

Sociodemographic factors linked to social skills in basic education students

Factores sociodemográficos vinculados a las habilidades sociales en estudiantes de educación básica

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Abstract

Social skills play a fundamental role in student development, as they significantly contribute to improving their academic performance. In this regard, the objective of this study is to identify the sociodemographic factors associated with social skills in elementary school students. To achieve this objective, a quantitative methodology based on the analysis of statistical results was used. The research design was non-experimental, as no variables were manipulated, and the study was conducted at a descriptive and association level. The study population consisted of 876 students from a public school. The sample, selected through purposive non-probability sampling, included 308 students. Data collection was conducted using a survey technique, administering a specific questionnaire on social skills. The results of the study led to the conclusion that certain sociodemographic factors, such as the mother's educational level and the number of siblings, are significantly associated with students' social skills. Specifically, it was observed that the higher the mother's educational level, the higher the level of social skills the students tend to have. Likewise, students who have siblings also show more favorable development in these skills.

Keywords: assertiveness, sociodemographic factors, social skills.

Resumen

Las habilidades sociales desempeñan un papel fundamental en el desarrollo de los estudiantes, ya que contribuyen significativamente a mejorar su rendimiento académico. En este sentido, el objetivo del presente trabajo es identificar los factores sociodemográficos asociados a las habilidades sociales en estudiantes de educación básica. Para alcanzar este propósito, se empleó una metodología con enfoque cuantitativo, basada en el análisis de resultados estadísticos. El diseño de la investigación fue no experimental, pues no se manipularon las variables, y se ubicó en un nivel descriptivo y de asociación de variables. La población del estudio estuvo conformada por 876 estudiantes de una institución educativa pública. La muestra, seleccionada mediante un muestreo no probabilístico intencionado, incluyó a 308 estudiantes. Para la recolección de datos, se utilizó la técnica de la encuesta, aplicando un cuestionario específico sobre habilidades sociales. Los resultados del estudio permitieron concluir que ciertos factores sociodemográficos, como el grado de instrucción de la madre y la cantidad de hermanos, se asocian de manera significativa con las habilidades sociales de los estudiantes. Específicamente, se observó que a mayor nivel de instrucción de la madre, los estudiantes tienden a presentar un nivel más alto de habilidades sociales. Asimismo, aquellos estudiantes que tienen hermanos también muestran un desarrollo más favorable en estas habilidades.

Palabras clave: asertividad, factores sociodemográficos, habilidades sociales.

Introduction

In Spain, academic performance is a key factor within the teaching-learning process, and it has been the subject of study across multiple disciplines, such as education, psychology, and social sciences. Its complexity lies in its multidimensional nature, as it is influenced by various biological, psychological, economic, and sociopolitical aspects. However, the challenge persists in understanding how these factors interact and affect the development of learning, underscoring the need for continued research to optimize educational strategies and enhance student performance (Tacilla-Cárdenas et al., 2020).

On the other hand, in Nigeria, the development of social skills is fundamental to an individual's life, as it facilitates the acquisition of other competencies, both academic and functional. These skills are essential for adaptation and effective functioning in society and include aspects such as interpersonal relationships, responsibility, self-esteem, and respect for rules and norms. The lack of these competencies can negatively impact social integration and emotional well-being, highlighting the importance of studying and strengthening them in various educational and social contexts (Oladimeji et al., 2023).

In Latin America, academic performance in education is a crucial aspect that cannot be overlooked. Identifying the factors that influence students' academic outcomes is fundamental, as it allows for the design of intervention strategies at both the institutional and individual levels. Without adequate monitoring, it becomes challenging to implement effective actions to improve performance and ensure quality education (Soza-Mora, 2021).

