute fit indices GFI = 0.955 and AGFI = 0.925 exceed the threshold of 0.80, indicating a good absolute fit.

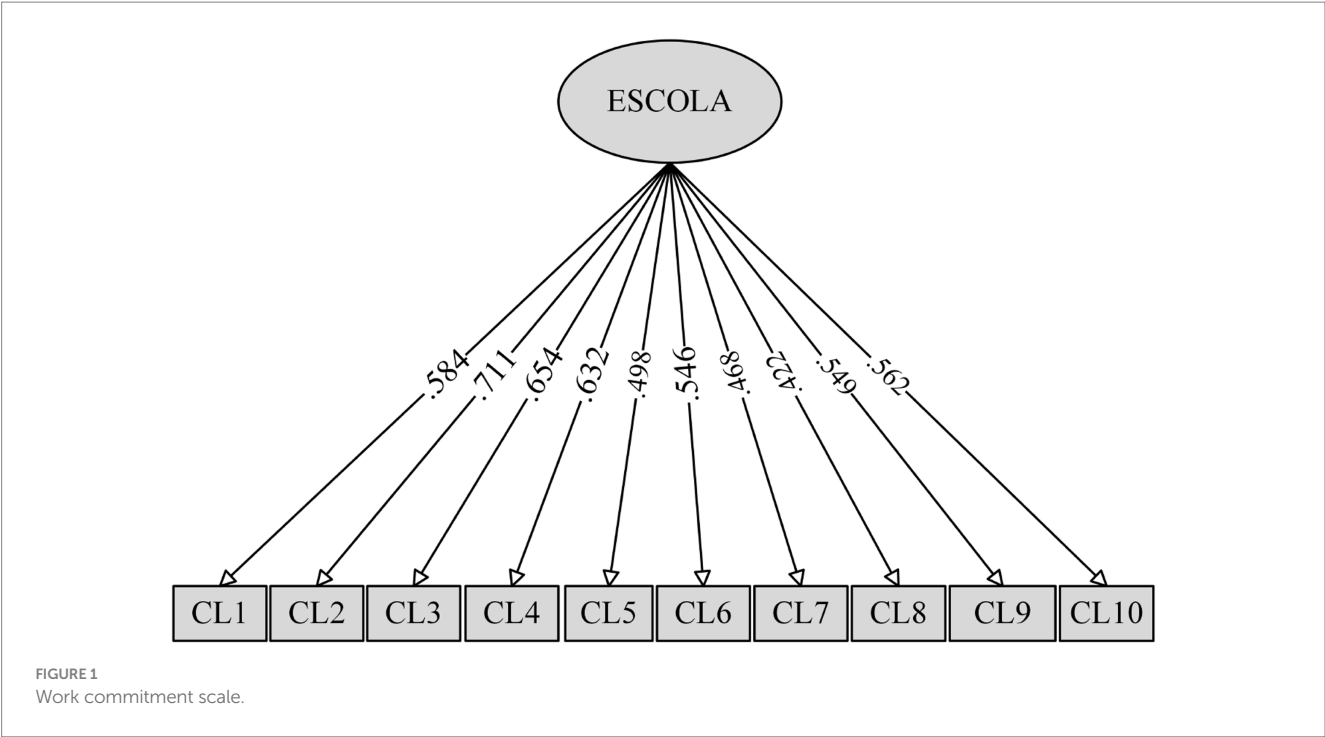


TABLE 3 Descriptive statistics and exploratory factor analysis.

