

Academic engagement of Peruvian Amazonian university students during the post-pandemic context

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Abstract

Introduction: academic commitment is a construct that manifests itself through the connection of students to academic activities, which are considered as a positive challenge. **Objective:** To analyze the academic commitment of students from 3 universities in the Peruvian Amazon during the post-pandemic context. **Method:** The approach was quantitative; the design was non-experimental and the type was descriptive transectional. Academic engagement was assessed in 354 students by applying the UWES-S Scale, an instrument with adequate levels of content validity and reliability. **Results:** It was found that 39.3% of the students presented moderate levels of academic engagement and it was determined that this variable was significantly associated with gender, university of origin and study modality of the participants. **Discussion:** It is necessary for universities to promote the cognitive, affective and attitudinal domains of students to improve their academic engagement. **Keywords:** academic engagement; students; university education; post-pandemic.

Compromiso académico en los estudiantes universitarios de la Amazonía Peruana durante el contexto pospandemiat

Resumen

Introducción: el compromiso académico es un constructo que se manifiesta a través de la conexión de los estudiantes con las actividades académicas, las cuales son consideradas como un desafío positivo. **Objetivo:** analizar el compromiso académico de los estudiantes de tres universidades de la amazonía peruana durante el contexto pospandemia. **Método:** el enfoque fue cuantitativo, el diseño no experimental y el tipo descriptivo transeccional. Se evaluó el compromiso académico a 354 estudiantes mediante la aplicación de la escala UWES-S, instrumento con adecuados niveles de validez basada en el contenido y confiabilidad. **Resultados:** Se encontró que el 39.3% de los estudiantes presentaron niveles moderados de compromiso académico y se determinó que dicha variable se asociaba significativamente con el sexo, la universidad de procedencia y modalidad de estudios de los participantes. **Discusión:** es necesario que las universidades promuevan los dominios cognitivos, afectivos y actitudinales de los estudiantes para mejorar su compromiso académico..

Palabras clave: compromiso académico; estudiantes; educación universitaria; pospandemia

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Introduction

The concept of engagement, as well as its respective scientific study, is associated with positive psychology emergence, which plays the role of estimating human strength as well as its optimal functioning ([Domínguez et al., 2020](#)). Due to the implications in defining engagement, it was extended to the academic context through the academic engagement (AE) construct. Here the responsibilities fulfilled by students at university can be understood as a way of working in which they, on the one hand, are part of an organization (the university) and, on the other hand, must meet certain demands, since failure to do so may affect their permanence in the institution. Finally, they must have the necessary time to perform a series of activities, such as attending classes, delivering assignments, taking exams, giving presentations, working in a team, and having an adequate performance ([Schaufeli, et al., 2002](#)).

Thus, AE is associated with a psychological state. It is characterized by students' sense of belonging, which adds a special value to the educational process and encourages their active participation in university activities ([Glanville & Wildhagen, 2007](#)). Likewise, it was defined as a multifactorial construct related to the effort made by the student body to achieve positive academic objectives ([Cavazos & Encinas, 2016](#)). Despite some definitions, such as those mentioned above, some authors argue that conceptualizing AE still requires more debate and understanding to enrich this variable's state of the art ([Cajas et al., 2020](#)).

AE is conditioned by a set of determinants, such as the student's personal characteristics, teachers, teaching learning strategies, classmates, class environment, among others ([Amerstorfer & Freiin, 2021](#)). However, different ways have been proposed to describe the student body's AC. Among the ones that stand out, on the one hand, there is the degree of voluntary compliance with rules, values, and institutional processes, and, on the other hand, there is the students' active participation and emotional readiness with their learning ([Casuso et al., 2013](#)).

According to [Schaufeli et al. \(2002\)](#), AE is made up of three clearly distinguishable components:

dedication, vigor, and absorption. Dedication is related to the level of involvement that students show with their studies, that is, the degree to which they are involved in performing academic activities and the meaning they give to them, which will allow them to obtain better results. As for vigor, it refers to the energy levels, mental resistance, and resilience evidenced by students while performing academic activities, even when difficulties and adverse situations appear along the way. Finally, absorption implies the concentration, immersion, and enjoyment that students have during academic activities. This means that, in many cases, they do not notice time passing and let themselves be carried away by their responsibilities.

According to [Egbert \(2020\)](#), it is possible to promote students' AE with the following teaching strategies: relating the activities to their real life, maintaining constant communication to provide timely feedback, providing learning resources necessary to complement teaching, designing activities associated with the interest of the students involved, encouraging their autonomy, and developing tasks with a level of difficulty beyond the students' capabilities, since it will allow them to perceive the need to make an effort to successfully complete the activity.

