revistaFuentes
ISSN: 1575-7072 | e-ISSN: 2172-7775

Perceived social support and academic performance in Peruvian high school students: influence of academic engagement and academic self-efficacy

Sergio Dominguez-Lara[1]
Universidad de San Martín de Porres (Perú)
Sabina N. Valente
CARE - Research Center on Health and Social Sciences, Polytechnic Institute of Portalegre (Portugal)
Abílio A. Lourenço
Universidade do Minho (Portugal)
Benigno Peceros-Pinto
Universidad de San Martín de Porres (Perú)
Maite Díaz-Peñaloza
Universidad Científica del Sur (Perú)
Segundo R. León
Universidad Privada San Juan Bautista (Perú)

Abstract
Based on ecological systems theory, three main social contexts are associated with school engagement. In this sense, this study aimed to find out the impact of perceived social support on academic achievement considering the mediating role of academic engagement and academic self-efficacy. A total of 623 Peruvian secondary school students (women = 51.364%) and adolescents between 12 and 17 years old (M_{age} = 14.255; SD_{age} = 1.454) participated. Were evaluated with the *Multidimensional Scale of Perceived Social Support*, the *Utrecht Work Engagement Scale – Student*, the *Academic Situations Specific Perceived Self-efficacy*, and the academic performance obtained from the institutional data. The data analysis was carried out under structural regression analysis with the weighted least square mean and variance adjusted and the parameters were interpreted under an effect size perspective. Regarding the results, the perceived social support from parent's influences on academic self-efficacy and academic engagement; at the same time, academic self-efficacy influences academic engagement and academic performance. On the other hand, when the mediating role of academic self-efficacy and academic engagement were considered, only an indirect and significant influence of perceived social support from parents on academic performance was found. In conclusion, the family is a relevant factor to increase self-efficacy beliefs and optimize academic performance.

Keywords: academic performance; perceived social support; academic self-efficacy; academic engagement; high school.

[1] **Corresponding author**: sdominguezmpcs@gmail.com

Revista Fuentes
2024, *26*(2), 198-210
https://doi.org/10.12795/revistafuentes.2024.23116

Received: 2023-02-09
Revised: 2023-02-15
Accepted: 2024-01-25
First Online: 2024-02-15
Published: 2024-05-15

revistaFuentes

1. Introduction

The COVID-19 pandemic hurt learning levels due to the low quality of distance education (García-Castro et al., 2022), with observed limitations in the teaching and learning strategies employed (Anaya, 2021). There was a lack of effective resources to mediate conflicts in the school environment (Albor-Chadid, 2022), resulting in lost learning opportunities, an increased risk of school dropout (Arellano-Esparza & Ortiz-Espinoza, 2022), and socio-economic inequalities arising from this situation (Cabrera et al., 2020; Valente, 2020). Additionally, the pandemic affected the psychosocial health and well-being of children and adolescents, two of the most vulnerable groups. It was associated with an increase in psychosocial factors, such as the loss of healthy habits, intra-family violence, and the abuse of new technologies (Sánchez, 2021), including disruptions to sleep patterns, overweight issues, and addictions (Orgilés et al., 2020). The uncertainty generated by the changes resulting from the pandemic could have affected students' perceptions of their school environment, family dynamics, beliefs about their abilities, and engagement with school, negatively impacting academic performance. The association between these aspects is developed below.

1.1. Importance of family and friends' social support in the school stage

From the perspective of ecological systems theory, three main social contexts are associated with school engagement: family, peers, and school (Sinclair et al., 2003). Having individuals to trust, with whom to express emotions, difficulties, and opinions significantly impacts school adaptation (Suárez-Orozco et al., 2009), making social support (SS) relevant.

SS refers to the set of instrumental or expressive provisions, perceived or real, offered by the community, social networks, and intimate friends in crisis situations and daily life (Lin, 1986). This is especially crucial during adolescence, characterized by changes where individuals are exposed to family, social, and academic circumstances that could lead to health problems (Navarro-Loli et al., 2019).

In this sense, the family is a vital emotional axis for the full development of individuals, with parents and other family members playing a crucial role in adolescents' academic outcomes and adaptation to school (Simpkins et al., 2019; Veiga et al., 2015). During the pandemic, positive bonds between parents and children strengthened, positively impacting adolescents' mental health (Jones et al., 2021).

Furthermore, friends at school become increasingly important as young people enter adolescence (Smetana et al., 2015), a trend enhanced by the constant use of social networks (Guadarrama-Cárdenas & Mendoza-Ruíz, 2022). Therefore, the peer group could become the most influential socializing context during adolescence. Although the perception of family support decreases during this stage (Bokhorst et al., 2010), it continues to exert a strong influence, collectively impacting beliefs about adolescent engagement and academic competencies.

1.2. Influence of social support (family and friends) on academic engagement in adolescents.

Academic engagement (AE) refers to a positive mental state and satisfaction with studies and is configured around the dimensions of dedication, which involves enthusiasm and joy in the face of academic challenges, vigor linked to high levels of energy, and absorption, or the degree of concentration or immersion in activities (Schaufeli & Salanova, 2007). In other words, it relates to the extent to which students engage with their learning and actively participate in their academic activities and achievements (Usán-Supervía et al., 2018).

Academic engagement is a vital factor in social-personal development and academic success and is influenced by contextual aspects such as family or peers (Ansong et al., 2017; Miranda-Zapata et al., 2018; Miranda-Zapata et al., 2021; Winter et al., 2020).

Regarding the family, the support provided by parents strengthens the bond with schools, fostering a climate of warmth and encouraging decision-making (Pan et al., 2017; Sağkal & Sönmez, 2021), and holds more significance than peer support (Ansong et al., 2017).

However, it is also possible to observe the limited involvement of parents in accompanying and reviewing school tasks (Beltrán, 2013), which may increase in poverty contexts (Sucari et al., 2019).

On the other hand, emotional support provided by peers is also important for school participation, as adolescents with positive interactions with them are more engaged both behaviorally and emotionally in school (Steenberghs et al., 2021; Wang & Eccles, 2013).

DOI: 10.12795/revistafuentes.2024.23116

1.3. Influence of social support (family and friends) on academic self-efficacy in adolescents

Academic self-efficacy (ASE) is a set of judgments that students form about their abilities to plan and make decisions to achieve expected performance through the self-regulation of their attitudes during this process (García-Méndez & Rivera-Ledesma, 2021).