Items	Mean	SD	Aiken	Item-test correlation	Cronbach's alpha	McDonald's ω	Factor loadings	CI 95%
CL1	4.72	0.476	1.000	0.510	0.814	0.816	0.567	4.68–4.75
CL2	4.58	0.539	1.000	0.602	0.805	0.806	0.681	4.54–4.62
CL3	4.48	0.571	1.000	0.607	0.804	0.806	0.679	4.44–4.53
CL4	4.50	0.554	1.000	0.537	0.811	0.813	0.602	4.46–4.55
CL5	4.50	0.608	1.000	0.489	0.817	0.818	0.546	4.45–4.55
CL6	4.53	0.553	1.000	0.491	0.816	0.818	0.537	4.49–4.58
CL7	4.53	0.535	1.000	0.478	0.817	0.820	0.522	4.49–4.57
CL8	4.47	0.541	1.000	0.395	0.825	0.827	0.429	4.43–4.52
CL9	4.52	0.541	1.000	0.542	0.811	0.813	0.595	4.48–4.56
CL10	4.46	0.567	1.000	0.514	0.813	0.816	0.564	4.41–4.50

Likewise, the RMSEA is 0.076, being within the acceptable range (≤ 0.08). Regarding the comparative adjustment indices, the NFI is 0.909, CFI is 0.927, TLI is 0.901, and the IFI is 0.928; these indices exceed the threshold of 0.90, evidencing both an adjustment and an adequate model, and indicates that the structure (see Figure 1) of the scale is valid.

5 Discussion

The results of this research aim to identify the psychometric properties of the work commitment scale (ESCOLA) in Peruvian secondary school teachers. Work commitment is a fundamental aspect to guarantee quality in secondary education and the full development of the student. This would not only influence academic

TABLE 4 Model Adjustment Measurements.

Fit measures absolute	Values acceptable	Values of the scale
Chi-squared	-	147.032
P-value	< 0.05	0.000
GFI	≥ 0.80	0.955
AGFI	≥ 0.80	0.925
RMSEA	≤ 0.08	0.076
NFI	> 0.90	0.909
CFI	> 0.90	0.927
TLI	> 0.90	0.901
IFI	> 0.90	0.928

performance, but also its impact on students' motivation, emotional well-being, and sense of belonging. That is why it is important to continue investigating this concept, which is so relevant in institutions.

This study provides a key sociodemographic profile to understand the composition of the sample. The average age of the teachers is 41, with a range between 23 and 65 years, while the study by [Prieto-Díez et al. \(2021\)](#) shows an average age of 44 years. In educational institutions, it is common to see this type of composition in age groups, some young, others with greater experience, and each one having development, learning, and growth needs that are unique ([Hammack-Brown et al., 2024](#)).

Regarding gender, there is a relatively equitable distribution with 53.4% of female teachers and 46.6% of male teachers. Concerning marital status, the findings show a solid family nucleus, since the majority are married (62.1%); in contrast, 26.6% are single, 9.4% are divorced, and 1.8% are widowed. Regarding the level of instruction, teachers have academic training that follows the market's needs, as 58.3% claim to have a professional degree; however, 29.3% already hold a master's degree, and 4.3% have reached the highest academic degree (doctorate).

On the other hand, the ESCOLA presents solid evidence on its consistency and factor structure. In principle, the average scores of the items range between 4.46 and 4.72 on a scale with five response options; a fundamental aspect, since, in general, the respondents show good work performance. Likewise, the standard deviation is between 0.476 and 0.608, which indicates an adequate dispersion in the responses ([De Vellis, 2017](#)). Although a large part of the respondents indeed showed high work commitment, there is variability in perceptions individually.

Likewise, the content validity reveals perfect scores (1.000) in all the items and the evaluated criteria (clarity, congruence, context, and mastery of the construct); this shows that the judges reached a consensus on the items they evaluated ([Penfield and Giacobbi, 2004](#)). This finding reinforces the formulation of the items, which have been designed with precision and adequately represent the measurement of work commitment. Likewise, the findings on the item-test correlation, which range between 0.395 and 0.607, contribute significantly to the adequate measurement of the construct; this indicates that each item has a substantial relationship, allowing a proper representation of work commitment. Even reliability demonstrates adequate internal consistency, with values ranging between 0.804 and 0.825, exceeding the recommended threshold ([Cronbach, 1951](#)). The values are complemented by the McDonald's Omega coefficient, ranging between 0.806 and 0.827, reinforcing the internal stability of the construct ([Kulikowski, 2023](#)).