Within this continental context, in Ecuador, the definition of poverty or low socioeconomic status is key to understanding its impact across various areas. This phenomenon is a consequence of inequality, as the unequal distribution of resources limits access to opportunities. Moreover, poverty is closely linked to factors such as income, wealth, social class, gender, and race, emphasizing the need to analyze its implications for educational and social development (Ramos-Turbón et al., 2025). Additionally, social skills enable students to communicate effectively, collaborate on projects, resolve difficulties from a constructivist approach, and establish healthy relationships with peers and teachers. These skills are related to quality of life, and teachers play a fundamental role in their development through pedagogical strategies that promote cooperation, problem-solving, and emotional learning (Vergara-Moncada, 2023).

Regarding Peru, unfavorable social environments can affect adolescents' development, limiting their learning opportunities. However, some manage to transform these adverse conditions into strengths through resilience. In rural educational contexts, where living conditions are particularly challenging, resilience not only fosters learning but also helps reduce school dropout rates and overcome the effects of poverty and exclusion. This underscores the necessity to analyze how to strengthen resilience in these environments to improve academic performance and school retention (Sosa-Palacios et al., 2020). Furthermore, many children and adolescents grow up in dysfunctional family environments, marked by parental separation, abuse, or neglect. This reality raises questions about how perceptions of parental behaviors influence the development of their social

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skills. Understanding this relationship is crucial for identifying risk factors and designing strategies that promote better social adaptation in this population (Cordova-Cruz et al., 2022).

In a previous study, León et al. (2024) found that advanced social skills, related to adaptation and a sense of belonging to a group, are the most developed among adolescents. In contrast, initial social skills present greater difficulties. In conclusion, both strengths and weaknesses were identified in different groups, highlighting the importance of implementing specific programs that reinforce these competencies, especially for those facing greater challenges or in vulnerable situations.

Meanwhile, Soto-Romero et al. (2023) demonstrated that the development of social skills and emotional intelligence influences learning styles, reflecting different levels of association with academic performance. They also identified three groups of socio-emotional factors among students, which allows for the suggestion of strategies aimed at strengthening their holistic development and improving educational quality within the institution.

In another study, Cordova-Cruz et al. (2022) revealed that 87.1% of participants exhibit deficient levels of social skills, with adolescent males under 17 years old being the most affected. This is primarily attributed to risk factors such as low self-esteem and deficiencies in assertive communication. In conclusion, the study suggests that excessive dependence on technology, low academic performance, and limited personal development are key consequences of inadequate social skills. Furthermore, a significant relationship was confirmed between different levels of social skills and the quality of assertive communication.

On another note, Álvarez-Ibáñez et al. (2024) revealed that male students engage in more physical activity than female students, as do those from active families with good academic performance. They also observed that students involved in sports federations and those living in rural areas tend to be more active. In conclusion, the study highlights the importance of focusing pedagogical strategies on the less active groups to promote healthy habits and prevent childhood obesity.

Complementarily, Florez-Oviedo et al. (2022) demonstrated the presence of four learning methodologies that generated retention among students, either through the lessons learned or the routine of classes. Among the 13 variables analyzed, a direct association was found between family type and the preferred learning methodology for achieving meaningful learning. Although previous studies have explored this relationship, there is a lack of specific research in the university context. Therefore, a deeper analysis is recommended to evidence how the family environment and other sociodemographic factors influence the choice of learning strategies, considering their impact from prior education to university adaptation.

In general terms, social skills are a set of learned behaviors that enable individuals to interact effectively and harmoniously with others. These skills involve the ability to understand and manage both one's own emotions and those of others, thereby facilitating interpersonal relationships. Beyond being observable behaviors, they include cognitive and emotional processes that enhance communication and social adaptation (Esteves et al., 2020).

Furthermore, social skills allow individuals to express their emotions, needs, and opinions in various contexts. Their development depends on a variety of factors, such as upbringing, social and cultural environment, and personal experiences. Having well-developed social skills facilitates the creation of healthy interpersonal relationships, while their absence can negatively affect behavior and emotional well-being. However, these skills can be strengthened through practice and learning effective communication strategies in settings such as school and home (Vergara-Moncada, 2023).

