

Educational tutoring in school engagement in secondary education students

Nicanor Piter Saavedra-Carrion

Universidad César Vallejo Lima, Perú nsaavedraca@ucvvirtual.edu.pe
<https://orcid.org/0000-0001-5827-9524>

Abstract:

To analyze the level of development of educational tutoring (TE) and school engagement (CE) in high school students, as well as to characterize the possible causal correlation between these variables. The sample was determined by stratified probabilistic processes and consisted of 111 high school students from an educational institution in Ayacucho, Peru. It is a basic, quantitative, correlational-causal, descriptive-transversal and non-experimental study. Face-to-face questionnaires were used, proposed by León and Fernández-Díaz (2019) to measure the TE and Mora-Romo and Martel-Muñoz (2022) for the CE, both showed measurement validity by means of exploratory and confirmatory factor analysis, and their reliability was 0.927 and 0.820 Cronbach's alpha respectively, being both of acceptable internal consistency. From the analysis of the ordinal logistic regression, it was verified that the educational tutoring model is an influential factor on school commitment, because the Sig. value of the model adjustment report was 0.000; showing that the model is plausible, in addition, the R² determination value corroborated what was established, evidencing that educational tutoring explains, according to Nagelkerke 42.2% of the variation of school commitment. Tutors who help to identify and address the individual needs of students have an impact on the improvement of self-esteem and sense of belonging in the school community, where the close link between the tutor and the students promotes an environment of valuation and active listening, increasing their interest and participation in learning.

Keywords: Individualized teaching, Involvement, Responsibility, Participation.

Resumen:

Analizar el nivel de desarrollo de la tutoría educativa (TE) y el compromiso escolar (CE) en estudiantes de educación secundaria, así como caracterizar la posible correlación causal entre dichas variables. Se consideró una muestra determinada por procesos probabilísticos de tipo estratificado conformado por 111 estudiantes de secundaria de una institución educativa de Ayacucho, Perú. Es un estudio básico, cuantitativo, correlacional-causal, descriptivo-transversal y no experimental. Se utilizaron cuestionarios administrados de forma presencial, propuestos por León y Fernández-Díaz (2019) para medir a la TE y Mora-Romo y Martel-Muñoz (2022) para el CE, ambos evidenciaron poseer validez de medición por medio de análisis factorial exploratorio y confirmatorio, y la confiabilidad de los mismos fue de 0,927 y 0,820 de alfa de Cronbach respectivamente, siendo ambos de aceptable consistencia interna. A partir del análisis de la regresión logística ordinal, se verificó que el modelo de tutoría educativa es factor influyente sobre el compromiso escolar, porque el valor de Sig.

del informe de ajuste de modelo fue de 0,000; dando cuenta que el modelo es plausible, además, el valor de determinación R^2 , corroboró lo establecido, evidenciando que la tutoría educativa explica según Nagelkerke el 42.2% de la variación del compromiso escolar. Los tutores que apoyan a identificar y abordar las necesidades individuales del alumnado, inciden sobre la mejora del autoestima y sentido de pertenencia en la comunidad escolar, donde el nexo cercano del tutor y el alumnado, promueve un entorno de valoración y escucha activa, incrementando su interés y participación por los aprendizajes.

Palabras claves: Enseñanza individualizada, Involucramiento, Responsabilidad, Participación.

Introduction

Addressing the possible causality TE generates in the CE of secondary school students is essential, since adolescence is a critical stage of academic and personal development (Hervás et al., 2022). During these years, young people face multiple challenges can affect their motivation and academic performance (Formento-Torres et al., 2023). Therefore, TE offers a safe space where students can express their concerns and receive guidance, supporting them to feel more connected to their educational environment (Diaz, 2022). In addition, interaction with tutor can foster socio-emotional skills, such as resilience and self-confidence, essential for overcoming academic obstacles and personal contextual challenges (Rondan et al., 2024). Likewise, understanding how TE influences CE allows school organizations to design more effective programs adapted to needs of students (Nabi et al., 2024). By identifying strategies that are beneficial, school retention and academic performance can be improved, benefiting students and contributing to the creation of a positive and collaborative educational environment where the actors involved work together to achieve academic and personal success (Geletu, 2023). Therefore, research in this field can, therefore, guide school policies that prioritize comprehensive well-being of secondary school students. Given this, it was recognized that the study proposal is aligned with Sustainable Development Goal 4, because it seeks to provide guarantees of inclusive, equitable and quality education, therefore, from TE a learning environment is promoted that supports the individual needs of students, influencing the improvement of their performance and emotional well-being, in addition, by promoting active participation and CE with students, it contributes to the formation of responsible citizens committed to their community, this perspective also supports reduction of school dropout rates, promoting equal opportunities (United Nations, 2023).