About the confirmatory analysis, the Chi-square statistic (χ^2) obtained was 147.032, with a p -value < 0.05 . In addition, the absolute fit index GFI is 0.955 and AGFI is 0.925, which is above the threshold proposed in the theory ([Sahoo, 2019](#)) and indicates an adequate fit to the data. The RMSEA is 0.076, being within the recommended parameters. It should be noted that this result has the same value as the original ESCOLA scale ([Prieto-Díez et al., 2021](#)), which indicates that the scale has the same properties when evaluating secondary education teachers. Another aspect is related to the incremental adjustment indices, such as the NFI, which is 0.909; CFI, 0.927; TLI, 0.901; and the IFI, 0.928; these values exceed the threshold proposed in the theory ([Sahoo, 2019](#)).

Work commitment is an essential aspect of the literature; hence, several scales have emerged that help measure the concept. The [Prieto-Díez et al. \(2021\)](#) scale, composed of 10 items, demonstrates excellent reliability ($\alpha = 0.92$), with strong correlations with organizational climate ($r = 0.540$), entrepreneurial personality ($r = 0.701$), and happiness ($r = 0.674$), and is designed for application in organizational contexts. However, the UWES, the scale most used to measure commitment, is based on three factors (vigor, dedication, absorption) ([Shaufeli et al., 2002](#)), has been validated by studies in various contexts, such as in the BPO sector, where its principal value is that it presents significant relationships in the factors of commitment and variables such as the type of family composition and work experience ([Mangai and Jaffer Ali Khan, 2020](#)). Its validation in countries such as Zimbabwe ([Gwamanda et al., 2024](#)) and India ([Lathabhavan et al., 2017](#)) demonstrates its intercultural strength. However, other research has shown adjustment problems in a confirmatory analysis, indicating that there is a need to adapt the scale to different cultural contexts. On the other hand, the scale was validated in public health workers in Chile, where its reliability and factor structure are highlighted ([Cancino et al., 2024](#)). In addition, the UWES with 15 items was validated in multi-occupation samples, in which a three-dimensional scale is confirmed: vigor, dedication, and absorption ([Extremera et al., 2012](#)). However, in contexts such as India, a work commitment scale had to be developed for better precision in the measurement. It was comprised of three factors: (a) alignment, (b) affectivity, and (c) action orientation ([Shrotryia and Dhandu, 2020](#)). The relevance of this study lies in the measurement of the concept in emerging economies.

On the other hand, the work commitment scale was validated by taking an approach from the ideal point in the workplace ([DeNunzio et al., 2024](#)). Likewise, [Kulikowski \(2023\)](#) validates the work commitment scale that evaluates his work commitment with Likert-type categories from 0 to 10. It was also validated in digital environments ([Balgui, 2022](#)); thus, the TechnoWES-9 scale measures commitment with three dimensions: (a) techno-vigor, (b) techno-dedication, and (c) techno-absorption, demonstrating a strong relationship with subjective well-being and job satisfaction.

As expressed in previous lines, the scale of work commitment has been the subject of attention in the scientific academic field; however, in Peru and especially in the field of secondary education, it is still a high point that this concept has to be addressed and this scale that is proposed will be a valuable tool to advance with discoveries in this context. Although the results show adequate levels of work engagement, it is important to consider cultural factors that, in some cases, may limit or qualify its expression. In the Peruvian context, teaching is characterized by a high level of dedication and service with a strong sense of responsibility towards the community, which enhances teachers' dedication and absorption in their work. In some cases, they teach and also manage the institution. These cultural traits can generate tensions, such as the normalization of work overload, the low social value placed on the teaching profession, and the acceptance of precarious working conditions as an inherent aspect of educational practice. These cultural aspects, while reflecting resilience, can lead to sustained commitment based more on obligation than motivation.