In this sense, contexts close to the student promote their engagement in school, where parents, teachers, and peers provide suggestions and feedback on what they should think and how they should behave in social situations, with these praises being fundamental for the development of self-efficacy beliefs (Skaalvik et al., 2015). Furthermore, when parents encourage their children more and demonstrate higher educational expectations, adolescents have greater confidence in their abilities and improve their academic performance (Izar de la Fuente et al., 2019; Kağıtçıbaşı, 2017; Kontaş & Özcan, 2022).

Regarding peers, interactions among students positively contribute to their academic performance because, through forming friendships, they learn to work as a team and resolve conflicts, as well as provide support, resources, and information (Kağıtçıbaşı, 2017). Thus, peers play a crucial role in students' lives during basic education, influencing adjustment and academic performance due to adolescents' tendency to choose friends with similar levels of performance and engagement, subsequently conveying a similar achievement expectation that influences academic performance (Izar de la Fuente et al., 2019).

1.4. Influence of academic self-efficacy on academic engagement

There is evidence that academic self-efficacy increases academic engagement (Sağkal & Sönmez, 2021; Usán-Supervía et al., 2018) because if the student is convinced, they will successfully complete the task, they will be more involved in it (Dogan, 2015), especially if they have previously succeeded in similar tasks. Conversely, a student with low confidence in their potential task success will not invest time or energy in it (Dogan, 2015). In the recent context of the pandemic, academic self-efficacy played a key role in addressing its consequences, particularly in adapting traditional face-to-face teaching to new modalities such as remote or virtual and hybrid environments.

1.5. Influence of academic engagement on academic performance

When it comes to predicting academic success and gaining a broader understanding of the factors involved, academic engagement emerges as a relevant construct within the growing number of social spaces where reciprocal relationships and bidirectional practices of trust, support, growth, and loyalty are established (Olivier et al., 2021). Furthermore, academic engagement is relevant because it brings together the intrinsic and extrinsic elements essential for the student to take responsibility and engage in their academic process to achieve mastery, connect with the educational institution, and find a purpose associated with their life project (Sarmiento-Martínez, et al., 2022).

Therefore, considering that academic performance is contingent on the success of the teaching-learning process, it is essential to understand the factors that predict it, and academic engagement is one of them (Liu & Flick, 2019; Miranda-Zapata et al., 2018; Miranda-Zapata et al., 2021). This indicates that less initiative to participate in activities will impact learning and performance (Li et al., 2020).

1.6. Influence of academic self-efficacy on academic performance

Self-efficacy is one of the most important factors for achieving favorable academic outcomes (Bandura, 1997) and significantly predicts academic performance (Usán-Supervía & Quílez-Robres, 2021). This is possible because students with high academic self-efficacy may perceive tasks as challenges and approach them with their knowledge and skills with a more positive attitude, increasing motivation for self-regulated task performance. This would unfold the necessary actions to achieve learning goals, guiding them toward more active behavior and a higher likelihood of attaining the desired academic performance (Güngör, 2020).

Therefore, changes in interest and perceived task difficulty may affect beliefs in academic self-efficacy and, subsequently, student performance (Nuutila et al., 2021). Additionally, academic performance and academic self-efficacy mutually influence each other over time (Ribeiro, et al., 2022; Talsma et al., 2018), making their joint consideration important.

1.7. Influence of social support on academic performance in schoolchildren

Students perform better academically when they perceive support from their environment (Alarcón-Lucuy & Coca-Lopez, 2022; Martínez et al., 2020; Vasiliki, 2022). Thus, this family and peer support allows students to better navigate the challenges presented in the school environment, as it is considered a resource they can rely on, especially in facing increased stress levels (Estrada & Mamani, 2020; Rodríguez, 2017). It is noteworthy that family support has a greater influence than peer support (Kağıtçıbaşı, 2017; Rodríguez et al., 2018), as the family expresses higher achievement expectations. However, it is essential to emphasize that the influence of parental involvement in their children's education is influenced by socio-economic, cultural, and educational aspects of the family context. If a family considers their children's education important from their perspective but lacks the necessary conditions to promote learning, it will pose an obstacle to achieving educational goals (Espitia-Carrascal & Montes-Rotela, 2021).

Peers have a significant influence on academic engagement and success (Buhs et al., 2006). Furthermore, this relationship is even more intense when mediated by academic self-efficacy (Thijs & Verkuyten, 2008) and academic engagement (Tomás et al., 2016).

On one hand, by increasing self-efficacy beliefs, the students will be convinced they will achieve good results through their efforts and will engage more actively in tasks (Juvonen et al., 2017), enhancing their learning (Pan et al., 2017). On the other hand, academic engagement serves as a mediator, enhancing the effects of the student's personal, social, and school context on academic achievement and satisfaction with school (Tomás et al., 2016). Conversely, the absence of support will distance the student from the curriculum, halting learning, creating dissatisfaction, and fostering beliefs of incompetence that increase the likelihood of dropping out of school (Pan et al., 2017).

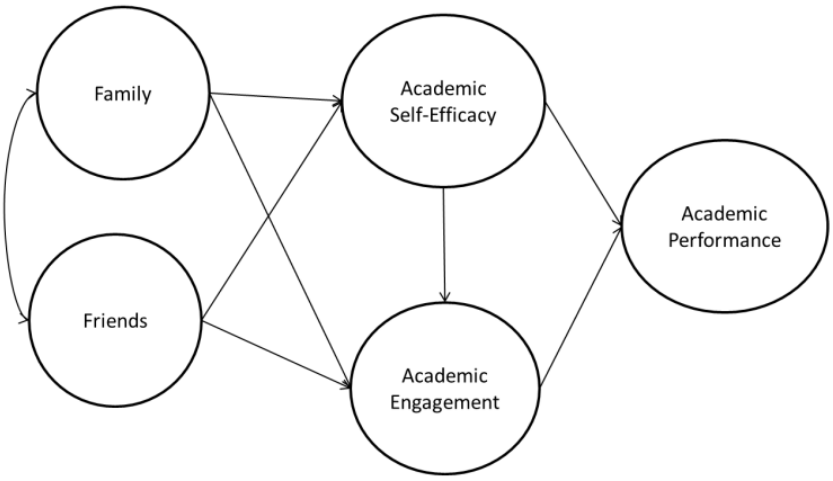

Figure 1. Explanatory model of academic performance. Note: For simplicity, chart items have been removed. Source: Own elaboration.