Thus, the problem associated with TE and CE lies in the lack of an effective connection between tutor and student, which generates disinterest and demotivation in the school process (Unicef, 2022). Many students feel that TE is limited to academic aspects without addressing their emotional and social needs, making it difficult for them to engage with the school organization (Unesco, 2023). In addition, the lack of resources and adequate training for tutors prevents them from providing comprehensive and personalized support (Hord and DeJarnette, 2022). This situation is aggravated by academic pressure and lack of a positive school climate, leading to poor participation in extracurricular activities and a feeling of disconnection from the educational context (Sara, 2023). As a result, students may experience poor academic performance and a negative attitude towards education, perpetuating a cycle

of demotivation and school dropout (Cannon et al., 2022). Thus, the effectiveness of SE TE becomes a critical component for promoting CE and academic success of secondary level students.

Therefore, to address problem of TE and CE, it is relevant to implement a holistic perspective that includes ongoing training for tutors in emotional and pedagogical skills (Salinas and Gamboa, 2024). This can better connect students and understand their individual needs. In addition, determining mentoring programs foster a positive relationship between students and tutor can increase the feeling of belonging and motivation (Romero, 2024). Also, the inclusion of extracurricular activities that are attractive to students is essential, because it promotes participation and commitment to school community (Salcedo et al., 2024). Such possible solutions can support the strengthening of TE and consequently increase CE.

It should be noted proposal faces several problems, including the disconnection between tutors and students, and the lack of strategies to promote CE. Many students feel that TE does not address their emotional or academic needs, that it reduces their motivation and participation in school process. Therefore, the goal of the study includes analyzing level of development of TE and CE in secondary education students, as well as characterizing possible causal correlation between these variables, from the search for the determination of clear indicators to quantify the impact of TE on CE, facilitating creation of effective school policies. In this sense, by addressing these problems, the study aims to contribute to improving quality of secondary education and, ultimately, the academic success of students. Regarding the theoretical support, from analysis of Vygotsky's sociocultural learning theory, the relevance of social and cultural context in learning is emphasized, because it is considered a collaborative process that occurs through significant interactions between the tutor and the students, where knowledge is jointly constructed (Merino et al., 2023). For its part, from the self-determination theory of Decy and Ryan, the relevance of satisfying three basic needs in educational context is highlighted, therefore, when students feel that they have control over their learning and that their skills are valued, their motivation and desire to participate in school increases, reinforcing their CE (Albor-Chadid and Rodríguez-Burgos, 2022). Thus, together theories show how effective TE supports academic development and also encourages deeper and longer-lasting commitment of students to their learning.

Regarding the conceptual basis, TE according to López-Agudo et al. (2020) includes a process of personalized accompaniment and support that seeks to guide students in their academic, emotional and social development, therefore, through meaningful interactions, the tutor facilitates learning, encourages autonomy and helps students overcome personal and academic obstacles. Likewise, Rondan et al. (2024) added that this comprehensive approach is focused on improving academic performance and also promotes well-being and the development of life skills, therefore, TE is an essential tool to enhance student success in their school career.

The goals of educational TE are diverse, since they include improving academic performance and promoting socio-emotional skills and strengthening the ability to self-manage learning (Reséndiz-Castro and Zepeda-Bautista, 2021). In addition, the existence of different tutoring models, such as individualized tutoring and peer tutoring, can be adapted to specific needs and contexts of students (Ocampo-Gómez et al., 2021). In this sense, TE is presented as a

fundamental tool to enhance student engagement and motivation, thus contributing to their academic and personal success.