In that sense, it has been reported that people with low levels of AE constantly missed classes, were not fully motivated, had a moderate academic performance, and sometimes felt ineffective ([Jorquera & Guerra, 2021](#)). However, people who did have adequate levels of AE had a greater emotional and energetic connection, felt more self-effective, had better results, and allocated more time and dedication to their academic responsibilities ([Loscalzo & Giannini, 2018](#)).

There are studies that analyzed the level of AE development in university students during the health emergency, and the findings are heterogeneous. Some studies reported medium levels of development ([Espinoza et al., 2022](#); [Tristán et al., 2021](#); [Valero et al., 2021](#)), while others reported high levels ([García et al., 2022](#); [Rigo, 2021](#)).

These differences in results would be caused by sociodemographic aspects and academic conditions from where data were collected.

Currently, the infection level and deaths associated with COVID-19 has significantly decreased world wide, mainly due to vaccination campaigns. Consequently, many activities that used to be carried out virtually are now being carried out in person. In the case of university education services in Peru, they are also progressively returning to face to face teaching, and the Peruvian Ministry of Education has decided that the 2022 II academic term will be held strictly face to face. In this sense, students will return after two years of virtuality to an environment in which, according to their perception, they learned more (Estrada et al., 2022). Therefore, the objective of this research was to analyze the students' AE at three universities in the Peruvian Amazon during the post-pandemic context.

Method

Design

The research followed a quantitative approach, has a non experimental design, and is descriptive and cross sectional in type (Hernández & Mendoza, 2018). The analyzed variable was academic engagement, and, subsequently, it was determined whether it was associated with some sociodemographic variables.

Participants

The sample consisted of 354 students from universities that provide educational services in the region of Madre de Dios, Peru: Universidad Nacional Amazónica de Madre de Dios (Unamad) and the affiliates of Universidad Andina del Cusco (UAC) and Universidad Nacional de San Antonio Abad del Cusco (UNSAAC). To determine the sample, stratified probability sampling was used with a confidence level of 95% and a significance level of 5%. A total of 354 people participated in the study—192 women (54.2%) and 162 men (45.8%)—with ages ranging between 16 and 44 years ($M_{age} = 23.9$ years, $SD_{age} = 5.5$).

Regarding the university of origin, 275 were studying at Unamad (77.7%), 63 at UAC (17.8%), and 16 at UNSAAC (4.5%). Finally, concerning the study

modality, 225 students were studying face to face (63.6%) and 129 were studying virtually (36.4%).

Instruments

A virtual structured survey on Google Forms was used, consisting of two sections. In the first section, participants were asked for sociodemographic information (gender, age group, and university of origin). In the second section, the Utrecht Work Engagement Scale (UWES-S) was applied, which was originally developed and translated into Spanish by [Schaufeli et al. \(2002\)](#) and adapted to Peruvian context by [Tacca et al. \(2021\)](#). This scale consists of 16 Likert-type items (strongly disagree, disagree, neither agree nor disagree, agree, and strongly agree) and evaluates three dimensions: dedication, vigor, and absorption. Its metric properties were determined through the process of content based validity and reliability. In this sense, it was determined, through expert judgment technique, that the scale presented an adequate level of validity (Aiken's $V = 0.877$). On the other hand, reliability was measured by means of a pilot test applied to 30 students, and it was determined that the instrument had an adequate reliability level ($\alpha = 0.855$).

Procedures

Data collection

This process was carried out between May and June 2022. For this purpose, the respective permits were requested from the corresponding university authorities. Subsequently, students were invited to participate in the research and the link to the survey was sent to them, where they received an explanation of objectives, a request of consent, and instructions to complete the items. The survey lasted approximately 15 minutes and, after confirming the participation of 354 students, access was disabled.

Data analysis

The descriptive statistical analysis was performed using frequency and percentage tables obtained using SPSS V.25. Likewise, inferential results were obtained using the nonparametric Pearson's Chi squared test (X^2) because we also sought to determine whether AE was significantly associated with the proposed sociodemographic variables.

Results

Table 1 shows the descriptive analysis of the AE variable and its dimensions: dedication, vigor and absorption. In this sense, it was determined that 39.3% of the students presented a moderate level of AE, 37% had a high level, and 23.7% showed a low level.

Concerning the dedication dimension, it was the best rated by students in comparison with the other two dimensions, that is, they considered that their chosen program was challenging and meaningful, making them proud and enthusiastic to study it.

As for the vigor dimension, it was the least valued, since many students indicated that performing academic tasks and activities notoriously wore out their energies—sometimes they did not feel like going to class or studying

and felt that it was difficult to continue studying for long periods of time. As of the absorption dimension, the moderate level also predominated, with students feeling they were not totally immersed or concentrated in their studies and academic responsibilities.

According to Table 2, some sociodemographic variables such as sex, university of origin, and learning modality were significantly associated with AE levels. In the case of sex, the predominant level of AE in females was high, while in males it was moderate. Regarding the university of origin, students from Universidad Andina del Cusco showed higher levels of AE than students from Unamad and UNSAAC. Regarding learning modality, students who studied virtually presented slightly higher levels of AE compared to those who studied face-to-face.