1.8. The present study

Academic performance is a current concern due to its relationship with the increasing academic offerings and the high number of students enrolled in private educational institutions (Grasso, 2020). As the number of students in private basic education institutions increases, it becomes less likely to monitor the learning of all students, making it challenging to detect cases that require specialized attention. Various psychosocial factors affect student performance, and these factors should be considered when assessing academic quality in adolescents before they enter higher education (García-Martín & Cantón-Mayo, 2019). There is evidence that performance in basic education predicts performance in university education (Tapasco-Alzate et al., 2021), leading institutions to do their best to optimize learning conditions.

It is known that the major determinants of student academic performance are their perception of self-efficacy and engagement, both of which are also influenced by the social support (AS) from family and

 DOI: 10.12795/revistafuentes.2024.23116

peers/friends. This creates overlapping spheres of influence between school, family, and community working together to guide and support student learning and academic development. Additionally, academic self-efficacy is directly related to self-regulation processes, as in a highly distracting environment, it becomes increasingly difficult for students to be successful, resulting in lower academic performance. This poses a significant social problem that will impact the quality of young professionals in the future.

In this context, the objective of this study is to understand the impact of perceived social support on academic performance in schooled adolescents, considering the mediating role of academic engagement and self-efficacy. The research hypotheses were:

Hypothesis 1: Family and friends' social support directly and positively influence academic engagement.
Hypothesis 2: Family and friends' social support directly and positively influence academic self-efficacy.
Hypothesis 3: Academic self-efficacy directly and positively influences academic engagement.
Hypothesis 4: Academic engagement directly and positively influences academic performance.
Hypothesis 5: Academic self-efficacy directly and positively influences academic performance.
Hypothesis 6: Family and friends' social support, considering the mediating role of academic engagement and academic self-efficacy, indirectly and positively influence academic performance.

2. Methodology

2.1. Design

The study is situated within an explanatory design (Ato et al., 2013), focused on analyzing an explanatory model using structural equation modeling.

2.2. Participants

A total of 623 adolescents participated in the study, with 51.364% being female, ranging in age from 12 to 17 years (Mean = 14.255; SD_{age} = 1.454). Of the participants, 61.637% lived with both parents, 18.459% with only the mother, 2.408% with only the father, and the remaining students had other family configurations. All participants were enrolled in grades one through five of secondary education and came from four jointly managed private schools (State and Church) located in the Constitutional Province of Callao (central coast of Peru). These schools predominantly cater to students from a medium-low socioeconomic background.

2.3. Instruments

The *Multidimensional Scale of Perceived Social Support* (MSPSS; Zimet et al., 1988) was employed in its validated version for Peruvian adolescents (Navarro-Loli et al., 2019). Originally assessing three dimensions of social support (family, friends, and significant others), it consists of 12 items scaled in Likert format with seven response alternatives (ranging from *strongly disagree* [1] to *strongly agree* [7]). For this study, only the first two dimensions were considered, showing a good fit (CFI = .994; RMSEA [90% CI] = .075 [.059, .091]; WRMR = 0.762), and high reliability for perceived family support (α = .873) and friend support (α = .922).

The six-item version of the *Utrecht Work Engagement Scale – Student* (Schaufeli et al., 2002), validated in Peruvian school students (UWES-6S; Dominguez-Lara et al., 2022), was used. This version is based on the original nine-item scale (UWES-9S; Schaufeli et al., 2006). The UWES-6S assesses work engagement unidimensionally with six items and seven response options (from *Never* [0] to *Always* [6]). In this study, the UWES-6S demonstrated an acceptable fit (CFI = .983; RMSEA [90% CI] = .149 [.127, .172]; WRMR = 0.987) and high score reliability (α = .898).

The version tailored for Peruvian adolescents (Navarro-Loli & Dominguez-Lara, 2019) of the *Perceived Self-Efficacy Scale in Academic Situations* (EAPESA; Palenzuela, 1983) was utilized. The EAPESA assesses academic self-efficacy unidimensionally with seven items and four response options (from *Never* [1] to *Always* [4]). The fit with the data in this study was adequate (CFI = .993; RMSEA [90% CI] = .075 [.056, .094]; WRMR = 0.791), and the score reliability was high (α = .897).

Finally, to assess academic performance, the institution's grade records in three subjects—science and technology, mathematics, and communication—were taken into account. For analytical purposes, academic performance was treated as a latent variable. In the current study, the score reliability was deemed acceptable (α = .770).

revistafuentes

2.4. Procedure

This report is the result of a research project approved by the Institutional Ethics Committee of the Universidad Privada San Juan Bautista (Registration No. 063-2021-CIEI-UPSJB). Additionally, it was conducted by the Declaration of Helsinki (2013) and the Code of Ethics of the Colegio de Psicólogos del Perú (2018).

Subsequently, contact was made with the participating educational institutions, and parents were approached to obtain authorization for the assessment of students through an informed consent form created on Google Forms. The consent form outlined the research objectives, the confidential treatment of data, and the potential use of the results. The inclusion criterion for the study was adolescents in grades one to five of secondary education from private schools. The evaluation took place during classes, and only those adolescents who agreed after the objectives of the study were explained participated. The assessment was conducted using a *Google Form*.

2.5. Data Analysis

Regarding the analytical section, structural regression (Figure 1) was employed for testing the research hypotheses. The Weighted Least Squares Mean and Variance Adjusted (WLSMV) estimation method was used. Model fit was assessed using the Comparative Fit Index (CFI) (> .90; McDonald & Ho, 2002) and the Root Mean Square Error of Approximation (RMSEA) (< .08; Browne & Cudeck, 1993). The analysis was conducted using Mplus version 7 (Muthén & Muthén, 1998 - 2015).

After evaluating the individual fit of the instruments and an oblique model illustrating the association between variables, relationships between predictor and criterion variables were modeled according to the proposed model (Figure 1). Direct and indirect effects were analyzed from an effect size perspective. Concerning direct effects between constructs, effects were categorized as low if less than .30, moderate between .30 and .50, and high if greater than .50 (Miranda-Zapata et al., 2018). The explained variance of criterion variables within the model was quantified similarly to R^2: less than .04 was considered insignificant, between .04 and .25 small, between .25 and .64 moderate, and greater than .64 large.