It should be added that there are a series of TE perspectives that can be implemented in schools, each with its own characteristics and benefits. Where individualized tutoring allows for a personalized approach, where the tutor adapts to specific needs of the students, facilitating effective learning (Martinez et al., 2023). On the other hand, peer tutoring promotes collaboration and mutual learning, where students can support each other, which can be especially motivating (Chacón-Vargas, 2022). Likewise, the development of group tutoring programs that encourage teamwork and social interaction contributes to the sense of community in the classroom (Fernández-Martín et al., 2022). The choice of the appropriate approach will depend on the school context and particularities of the students, highlighting need for flexibility and adaptation when implementing tutoring programs.

From what has been stated, it is understood that, despite the benefit that TE can provide, there are also a series of challenges must be addressed to ensure its effectiveness. Thus, the lack of training and resources for tutors limits quality of support provided to students (Yucra-Mamani, 2021). Furthermore, it is essential to ensure that the TE proposal is accessible to all students, avoiding the inclusion of those who need it most (Rondan et al., 2024). Likewise, continuous evaluation of TE is essential to identify areas for improvement and adapt strategies to changing needs of students (Maldonado-Cid et al., 2021). However, such challenges also represent opportunities for innovation and the development of effective practices in tutoring. Therefore, by addressing such aspects, schools can maximize the positive impact of TE on CE and student success.

Regarding CE, Veliz et al. (2022) stated that CE refers to level of involvement and dedication that students demonstrate towards their education and educational community. This concept, according to Torres et al. (2023) covers various dimensions, including school engagement, associated with identification and belonging to school, behavioral engagement, which involves actively participating in school activities, and cognitive engagement, related to interest and motivation to learn. In addition, the relevance of CE, according to Lara et al. (2022), lies in its link with the academic performance and emotional well-being of students, because more engaged they feel, the more likely they are to attend regularly, participate in classes, and strive to achieve their school purpose. Therefore, promoting CE is essential to influence the improvement of school quality and reduce the dropout rate.

Likewise, Wang et al. (2019) determined a high impact of CE on academic performance, because it was shown that students who are engaged tend to get better grades, participate in extracurricular activities, and have a positive attitude towards learning. Furthermore, EQ is associated with high persistence in the face of challenges and a lower probability of dropping out of school (Zamudio, 2021). This link is due to the fact that engaged students are more motivated to set academic goals and strive to achieve them (Maluenda et al., 2021). Therefore, promoting EQ benefits students' emotional well-being and also contributes to their academic and professional success at an older age.

Methodology

The research was of a basic type, because it sought to generate fundamental knowledge associated with TE and CE, focusing on understanding them without an immediate

application, contributing to school theory from proportion of information that can be useful for future studies or interventions. According to Arispe et al. (2020), basic research seeks to expand theoretical knowledge about a phenomenon without an immediate application in practice, focusing on exploring and understanding fundamental concepts, contributing to the development of explanatory theories and models.

It was also quantitative in approach, because it allowed the collection and analysis of numerical information, facilitating the identification of patterns and links between measurements, therefore, by using standardized instruments, the impact of TE on CE can be objectively measured. For Sánchez (2019), the quantitative perspective is differentiated by its process of collecting and analyzing numerical data, allowing links or patterns to be established between measurements jointly, from the use of statistical methods, facilitating the generalization of results.

The selected method was the hypothetical-deductive one, because it allowed specific hypotheses to be formulated about the impact of ET on CE. Based on these assumptions, deductions can be made to guide the data collection process and subsequent analysis, making it easier to validate or refute the hypotheses for a better understanding of how tutoring influences student engagement. In this regard, Siponen and Klaayuniemi (2020) mentioned that the method considered is an approach that starts from the formulation of specific hypotheses based on existing theories, where the observable consequence that can be tested through data collection is deduced.