These competencies are fundamental for personal development and the academic success of primary education students. Through skills such as empathy, conflict resolution, leadership, and self-esteem, students learn to interact effectively and adapt to diverse social situations (Tomé-Fernández et al., 2024). Therefore, possessing a good repertoire of interpersonal skills and adequate public speaking abilities is essential for social and academic adaptation (Bauth & Oliveira, 2019).

Regarding their dimensions, assertiveness refers to the ability to communicate ideas, feelings, and desires directly and thoughtfully, maintaining a balance between self-respect and respect for others, without resorting to aggressive or submissive behaviors. The conversation dimension consists of the skill to initiate and maintain effective dialogues, adapting to the context and interlocutors, thereby fostering communication through attentive listening and timely responses. Finally, self-regulation is the ability to control one's emotions and actions in various social environments, ensuring appropriate responses and promoting harmonious relationships with others (Salas et al., 2019).

In this context, the present study aims to establish the factors linked to the development of social skills in basic education students.

Methodology

The present study was conducted using a quantitative approach, based on the analysis of statistical results. The design adopted was non-experimental, as the variables were not manipulated, and the level of research corresponded to descriptive and variable association (Hernández & Mendoza, 2018).

The population consisted of 876 students from a public educational institution. Inclusion criteria were students of both sexes, belonging to secondary education, who provided informed consent. Conversely, students in primary education and those who did not provide consent were excluded. The sample was selected through intentional non-probability sampling, ultimately comprising 308 students.

Data collection employed the survey technique, utilizing a social skills questionnaire composed of 17 items distributed across three dimensions: assertiveness, conversation, and self-regulation. This instrument demonstrated content validity and an exploratory factor analysis with an RMSEA value above 0.900, which is considered acceptable. Additionally, reliability, measured through Cronbach's Alpha coefficient, was 0.900, indicating high reliability (Salas et al., 2019).

Results

The following sections present descriptive results related to sociodemographic factors, along with the levels of social skills achieved by the students. Cross tables are included to demonstrate the association between these factors and social skills. Finally, hypothesis testing is presented to identify which of these factors are significantly linked to the development of social skills.

Descriptive analysis of results

Table 1

Sociodemographic factors

										Sex													
Female				Male				Total															
f		%		f		%		f		%													
265		86		43		14		308		100													
										Age													
12-14 years				15-17 years				Total															
f		%		f		%		f		%													
120		39		188		61		308		100													
										Father's education level													
Primary		Secondary		Higher (Incomplete)		Higher (Completed)		Total															
f		%		f		%		f		%													
15		4.9		141		45.8		45		14.6		107		34.7		308		100					
										Mother's education level													
Primary		Secondary		Higher (Incomplete)		Higher (Completed)		Total															
f		%		f		%		f		%													
15		4.9		127		41.2		62		20.1		104		33.8		308		100					
										Number of Siblings													
None		1 sibling		2 siblings		3 siblings		4 or more siblings		Total													
f		%		f		%		f		%													
29		9.4		100		32.5		89		28.9		53		17.2		37		12		308		100	

In Table 1, it is observed that 86% of the students are female, while 14% are male. Regarding age, 39% of the students are between 12 and 14 years old, and 61% are between 15 and 17 years old. Concerning the father's education level, 4.9% have primary education, 45.8% have secondary education, 14.6% have incomplete higher education, and 34.7% have completed higher education. As for the mother's education level, 4.9% have primary education, 41.2% have secondary education, 20.1% have incomplete higher education, and 33.8% have completed higher education. In relation to the number of siblings, 9.4% have no siblings, 32.5% have one sibling, 28.9% have two siblings, 17.2% have three siblings, and 12% have four or more siblings.