As for indirect effects, they were quantified in terms of explained variance, following the criteria mentioned in the previous paragraph.

3. Results

3.1. Measurement Model Evaluation

Preliminarily, the oblique model showed a good fit (CFI = .973; RMSEA [90% CI] = .060 [.055, .064]; WRMR = 1.182), and significant reliability coefficients and interfactorial correlations (> .20) were observed among the constructs (Table 1).

Table 1
Construct reliability and interfactorial correlations

	ω	1	2	3	4	5
1. Social support (family)	.907	1				
2. Social support (friends)	.941	.347	1			
3. Academic engagement	.916	.539	.209	1		
4. Academic self-efficacy	.929	.523	.236	718	1	
5. Academic performance	.913	.167	.051	.248	.355	1

Note: ω: omega coefficient

3.2. Evaluation of Research Hypotheses

Regarding the overall assessment of the proposed model, it showed favorable fit indices (CFI = .979; RMSEA [90% CI] = .053 [.048, .058]; WRMR = 1.120). The first hypothesis (Family and friends' social support

DOI: 10.12795/revistafuentes.2024.23116

directly and positively influences academic engagement) and the second hypothesis (Family and friends' social support directly and positively influences academic self-efficacy) receive partial support, as only family support significantly influences academic engagement and academic self-efficacy at a high level (γ > .50) and a low level (γ < .30), respectively.

On the other hand, the third hypothesis (Academic self-efficacy directly and positively influences academic engagement) is supported, showing a high influence (γ > .50), although the fourth hypothesis (Academic engagement directly and positively influences academic performance) did not receive favorable evidence. Conversely, the fifth hypothesis (Academic self-efficacy directly and positively influences academic performance) is supported, demonstrating a moderate influence (γ > .30).

Regarding explained variance, the model moderately explains the variance in academic self-efficacy (R^2 = .275) and academic engagement (R^2 = .554), while the explained variance in academic performance could be considered low (R^2 = .140).

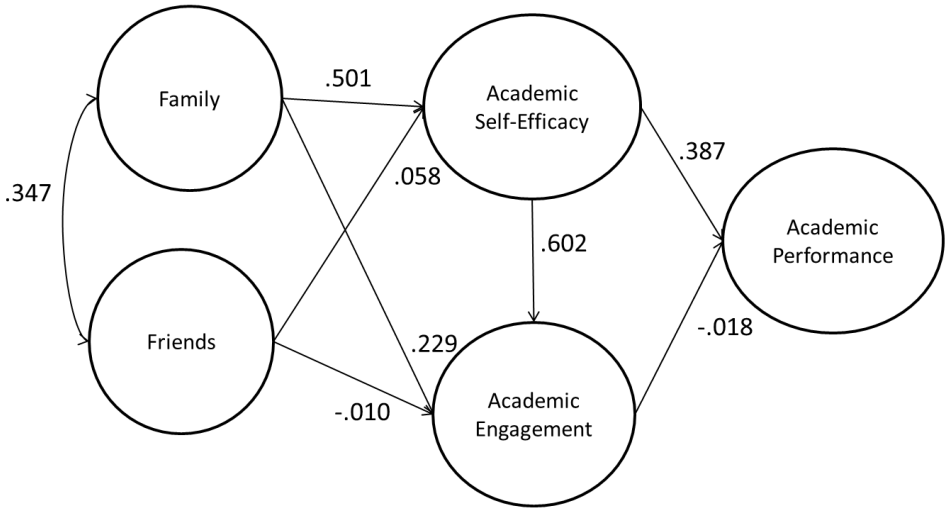

Figure 2. Explanatory model of academic performance

Regarding the sixth hypothesis (Family and friends' social support, considering the mediating role of academic engagement and academic self-efficacy, indirectly and positively influences academic performance), the data suggest partial support, considering that only the dimension related to family, and in the presence of academic self-efficacy, shows an indirect and positive influence (Table 2).

Table 2
Factorial parameters of the oblique three-factor model by age

Associations	Effects
Effects of social support (Family) on academic performance	
Total indirect effect	.203
Specific indirect effect	
SS (Family) → ASE→ AP	.209
SS (Family) → ASE→ AE → AP	-.006
Effects of social support (Friends) on academic performance	
Total indirect effect	.024
Specific indirect effect	
SS (Friends) → ASE→ AP	.024

Note: SS = Social Support; ASE = Academic Self-Efficacy; ÃP = Academic Performance; AE = Academic Engagement

4. Discussion

The present research aimed to contribute to a better understanding of the factors that enhance academic performance in Peruvian students, specifically perceived social support, academic self-efficacy, and academic engagement. After presenting the theoretical foundations and assumptions, justifying the chosen methodological approaches, and disseminating and discussing the findings, it became possible to systematize the results obtained through a deeper level of reflection.

There is evidence of the influence of perceived social support from family and friends on academic self-efficacy (Izar de la Fuente et al., 2019; Kağıtçıbaşı, 2017; Kontaş & Özcan, 2022) and academic engagement (Miranda-Zapata et al., 2018; Miranda-Zapata et al., 2021; Winter et al., 2020). However, the importance of these factors tends to lean towards family support (Ansong et al., 2017). In this regard, the inclusion of family and friends' social support in the model allowed visualizing that family support is more relevant both in terms of academic self-efficacy and academic engagement. Therefore, the existence of family support will enable students to form and consolidate a set of beliefs about their capabilities to adjust to the potential challenges of the school environment, thereby increasing their adaptability, cohesion, and resilience to cope with potential stress levels (Estrada & Mamani, 2020).