This research has some limitations that must be mentioned: the sample focused on a geographical area, which could hinder the generalization of the results and their applicability in other contexts.

In this sense, it is recommended to expand the study to a national level to have a more precise perception of the concept. This geographical delimitation could mean an influence on the perception of work commitment, due to contextual factors, such as the socio-cultural aspects of the region or the type of management of the institution that predominates (in this case it was carried out in public management); for example, perceptions in a private management could mean differences in terms of perception. In addition, working conditions such as workload, access to learning resources, salary levels, and job stability could condition participants' responses.

5.1 Implications of the research

5.1.1 Practical implications

Based on the findings of this research, certain practical implications for the education system in Peru are offered. A valid work engagement scale adapted for teachers provides education authorities with a reliable tool for diagnosing levels of engagement. With this information, public policies focused on teacher well-being can be created and staff turnover in the education system can be reduced, prioritizing institutions with high levels of job burnout. Following this same line of thinking, the results can be used by educational institutions to establish ongoing training programs, motivational tactics, and professional development projects that contribute to reinforcing enthusiasm, commitment, and integration in the workplace. These actions promote more committed teacher education, which would influence the learning level of Peruvian students.

5.1.2 Theoretical

The results of this study help to strengthen the understanding of teachers' work engagement in the Peruvian context by providing empirical evidence that supports the applicability of ESCOLA under a unidimensional model. The psychometric properties not only confirm adequate internal consistency but also broaden the knowledge base and explain how this construct manifests itself in sociocultural realities different from those where it was originally developed. This allows us to contrast and enrich existing theory by showing that teacher commitment maintains a stable conceptual structure in Hispanic contexts, but with nuances that invite reflection on cultural and institutional factors in Peru. Thus, this study offers a consolidated frame of reference for future research seeking to integrate the theory of work commitment with other variables in educational contexts.

5.1.3 Methodological

From a methodological perspective, this research provides a scale with solid psychometric properties for use in future research evaluating teacher engagement in Peru. The validation of ESCOLA provides a standardized tool that facilitates the comparison of results between different institutions, allowing for a macro-level analysis of educational institutions. Likewise, this scale can be used for longitudinal studies that help researchers explore the evolution of commitment over time and evaluate the impact of intervention programs aimed at teacher well-being. On the other hand, having a reliable scale promotes the development of contextualized measurements, adjusted to the Peruvian educational reality, which constitutes an important methodological advance.

6 Conclusion

Based on the objectives set and the results obtained in the study, the following conclusions are reached:

- The results obtained provide sufficient evidence to indicate that the ESCOLA is an adequate scale to measure the work commitment of secondary school teachers. This is due to solid statistical findings derived from descriptive and confirmatory analyses, which allow validating the factorial structure and reliability. Therefore, the ESCOLA can be used to collect valuable information to implement strategies and policies that strengthen commitment, leading to a memorable experience in teacher satisfaction and, consequently, productivity.
- The concept of work commitment is very often studied in the literature because it directly impacts motivation, job satisfaction, and productivity. Having a teacher who demonstrates high levels of commitment is not only about having a teacher identified with the institution, but also about having someone fully involved in their functions, who seeks their professional development on an ongoing basis. In this sense, having an accurate measurement scale such as the ESCOLA will help in decision-making and improve the management of educational institutions.
- Finally, the ESCOLA, in addition to contributing to the advancement of literature through its application in diagnostic studies, can be used as a tool in the management of educational institutions to make strategic decisions that help the well-being of teachers.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by the Graduate School of the Universidad Peruana Unión. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

MA-R: Resources, Visualization, Software, Project administration, Writing – original draft, Formal analysis, Funding acquisition, Data curation, Methodology, Investigation, Validation, Conceptualization, Writing – review & editing, Supervision. JC-T: Project administration, Formal analysis, Validation, Writing – review & editing, Methodology, Supervision, Data curation, Software, Conceptualization, Resources, Funding acquisition, Visualization, Investigation.

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Conflict of interest

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