Likewise, an explanatory level study was considered, because it focused on analyzing the causes and effects of ET on CE. Through the perspective, it seeks to describe the nexus of the phenomena and also to understand the mechanism underlying said nexus, where the identification of mediating or moderating factors can offer deeper explanations of how ET impacts CE. According to Rodríguez and Buelvas (2021), explanatory level research focuses on analyzing the causes and effects of phenomena, seeking to understand the mechanisms connect them, allowing causal links to be determined and explaining why certain phenomena occur.

The design considered was non-experimental, causal correlational, because it allowed examining causal link of TE and CE without manipulating the phenomena, making it easier to identify their inference of causality and providing a clearer perspective of how TE contributes to CE, establishing patterns suggest directions of incidence. Likewise, Starbuck (2023) mentioned that the design considered allows observing how phenomena are related in their natural context, effective for identifying patterns and links suggest causal relationships, providing a more contextualized view.

And the cross-section considered was the transversal one, because the data was collected at a single point in time, which was effective in assessing current situation of the TE and the CE. The present section offers a snapshot of the phenomena in specific contexts, facilitating the identification of links between them. For Cvetkovic-Vega et al. (2021), the transversal section involves collecting data at a single point in time, providing a snapshot of measurements in specific contexts, allowing the current situation of the phenomenon to be assessed and links to be established between them at a given time.

Regarding the population, 154 high school students from an educational institution in Huancapi were considered. They were selected by the following inclusion criteria: (a) Students between 12 and 18 years old, (b) Students with regular attendance to classes, (c) Students whose parents have signed consent, and as exclusion criteria: (a) Students who had disabilities or disorders, (b) Students who refuse to participate in study and (c) Students who do not attend school for various reasons. It is worth mentioning that the sample was determined from the use of a stratified probability sampling, made up of 111 students. According to Cortés et al. (2023), the considered sampling is a method to select samples in which the population is divided into subgroups or strata based on specific particularities, such as age, gender or school level, which ensures that different strata of population are represented in the sample.

Table 1. Population and Research Sample.

Grades	No. of students		Population	Factor	No. of students		Sample
	Men	Women			Men	Women	
1°	20	11	31	0,720	14	8	22
2°	12	21	33	0,720	9	15	24
3°	14	21	35	0,720	10	15	25
4°	16	14	30	0,720	12	10	22
5°	9	16	25	0,720	6	12	18
Total	71	83	154		51	60	111

Note: Data taken from the 2024 enrollment payrolls.

To quantify the TE, the model developed by León and Fernández-Díaz (2019) was considered, which has four dimensions: (a) Functions with students, referring to the various actions and responsibilities assumed by tutor in direct relation to students, including academic guidance, emotional support and promotion of social skills, (b) Functions with the family, covers interaction between the tutor and families of the students, recognizing their fundamental role in school process, where the tutor is responsible for maintaining fluid and effective communication with parents, informing them about the academic progress and the difficulty of their children, (c) Development of tutoring, focuses on planning and execution of tutoring programs that respond to the specific need of students, involving designing strategies and activities promote learning, coexistence and emotional well-being of students, and (d) Evaluation of tutoring, involves the systematic analysis of results and effectiveness of the tutoring actions implemented, including evaluating academic progress of the student. students, as well as their personal and social development.

Similarly, to measure CE, the model established by Mora-Romo and Martel-Muñoz (2022) was considered, where five dimensions were identified: (a) Involvement, referring to level at which students participate in the school process, including their attendance at class, participation in school activities, and willingness to interact with academic content, (b) Performance, associated with students' academic achievements, reflected in their ability to achieve educational goals, this performance can be measured through grades, exams, and quality of present work, (c) Reinforcers, encompasses those stimuli and supports motivate students to commit to education, this can be intrinsic, such as interest in learning, or extrinsic, such as recognition and reward offered by teachers and parents, (d) Socio-educational

Interaction, refers to link that students determine with their peers, teachers, and other members of the school community, crucial for the social and emotional development of the student. students, and (e) Resilience, refers to the ability to face and overcome adversities at school, those who despite the challenges maintain their commitment to learning and seek solutions to their problems.

Table 2. Operationalization of the Variables.