The influence of academic self-efficacy on academic engagement is well-documented (Sağkal & Sönmez 2021; Usán-Supervía et al., 2018). Therefore, beliefs about one's capabilities increase the likelihood of actively engaging in academic tasks inherent to school life. On the other hand, while there is previous evidence of the independent influence of academic self-efficacy and academic engagement on academic performance (Miranda-Zapata et al., 2021; Sarmiento-Martínez et al., 2022; Usán-Supervía & Quílez-Robres, 2021), in this study, only academic self-efficacy showed significant influence. Thus, academic self-efficacy is crucial as it represents a belief that prevails in the student's effort, persistence, and use of cognitive and metacognitive strategies, influencing academic outcomes. Students who successfully complete school activities and achieve good academic performance experience a sense of confidence in their abilities, generally fostering renewed engagement in studying, leading to constant positive feedback. The lack of influence of academic engagement on academic performance is explained by its strong bivariate association with academic self-efficacy (> .70). When analyzing both variables together in the structural model, it gives greater importance to self-efficacy beliefs.

On the other hand, the research results are consistent with the influence of perceived social support on students' academic performance, with academic self-efficacy and academic engagement as mediating variables (Thijs & Verkuyten, 2008; Tomás et al., 2016). Several studies reveal that students exhibit better academic performance when they feel supported by social support, specifically, if this support comes from family members (Alarcón-Lucuy & Coca-Lopez, 2022; Martínez et al., 2020; Vasiliki, 2022) or peers (Buhs et al., 2006). The results indicate that the most significant influence on academic performance comes from the family sphere, with academic self-efficacy as a mediator. In other words, the constant support from the family shapes and consolidates students' self-efficacy beliefs, enhancing their academic performance.

Regarding limitations, the results of this study should be interpreted with caution, considering that the sample size, while large, does not allow for generalization to other regions due to a lack of geographical representativeness, needing expansion in future research. Another limitation is that it is a self-report instrument and is specifically aimed at a single data collection technique. However, the use of structural equation modeling represents a methodological strength because it allows for the simultaneous analysis of variables, given that there are some bivariate associations (e.g., correlations) with empirical evidence (e.g., academic engagement and academic performance) that are not replicated in the results due to the presence of other variables with greater explanatory relevance.

The practical implications of this study are diverse as it contributes to systematizing and operationalizing an analytical model to understand, in an interrelated and reflective manner, the dynamics established between the set of personal and contextual variables of students and their academic performance. Firstly, institutional and pedagogical management of educational centers needs to incorporate changes in educational environments and curricular designs to define policies and operationalize practices focused on the development of processes that can improve students' academic performance. For example, developing educational actions to promote parental involvement in the educational process (Cosso et al., 2022), considering the diversity of existing family environments (Alarcón-Lucuy & Coca-Lopez, 2022), and simultaneously increasing students' self-efficacy strategies to improve their academic performance (Eyni & Hashemi, 2022).

DOI: 10.12795/revistafuentes.2024.23116

5. Conclusions

Regarding the overall model, it is concluded that perceived social support from the family, with academic self-efficacy as a mediator, positively impacts students' academic performance. Additionally, more specifically, academic self-efficacy influences academic engagement and academic performance.

Finally, it is recommended for future studies to use various methodologies simultaneously to reduce the impact of a single evaluation method or approach. Likewise, it would be interesting to employ longitudinal designs and have larger samples, if possible from both public and private institutions, considering the cultural and social diversity existing in all regions of Peru, as differences in learning preferences may be found based on demographic variables. Furthermore, in addition to academic variables, it would also be necessary to evaluate more stable aspects, such as personality (Serrano et al., 2022), considering the importance of some of its dimensions in academic performance (Bergold and Steinmayr, 2018; Morales-Vives et al., 2020), or emotional intelligence, whose relevance is emphasized in the post-pandemic context (Dominguez-Lara et al., 2023), as well as the possibility of massive assessments at the beginning of the school year.

CRediT autorship contribution statement

SDL, **SV**, and **AAL** conceptualized the study. **SDL**, **MDP**, **SNV**, and **AAL** wrote the initial draft of the manuscript. All authors critically reviewed the manuscript's progress and made significant contributions. BPP was responsible for data collection. **SDL** conducted the data analysis. The manuscript's content was approved by all authors.

References

Alarcón-Lucuy, M. C., & Coca-Lopez, I. C. (2022). Influencia del entorno familiar en el rendimiento escolar de estudiantes de 12 a 15 años de la Unidad Educativa Ayacucho del distrito de Catavi, Norte Potosí Bolivia. *Revista Ciencia y Sociedad, 2*(3), 232–242. http://www.cienciaysociedaduatf.com/index.php/ciesocieuatf/article/view/44

Albor-Chadid, L. (2022). Propuesta educativa metodológica aplicada a través del comics por una construcción de paz. *MSC Métodos de Solución de Conflictos, 2*(2), 23-38. https://doi.org/10.29105/msc2.2-18

Anaya, T., Montalvo, J., Calderón, A., & Arizpe, C. (2021). Escuelas rurales en el Perú: factores que acentúan las brechas digitales en tiempos de pandemia (COVID-19) y recomendaciones para reducirlas. *Educación,* 30(58), 11-33. https://doi.org/10.18800/educacion.202101.001

Ansong, D., Okumu, M., Bowen, G., Walker, A., & Eisensmith, S. (2017). The role of parent, classmate, and teacher support in student engagement: Evidence from Ghana. *International Journal of Educational Development*, 54, 51–58. http://doi.org/10.1016/j.ijedudev.2017.03.010

Arellano-Esparza, C. A., & Ortiz-Espinoza, Á. (2022). Educación media superior en México: abandono escolar y políticas públicas durante la COVID-19. *Íconos. Revista de Ciencias Sociales, 74*, 33-52. https://doi.org/10.17141/iconos.74.2022.5292

Ato, M., López, J. J., & Benavente, A. (2013). Un sistema de clasificación de los diseños de investigación en psicología. *Anales de Psicología, 29*(3), 1038-1059. https://doi.org/10.6018/analesps.29.3.178511

Bandura, A. (1997). *Self-efficacy: The exercise of control.* W H Freeman/Times Books/ Henry Holt & Co.

Beltrán, A. (2013). El tiempo de la familia es un recurso escaso: ¿cómo afecta su distribución en el desempeño escolar? *Apuntes, 40*(72), 117 – 156. https://doi.org/10.21678/apuntes.72.677

Bergold, S., & Steinmayr, R. (2018). Personality and intelligence interact in the prediction of academic achievement. *Journal of Intelligence*, *6*(2), 27. https://doi.org/10.3390/jintelligence6020027

Bokhorst, C., Sumter, S., & Westenberg, P. (2010). Social support from parents, friends, classmates, and teachers in children and adolescents aged 9 to 18 years: Who is perceived as most supportive? *Social Development, 19*(2), 417–426. http://doi.org/10.1111/j.1467-9507.2009.00540.x

Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 445–455). Sage.