Table 1
Descriptive Results of the Academic Engagement Variable and Its Dimensions

Variable and dimensions	High		Moderate		Low		Total	
	<i>f</i>	%	F	%	<i>f</i>	%	<i>f</i>	%
Academic engagement	131	37.0	139	39.3	84	23.7	354	100.0
Dedication	136	38.4	129	36.4	89	25.2	354	100.0
Vigor	127	35.9	132	37.3	95	26.8	354	100.0
Absorption	132	37.3	140	39.5	82	23.2	354	100.0

Table 2
Association between Levels of Academic Engagement and Sociodemographic Variables

Sociodemographic variables		Academic engagement						p
		High		Moderate		Low		
		<i>F</i>	%	<i>F</i>	%	<i>f</i>	%	
Sex	Male	53	32.7	64	39.5	45	27.8	<.001
	Female	78	40.6	75	39.1	39	20.3	
Age group	16 a 20 years old	77	37.9	78	38.4	48	23.7	.073
	21 a 25 years old	38	39.2	37	38.1	22	22.7	
	26 a 30 years old	12	31.6	16	42.1	10	26.3	
	31 a years old	4	25.0	8	50.0	4	25.0	
University of origin	UNAMAD	98	35.6	108	39.3	69	25.1	<.001
	UAC	27	42.9	24	38.1	12	19.0	
	UNSAAC	6	37.5	7	43.8	3	18.7	
Modality of study	Face to face	78	34.7	89	39.6	58	25.7	<.001
	Virtual	53	41.1	50	38.8	26	20.1	

p<.001

Discussion

Currently, AE is considered a construct that manifests itself through students' connection to academic activities, which are considered a positive challenge. This connection could have been modified during the pandemic and in the present, since work, social, and academic activities are face to-face in a new normality. In this sense, this research sought to analyze AE of students from three universities in the Peruvian Amazonia during the post-pandemic context.

A first finding indicated a moderate level in students' AE, which implies that some students had not fully developed a sense of belonging, nor did they understand the actual value of the educational process, which would cause them not to participate actively in academic activities developed at the university. This situation could cause them not to have the expected academic performance, hindering in turn their goals as students (to advance and successfully complete their studies).

Similar results were reported in several studies ([Espinoza et al., 2021](#); [Tristán et al., 2021](#); [Valero et al., 2021](#)), where it was found that students' AE was at a medium or moderate level. This indicated that, on the one hand, there were students involved in their studies, who were proud and enthusiastic to take courses and perform activities entrusted to them. However, on the other hand, there were students with some dislike and demotivation attitudes for the program they had chosen, which was reflected in the unwillingness to be thoughtful, a limited openness to make efforts to understand, and a lack of inspiration and pride for their studies. Although there are universities that have already returned to face to face teaching partially or totally (as is the case of Unamad), some continue to work virtually (for example, UAC and UNSAAC), that is, some academic activities established during the pandemic are maintained. This could be the reason for the divergence in students' perceptions of their AE.

The importance of understanding students' AE and the problem of disengagement to university academic activities is increasingly recognized since they influence their adaptation and long term trajectory. Therefore, it is imperative to detect

such factors in order to design differentiated strategies to improve students' performance, progress, and retention ([Casuso et al., 2013](#)).

Regarding sociodemographic variables, AE was significantly associated with participants' sex, i.e., women presented slightly higher levels of academic engagement than men. Such finding coincides with previous research ([Daura et al., 2020](#); [Salmela & Read, 2017](#)) and would be explained by the natural disposition they have towards self discipline, effort, and obtaining better grades.

AE was also significantly associated with the university of origin, as well as the learning modality, i.e., students from universities that continued with virtual teaching learning modality were more committed to their studies compared to students who had returned to face to face or blended learning. These findings are somewhat contradictory, since, in a previous study, it was found that students who attended virtual classes considered that they were not learning at the same level as in the face to face modality ([Estrada et al., 2022](#)). Thus, the findings would indicate that students who currently attend face to face or blended classes could be having problems to readapt after two years of virtuality, as in this modality they could study both synchronously and asynchronously, at any time and place. Therefore, this face to face learning context could be compromising their psychological well being and engagement to their studies, and their adequate and timely fulfilment of academic responsibilities.

From the results described above, it was concluded that the level of AE that characterized students from universities of the Peruvian Amazonia during the post-pandemic context was moderate. Furthermore, this variable was significantly associated with participants' sex, university of origin, and learning modality.

This research was not free of limitations, such as the instrument characteristics (being self completed), which could generate social desirability biases or subjective assessments from students. Therefore, it is suggested that, in future research, complementary data collection techniques and instruments be used to provide much more objectivity to the process.

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