Variable	Dimensions	N.º ítems	Rating scale
Educational tutoring	1. Functions with students	13	1: Strongly disagree 2: Disagree 3: Neither agree nor disagree 4: Agree 5: Strongly agree
	2. Functions with the family	5	
	3. Development of tutoring	9	
	4. Evaluation of tutoring	10	
School commitment	1. Involvement	3	1: Strongly disagree 2: Disagree 3: Neither agree nor disagree 4: Agree 5: Strongly agree
	2. Performance	5	
	3. Reinforcers	5	
	4. Socio-educational interaction	4	
	5. Resilience	4	

Note. Built from the proposal of León and Fernández-Díaz (2019) for the TE and what was determined by Mora-Romo and Martel-Muñoz (2022) for the CE.

Regarding the psychometric property for the TE instrument, a scale concordant with function of the tutoring proposal at the secondary level was integrated, from the identification of four factors, 37 questions were proposed, also, regarding validity, it was analyzed at the confirmatory factorial level, showing that the multiple normality of the proposal through the value of Mardia = 181.746, also, a CFI index = 0.940 and IFI = 0.940 and RMSEA = 0.044 were obtained, showing model is appropriate. Regarding reliability, determined by means of Cronbach's alpha, it showed a coefficient of 0.927, interpreting it as a questionnaire of acceptable reliability (León and Fernández-Díaz, 2019).

Similarly, regarding the psychometric property of CE-concordant instrument, a proposal was integrated based on design of a scale to measure the educational commitment of students in Mexico, from the identification of five factors and the development of 21 questions. Likewise, the validation of the instrument was carried out through suitability analysis, where the KMO value = 0.805 and as a finding of the sphericity test a value of 2646.2 was obtained. In addition, regarding confirmatory analysis, suitable parameters were obtained, where the CFI = 0.942, GFI = 0.939; and RMSEA = 0.34. Regarding reliability, Cronbach's alpha was considered, where a general value of 0.820 was corroborated, being of acceptable reliability (Mora-Romo and Martel-Muñoz, 2022).

Results

Descriptive results.

Table 3. Cross-Levels of Educational Mentoring and School Commitment.

			School commitment			Total
			Low	Medium	High	
Educational tutoring	Poor	Count	8	1	0	9
		% of total	7,2%	0,9%	0,0%	8,1%
	Fair	Count	3	28	33	64
		% of total	2,7%	25,2%	29,7%	57,7%
	Efficient	Count	0	8	30	38
		% of total	0,0%	7,2%	27,0%	34,2%
Total	Count	11	37	63	111	
	% of total	9.9%	33.3%	56.8%	100.0%	

Table 3 presents the results of the crossing of the TE and the CE, where it is understood that, the crossing of greater tendency was valued by students to TE at regular level and to CE at high level with 29.7% (33), in that sense, the tutoring provides a safe space where the students can express their concern and receive personalized support, promoting feeling of belonging and the connection with the school. Likewise, the efficient evaluation of the TE and high of CE, was qualified in 27.0% (30), implying that, by determining open and personalized communication, teachers can motivate students, helping them to set clear and achievable goals, such individualized attention strengthens confidence of the students and promotes positive learning environments. And the regular assessment of the TE and the CE, with 25.2% (28) contributed to understanding that, although the attention is not as personalized as in higher levels of tutoring, the students still feel their needs are recognized, which motivates them to participate more in their classes, which boosts their interest in learning.

Correlational results.

Table 4. Correlation of the Dimensions of Educational Tutoring and School Commitment

Characteristics	School commitment	
	Spearman's rho coefficient	p-value
Educational tutoring	,657**	,000
Functions with students	,539**	,000
Functions with the family	,513**	,000
Development of tutoring	,568**	,000
Evaluation of tutoring	,692**	,000

Note. Correlation results by Spearman's Rho test. **. The correlation is significant at the 0.01 level (bilateral).