Buhs, E., Ladd, G., & Herald, S. (2006). Peer exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement. *Journal of Educational Psychology, 98*(1), 1 – 13. https://doi.org/10.1037/0022-0663.98.1.1

Cabrera, L., Pérez, C. N., & Santana, F. (2020). ¿Se incrementa la desigualdad de oportunidades educativas en la enseñanza primaria con el cierre escolar por el coronavirus? *International Journal of Sociology of Education, 9(Special Issue)*, 27-52. https://doi.org/10.17583/rise.2020.5613.

Colegio de Psicólogos del Perú (2018). *Código de ética y deontología*. https://www.cpsp.pe/documentos/marco_legal/codigo_de_etica_y_deontologia.pdf

Cosso, J., von Suchodoletz, A., & Yoshikawa, H. (2022). Effects of parental involvement programs on young children's academic and social–emotional outcomes: A meta-analysis. *Journal of Family Psychology*. Advance online publication. https://doi.org/10.1037/fam0000992

Declaration of Helsinki (2013). Ethical principles for medical research involving human subjects. *JAMA, 310*(20), 2191-2194. https://doi.org/10.1001/jama.2013.281053

Dogan, U. (2015). Student engagement, academic self-efficacy, and academic motivation as predictors of academic performance. *The Anthropologist*, *20*(3), 553-561. https://doi.org/10.1080/09720073.2015.11891759

Dominguez-Lara, S., Peceros-Pinto, B., Centeno-Leyva, S., Valente, S., Lourenço, A., Quistgaard-Alvarez, A., & Morales-Velásquez, M. (2022). Análisis psicométrico y datos normativos de la UWES en adolescentes peruanos. *Ciencias Psicológicas, 16*(2), e–2908. https://doi.org/10.22235/cp.v16i2.2908.

Dominguez-Lara, S., Peceros-Pinto, B., Valente, S. N., Lourenço, A. A., & Flores-Cataño, K. R. (2023). Análisis estructural de una versión breve de la Trait Meta-Mood Scale en adolescentes peruanos. *Revista Fuentes*, *25*(1), 82–100. https://doi.org/10.12795/revistafuentes.2023.22077

Espitia-Carrascal, R. E., & Montes-Rotela, M. (2021). Influencia de la familia en el proceso educativo de los menores del barrio costa azul de Sincelejo (Colombia). *Investigación & Desarrollo, 17*(1), 84–105. https://rcientificas.uninorte.edu.co/index.php/investigacion/article/view/803

Estrada, E., & Mamani, H. (2020). Funcionamiento familiar y niveles de logro de aprendizaje de los estudiantes de educación básica. *Revista Universitaria de Hermilio Vardizán, 14*(2), 96 – 102. http://revistas.unheval.edu.pe/index.php/riv

Eyni, S., & Hashemi, Z. (2022). The effectiveness of cognitive-behavioral intervention on decisional procrastination and academic self-efficacy education the students. *Journal of School Psychology, 11*(1), 68-79. https://doi.org/10.22098/jsp.2022.1571

Fondo de las Naciones Unidas para la Infancia (2020). *La educación en América Latina y el Caribe ante el COVID-19.* https://www.unicef.org/lac/informes/orientacion-para-la-prevencion-y-elcontrol-del-covid19-en-las-escuelas.

García-Castro, R. A., Chura-Quispe, G., Llapa-Medina, M. P., & Arancibia-Baspineiro, L. (2022). Validación de cuestionario de satisfacción de la enseñanza virtual para educación secundaria. *Revista Fuentes*, *24*(2), 162–173. https://doi.org/10.12795/revistafuentes.2022.19773

García-Méndez, R., & Rivera-Ledesma, A. (2021). Escala de autoeficacia en la vida académica: Propiedades psicométricas en estudiantes de nuevo ingreso al nivel universitario. *Revista Electrónica Educare, 25*(2), 1-24. https://doi.org/10.15359/ree.25-2.1

García-Martín, S., & Cantón-Mayo, I. (2019). Uso de tecnologías y rendimiento académico en estudiantes adolescentes. *Comunicar*, *27*(59). https://doi.org/10.3916/C59-2019-07

Grasso, P. (2020). Rendimiento académico: un recorrido conceptual que aproxima a una definición unificada para el ámbito superior. *Revista de Educación, 11*(20), 89-104. https://fh.mdp.edu.ar/revistas/index.php/r_educ/article/view/4165

Guadarrama-Cárdenas, M. I., & Mendoza-Ruíz, M. G. (2022). Influencia de las redes sociales en el rendimiento académico de los estudiantes de nivel medio superior de la UAEMéx. *Diversidad Académica, 2*(1), 216-240. https://diversidadacademica.uaemex.mx/article/view/19650/14570

Güngör, A. Y. (2020). The relationship between academic procrastination academic self-efficacy and academic achievement among undergraduates. *Oltu Beşeri ve Sosyal Bilimler Fakültesi Dergisi, 1*(1), 57-68. https://bit.ly/3a3MzcF

Izar de la Fuente, I., Rodríguez, A., & Escalante, N. (2019). Apoyo social percibido e implicación escolar: correlaciones y variabilidad. *European Journal of Child Development, Education and Psychopathology, 7*(1), 23-35. https://doi.org/10.30552/ejpad.v7i1.86

Jones, E., Mitra, A. K., & Bhuiyan, A. R. (2021). Impact of COVID-19 on Mental Health in Adolescents: A Systematic Review. *International Journal of Environmental Research and Public Health*, *18*(5), 2470. https://doi.org/10.3390/ijerph18052470

Juvonen, J., Espinoza, G., & Knifsend, C. (2012). The role of peer relationships in student academic and extracurricular engagement. In Christenson, S., Reschly, A. & Wylie, C. (Eds.), *Handbook of research on student engagement (*pp. 387-401). Springer. https://doi.org/10.1007/978-1-4614-2018-7_18

Kağıtçıbaşı, C. (2017). *Family, self, and human development across cultures*. Routledge.