Table 4 verifies the correlational analysis of the variables TE and CE, as well as the dimensions of TE and CE, where it was confirmed that the link between the variables was significant and valued at .657. In this sense, through guidance and monitoring, tutors can motivate students to participate more actively in their studies, by promoting an environment

of trust where students feel comfortable sharing their concerns. Likewise, from the functions with students and CE, a link of .539 was obtained, which contributed to understanding that tutors, by providing personalized support and attention to the individual needs of students, contribute to improvements in motivation and self-efficacy and strengthen the emotional connection. In addition, the link of the functions with family and CE was valued at .513, which shows that effective communication between tutors and parents reinforces the support that students receive at home. Similarly, the development of tutoring and CE had a link valued at .568, which implies that the implementation of strategies and activities designed to address the specific needs of students improves their commitment. Finally, the evaluation of tutoring and CE was valued at .692, in that sense, such a link allows us to identify the impact of what was implemented on learning and well-being of students.

Explanatory results.

Table 5. Regression Test of Educational Tutoring and School Commitment.

Model Fit Report					Pseudo R2	
Model	Log likelihood -2	Chi-square	gl	Sig.		
Only intersection	63,849				Cox y Snell	,355
					Nagelkerke	,422
Final	14,184	48,666	2	,000	McFadden	,239

Note. Results of the educational tutoring model as an influencing factor in school commitment and Pseudo R2 results. Link function: Logit.

Table 5 shows the analysis by logistic regression of the TE model, where the results of the adjustment report reported a significance of ,000, showing that TE is an influential factor on the CE of students, likewise, such assertions were corroborated by the values of determination Pseudo R2, showing that, according to Cox and Snell, the model associated with TE explains 35.5% of the improvement of the CE and in the same way Nagelkerke contributed determining that 42.2% of the CE is a product of TE. In that sense, TE provides a safe environment where students can express their concerns and receive the emotional support they need, strengthening their feeling of belonging to school community. In addition, tutors support students to determine clear academic goals, which increases motivation and dedication to learning. This personalized attention allows specific difficulties to be identified and addressed, which improves academic performance and reduces school dropout rates. In addition, interaction with tutors and peers fosters social skills and teamwork, which are essential for this stage of adolescent development.

Table 6. Regression Test of the Dimensions of Educational Tutoring and School Commitment.

Model adjustment report					Pseudo R2	
Dimensions	Log likelihood -2	Chi-square	gl	Sig.		
Functions with students	59,153	37,202	2	,000	Nagelkerke	,339
Functions with the family	51,932	33,752	2	,000	Nagelkerke	,312
Development of tutoring	50,944	34,545	2	,000	Nagelkerke	,318
Evaluation of tutoring	65,510	52,512	2	,000	Nagelkerke	,449

Note. Results of the model of functions with students, functions with the family, development of the tutoring and evaluation of the tutoring as factors affecting school commitment and results Pseudo R2. Link function: Logit.

Table 6 verifies the prediction results of models associated with the dimensions of the TE on the CE, where the functions with students explain 33.9% of the CE, the functions with the family explain 31.2% of the CE, the development of the tutoring 31.8% and the evaluation of the tutoring 44.9%, suggesting dimensions of the TE, which include the function with the students, the families, development of the tutoring and evaluation of tutoring itself, contribute to improvements to the CE, since this comprehensive perspective promotes academic performance, and also cultivates feeling of belonging and responsibility of the students, being key components for a solid and lasting CE, in this way, the constant interaction in these dimensions allows the construction of favorable environments for students to actively involve themselves in their education.

Discussion

The results obtained in the study show that TE has a high impact on the CE of Ayacucho students. This finding is aligned with studies proposed by Olivos and Tullume (2023), Gaxiola et al. (2022) and Karababa (2022), which have shown personalized attention and emotional support provided by tutors are essential to motivate students. Likewise, in a context such as Ayacucho, where there may be socioeconomic and cultural challenges, TE becomes a key tool for promoting inclusive learning environments, because students who actively participate in TE show a greater sense of belonging to the school community, translating into a high commitment to developing their learning and achieving their personal goals.