Kontaş, H., & Özcan, B. (2022). Explaining Middle School Students' Mathematical Literacy with Sources of Self-Efficacy, Achievement Expectation from Family, Peers and Teachers. *International Journal of Education & Literacy Studies, 10*(1) 198 - 206. https://doi.org/10.7575/aiac.ijels.v.10n.1p.198

Li, L., Chen, X., & Li, H. (2020). Bullying victimization, school belonging, academic engagement and achievement in adolescents in rural China: A serial mediation model. *Children and Youth Services Review*, 113. https://doi.org/10.1016/j.childyouth.2020.104946

Lin, N. (1986). Conceptualizing social support. En Lin, N., Dean, A. y Ensel.T. (Eds.), *Social support, life events and depression* (pp. 103-105). Academic Press

Liu, X., & Flick, R. (2019). The relationship among psychological need satisfaction, class engagement, and academic performance: Evidence from China. *Journal of Education for Business, 94*(6), 408–417. https://doi.org/10.1080/08832323.2018.1541855

Martínez, G. I., Torres, M. J., & Ríos, V. L. (2020). El contexto familiar y su vinculación con el rendimiento académico. *IE Revista de Investigación Educativa de la REDIECH, 11*, e657. https://doi.org/10.33010/ie_rie_rediech.v11i0.657

McDonald, R. P., & Ho, M.-H. R. (2002). Principles and practice in reporting structural equation analyses. *Psychological Methods, 7*(1), 64–82. https://doi.org10.1037/1082-989X.7.1.64

Miranda-Zapata, E., Lara, L., Navarro, J.-J., Saracostti, M., & De-Toro, X. (2018). Modelización del efecto del compromiso escolar sobre la asistencia a clases y el rendimiento escolar. *Revista de Psicodidáctica*, 23(2), 102-109. https://doi.org/10.1016/j.psicod.2018.02.003

Miranda-Zapata, E., Lara, L., & Saracostti, M. (2021). Modelización del efecto del compromiso escolar sobre el rendimiento escolar en cinco países de Iberoamérica. *Revista Iberoamericana de Diagnóstico y Evaluación – e Avaliação Psicológica*. 59(2), pp.151-161 https://doi.org/10.21865/RIDEP59.2.12

Morales-Vives, F., Camps-Ribas, E., & Dueñas-Rada, J. M. (2020). Predicting academic achievement in adolescents: The role of maturity, intelligence and personality. *Psicothema, 32*(1), 84-91. https://doi.org/10.7334/psicothema2019.262

Muthén, L. K., & Muthén, B. O. (1998 - 2015). *Mplus User's guide* (7th ed.). Muthén & Muthén. https://www.statmodel.com/download/usersguide/MplusUserGuideVer_7.pdf

Navarro-Loli, J. S., & Dominguez-Lara, S. (2019). Propiedades psicométricas de la Escala de Autoeficacia Percibida Específica de Situaciones Académicas en adolescentes peruanos. *Psychology, Society, and Education, 11*(1), 53-68. https://doi.org/10.25115/psye.v10i1.1985

Navarro-Loli, J. S., Merino-Soto, C., Dominguez-Lara, S., & Lourenço, A. (2019). Estructura interna de la Multidimensional Scale of Perceived Social Support (MSPSS) en adolescentes peruanos. *Revista Argentina de Ciencias del Comportamiento*, *11*(1), 38-47. https://doi.org/10.32348/1852.4206.v11.n1.21532

Nuutila, K., Tapola, A., Tuominen, H., Molnar, G., & Niemivirta, M. (2021) Mutual relationships between the levels of and changes in interest, self-efficacy, and perceived difficulty during task engagement. *Learning and Individual Differences, 92,* 102090, https://doi.org/10.1016/j.lindif.2021.102090

Olivier, E., Galand, B., Morin, A. J., & Hospel, V. (2021). Need-supportive teaching and student engagement in the classroom: Comparing the additive, synergistic, and global contributions. *Learning and Instruction, 71*, 101389. https://doi.org/10.1016/j.learninstruc.2020.101389

Orgilés M., Morales A., Delvecchio E., Mazzeschi C., & Espada J.P. (2020). Immediate psychological effects of the COVID-19 quarantine in youth from Italy and Spain. *Frontiers in Psychology, 11*, 579038. https://doi.org/10.3389/fpsyg.2020.579038

Palenzuela, D. (1983). Construcción y validación de una escala de autoeficacia percibida específica de situaciones académicas. *Análisis y Modificación de Conducta, 9*(21), 185-219. https://doi.org/10.33776/amc.v9i21.1649

Pan, J., Zaff, J., & Donlan, A. (2017). Social support and academic engagement among reconnected youth: Adverse life experiences as a moderator. *Journal of research on adolescence: The official journal of the Society for Research on Adolescence*, *27*(4), 890–906. https://doi.org/10.1111/jora.12322

Ribeiro, M. F., Ribeiro, C., & Pereira, P. (2022). Fatores preditores do desempenho académico: motivação, satisfação e autoeficácia. *Gestão e Desenvolvimento, 30*, 41-89. https://doi.org/10.34632/gestaoedesenvolvimento.2022.11319

Rodríguez, A. (2017). Estilos y estrategias de afrontamiento en adolescentes droga-dependientes de la zona valle de la provincia de Jujuy. *Difusiones, 3*(3), 111-126. https://revistadifusiones.net/index.php/difusiones/article/view/30

Rodríguez, A., Ramos, E., Ros, I., & Zuazagoitia, A. (2018). Implicación escolar de estudiantes de secundaria: La influencia de la resiliencia, el autoconcepto y el apoyo social percibido. *Educación XX1*, *21*(1), 87-108. https://www.redalyc.org/pdf/706/70653466005.pdf

Sağkal, A. S., & Sönmez, M. T. (2021). The effects of perceived parental math support on middle school students' math engagement: the serial multiple mediation of math self-efficacy and math enjoyment. *European Journal of Psychology of Education.* Avance online. https://doi.org/10.1007/s10212-020-00518-w

Sánchez, B. (2021). Impacto psicológico de la COVID-19 en niños y adolescentes. *MEDISAN*, *25*(1), 123-141. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S1029-30192021000100123&lng=es&tlng=es.