Furthermore, the functions performed by the tutor in conjunction with the students and families were decisive in developing the CE, since the constant communication between tutors and parents facilitated the monitoring of academic progress and also allowed the possible difficulties faced by the students to be addressed jointly (León and Fernández-Díaz, 2019). Such a collaborative perspective reinforces relevance of involving the family in school process, which in turn enhances the students' interest and motivation towards learning (Wijner-Meijer et al., 2022). Therefore, the perception of support at school and home is reinforced by a high willingness to participate in school activities and assume school responsibilities.

In addition to the above, developing tutoring through structured programs also allowed CE to be identified as a key element, because students who participate in activities designed to promote active learning and collaboration reported a high motivation and desire for improvement (Fernández-Martin et al., 2022). This highlights the need to implement pedagogical practices that are not only focused on academic content, but must also integrate the development of socio-emotional skills (Yucra-Mamani, 2021). Likewise, in a context such as Ayacucho, where school needs can vary significantly, adapting tutoring to the particularities of each group is an essential aspect for maximizing its effectiveness.

It should be added that the continuous evaluation of tutoring was revealed as a fundamental component that ensures a high impact on CE, because the findings suggest that TE that incorporates feedback mechanisms and adjustments according to the needs of the students are more effective (López-Agudo et al., 2020). Such evaluation allows areas of improvement

to be identified and also provides greater willingness to involve students in their own learning process, by promoting self-awareness and responsibility (León and Fernández-Díaz, 2019). In this sense, by feeling that they are an active part of their education, students tend to commit to their studies and develop a positive attitude towards learning.

Finally, it is understood that the results highlight the importance of strengthening TE in Ayacucho as a means to improve the students' CE, where the implications of the study suggest that schools should invest in the training of tutors and in the creation of programs that address specific needs of students. Likewise, fostering an academic environment that values tutoring benefits students in terms of academic performance and also contributes to personal and social development, preparing new generations to face future challenges. In this way, tutoring is presented not only as a school strategy, but as a fundamental pillar in comprehensive training of students in the department of Ayacucho, Peru.

Conclusions

The findings of this study are of significant relevance to the sociocultural context of Ayacucho students, as they address a reality where socioeconomic and cultural conditions can exert a detrimental impact on their academic performance and well-being. In this region, where families contend with challenges such as poverty and constrained access to educational resources, TE emerges as a pivotal element, serving as a vital conduit for tailored assistance and fostering a sense of belonging. Furthermore, the study underscores the potential of tutoring programs to reinforce the school community by fostering values of collaboration and solidarity through interactions between tutors, students, and families. By identifying effective tutoring strategies, programs can be designed that improve CE and also contribute to the comprehensive development of students, equipping them to navigate challenges in their context. This approach demonstrates the beneficial impact on academic performance and social cohesion within the Ayacucho community.

It is noteworthy that the study has the potential to have a significant impact at various levels in the future. The results can serve as a foundation for the development of effective tutoring programs that can be tailored to the specific needs of Ayacucho students, based on their impact on the enhancement of academic commitment and performance. Furthermore, the study can inform the development of school policies that acknowledge the significance of tutoring as a crucial element in the comprehensive education of students. Over time, it is anticipated that by reinforcing CE, the dropout rate will decline and the training of more critical and participatory citizens will increase. Furthermore, the involvement of families in the present process may facilitate a cultural shift towards greater collaboration between the school and the home. Collectively, these outcomes can facilitate the development of an inclusive and resilient school community, equipped to address future sociocultural challenges.

It is recommended that future research adopt a more expansive perspective, encompassing a diverse array of contexts and populations. This approach is expected to facilitate a more comprehensive understanding of the underlying dynamics. Furthermore, it would be beneficial to conduct longitudinal research that examines the long-term impact of technology-enhanced learning (TE) on student engagement and academic performance. Similarly, it is recommended that different tutoring modalities, such as peer tutoring and

virtual tutoring, be investigated to ascertain which are more efficacious in specific contexts. Furthermore, it is crucial to incorporate the viewpoint of families into these studies, as they can offer insights pertaining to their involvement in the educational process. Additionally, it is essential to evaluate the training of tutors and its influence on the efficacy of the TE program.

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