Sarmiento-Martínez, A. M., Moreno-Acero, I. D., & Morón-Castro, C. (2022). Engagement académico: un elemento clave para el éxito académico. *Praxis, 18*(1), 1-17. https://doi.org/10.21676/23897856.3695

Schaufeli, W. B., & Salanova, M. (2007). Efficacy or inefficacy, that's the question: Burnout and engagement, and their relationships with efficacy beliefs. *Anxiety, Coping & Stress, 20*(2), 177-196. https://doi.org/10.1080/10615800701217878

Schaufeli, W., Bakker, A., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: a cross–national study. *Educational and Psychological Measurement, 66*(4), 701-716. https://doi.org/10.1177/0013164405282471

Serrano, C., Murgui, S. y Andreu, &. (2022). Improving the prediction and understanding of academic success: The role of personality facets and academic engagement. *Revista de Psicodidáctica, 27*(1), 21-28. https://doi.org/10.1016/j.psicoe.2021.11.002

Simpkins, S., Liu, Y., Hsieh, T., & Estrella, G. (2019). Supporting Latino high school students' science motivational beliefs and engagement: Examining the unique and collective contributions of family, teachers, and friends. *Educational Psychology, 40*(4), 409–429. http://doi.org/10.1080/01443410.2019.1661974

Sinclair, M., Christenson, S., Lehr, C., & Reschly-Anderson, A. (2003). Facilitating school engagement: Lessons learned from Check & Connect longitudinal studies. *The California School Psychologist, 8*, 29–41. http://doi.org/10.1007/BF03340894

Schaufeli, W. B., Martínez, I. M., Marqués Pinto, A., Salanova, M., & Bakker, A. B. (2002). Burnout and engagement in university students: A cross-national study. *Journal of Cross-Cultural Psychology*, *33*(5), 464–481. https://doi.org/10.1177/0022022102033005003

Skaalvik, E., Federici, R., & Klassen, R. (2015). Mathematics achievement and self-efficacy: Relations with motivation for mathematics. *International Journal of Educational Research, 72*, 129-136. https://doi.org/10.1016/j.ijer.2015.06.008

Smetana, J., Robinson, J., & Rote, W. (2015). Socialization in adolescence. In Grusec, J. y Hastings, P. (Eds.), *Handbook of socialization: Theory and research* (pp. 60–84). *Guilford Press.*

Steenberghs, N., Lavrijsen, J., Soenens, B., & Verschueren, K. (2021). Peer effects on engagement and disengagement: differential contributions from friends, popular peers, and the entire class. *Frontiers in Psychology, 12*, 726815. http://dx.doi.org/10.3389/fpsyg.2021.726815

Suárez-Orozco, C., Pimentel, A., & Martin, M. (2009). The significance of relations. Academic engagement and achievement among newcomer immigrant youth. *Teacher College Record, 111*(3), 712–749. https://doi.org/10.1177/016146810911100308

Sucari, W., Aza, P., Anaya, J., & García, J. (2019). Participación familiar en la educación escolar peruana. *Revista Innova Educación, 1*(1), 6-18. https://doi.org/10.35622/j.rie.01.001

Talsma, K., Schuz, B., Schwarzer, R., & Norris, K. (2018) I believe, therefore I achieve (and vice versa): A meta-analytic cross-lagged panel analysis of self-efficacy and academic performance. *Learning and Individual Differences, 61*, 136-150. https://doi.org/10.1016/j.lindif.2017.11.015

Tapasco-Alzate, O. A., Ruiz-Ortega, F. J., Osorio-García, D., & Ramírez-Ramírez, D. (2021). El historial académico de secundaria como factor predictor del rendimiento universitario. Caso de estudio. *Revista Colombiana de Educación*, *81*, 147-169. https://doi.org/10.17227/rce.num81-7530

Thijs, J., & Verkuyten, M. (2008). Peer victimization and academic achievement in a multiethnic sample: The role of perceived academic self-efficacy. *Journal of Educational Psychology, 100*, 754–764. http://doi.org/10.1037/a0013155

Tomás, J. M., Gutiérrez, M., & Fernández, I. (2016). Predicción de la satisfacción y el rendimiento escolar: El compromiso como mediador. *Revista Búsqueda*, *3*(16), 7-19. https://doi.org/10.21892/01239813.162

Usán, P., & Quílez, A. (2021). Emotional Regulation and Academic Performance in the Academic Context: The Mediating Role of Self-Efficacy in Secondary Education Students. *International Journal of Environmental Research and Public Health*, *18*(11), 5715. https://doi.org/10.3390/ijerph18115715

Usán-Supervía, P., Salavera-Bordás, C., & Domper-Buil, E. (2018). ¿Cómo se interrelacionan las variables de burnout, engagement y autoeficacia académica? Un estudio con adolescentes escolares. *Revista Electrónica Interuniversitaria de Formación del Profesorado*, *21*(2), 141–153. https://doi.org/10.6018/reifop.21.2.311361

Valente, S. (2020). Competências socioemocionais na atividade do educador social: Implicações à inclusão escolar. *Revista Ibero-Americana de Estudos em Educação, 15*(esp. 3), 2332-2349. https://doi.org/10.21723/riaee.v15iesp3.14441

Vasiliki, P. (2022). Examining high achievement in mathematics and science among post-primary students in Ireland: a multilevel binary logistic regression analysis of PISA data. *Large-Scale Assessments in Education*. *10*, art14. https://doi.org/10.1186/s40536-022-00131-x

Veiga, F., García, F., Reeve, J., Wentzel, K., & García, Ó. (2015). When adolescents with high self-concept lose their engagement in school. *Revista de Psicodidáctica*, *20*(2), 305-320. https://doi.org/10.1387/RevPsicodidact.12671

Wang, M.-T., & Eccles, J. S. (2013). School context, achievement motivation, and academic engagement: A longitudinal study of school engagement using a multidimensional perspective. *Learning and Instruction, 28,* 12–23. https://doi.org/10.1016/j.learninstruc.2013.04.002

Winter, L., Hernández-Torrano, D., McLellan, R., Almukhambetova, A., & Brown-Hajdukova, E. (2020). A contextually adapted model of school engagement in Kazakhstan. *Current Psychology*, *41*, 2479–2495. https://doi.org/10.1007/s12144-020-00758-5

Zimet, G., Dhalem, N., Ziment, S., & Farley, G. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, *52*(1),30 – 41. https://doi.org/10.1207/s15327752jpa5201_2