Table 2*Distribution of social skills levels and their dimensions*

Levels	Low		Medium		High		Total	
	f	%	f	%	f	%	f	%
Social skills	2	0.6	263	85.4	43	14.0	308	100
Assertiveness	23	7.5	172	55.8	113	36.7	308	100
Conversation	28	9.1	238	77.3	42	13.6	308	100
Self-regulation	6	1.9	137	44.5	165	53.6	308	100

In Table 2, it is observed that social skills show 0.6% of students at a low level, 85.4% at a medium level, and 14% at a high level. In the assertiveness dimension, 7.5% of students are at a low level, 55.8% at a medium level, and 36.7% at a high level. Regarding the conversation dimension, 9.1% are at a low level, 77.3% at a medium level, and 13.6% at a high level. Finally, in the self-regulation dimension, 1.9% of students are at a low level, 44.5% at a medium level, and 53.6% at a high level.

Table 3*Distribution of social skills levels according to mother's education level*

		Mother's education level				Total
		Primary	Secondary	Higher (Incomplete)	Higher (Completed)	
Social skills	Low	2 0.6%	0 0.0%	0 0.0%	0 0.0%	2 0.6%
	Medium	12 3.9%	107 34.7%	55 17.9%	89 28.9%	263 85.4%
	High	1 0.3%	20 6.5%	7 2.3%	15 4.9%	43 14.0%
Total		15 4.9%	127 41.2%	62 20.1%	104 33.8%	308 100.0%

Table 3 shows that among students with low social skills, 0.6% of their mothers have primary education. In the group of students with medium social skills, 3.9% of mothers have primary education, 34.7% have secondary education, 17.9% have incomplete higher education, and 28.9% have complete higher education. Finally, among students with high social skills, 0.3% of mothers have primary education, 6.5% have secondary education, 2.3% have incomplete higher education, and 4.9% have complete higher education.

Table 4*Distribution of social skills levels according to number of siblings*

		Number of siblings					Total
		None	1 sibling	2 siblings	3 siblings	4 or more siblings	
Social skills	Low	0 0.0%	0 0.0%	0 0.0%	0 0.0%	2 0.6%	2 0.6%
	Medium	26 8.4%	87 28.2%	75 24.4%	44 14.3%	31 10.1%	263 85.4%
	High	3 1.0%	13 4.2%	14 4.5%	9 2.9%	4 1.3%	43 14.0%
Total		29 9.4%	100 32.5%	89 28.9%	53 17.2%	37 12.0%	308 100.0%

Table 4 shows that among students with low social skills, 0.6% have four or more siblings. In the medium level group, 8.4% have no siblings, 28.2% have one sibling, 24.4% have two siblings, 14.3% have three siblings, and 10.1% have four or more siblings. Finally, among students with high social skills, 1% have no siblings, 4.2% have one sibling, 4.5% have two siblings, 2.9% have three siblings, and 1.3% have four or more siblings.

General hypothesis test

- **Ho:** There is no significant association between sociodemographic factors and students' social skills.
- **Ha:** There is a significant association between sociodemographic factors and students' social skills.

Table 5

Sociodemographic factors associated with students' social skills

Variables	Pearson Chi-Square	Asymptotic Significance (2-tailed)
Sex	0.533 ^a	0.766
Age	1.805 ^a	0.406
Father's education level	2.926 ^a	0.818
Mother's education level	40.412 ^a	0.000
Number of siblings	15.947 ^a	0.043

Finally, Table 5 shows that social skills are not associated with sex, age, or father's education level, as the p-values are greater than 0.05. However, there is a significant association between social skills and mother's education level, as well as with the number of siblings, since in these cases p is less than 0.05. Consequently, the alternative hypothesis is accepted, and the null hypothesis is rejected, establishing that the sociodemographic factors related to maternal education level and number of siblings are significantly linked to students' social skills.

Discussion

The study found that sociodemographic factors, specifically the mother's education level and the number of siblings, are significantly associated with students' social skills. It was observed that a higher educational level of the mother corresponds to a higher level of social skills in students; similarly, those with siblings tend to exhibit better social skills. These findings align with the results of Oladimeji & Lazarus (2023), who indicated that both socioeconomic status and gender can predict the development of social skills in students with intellectual and learning disabilities.

Moreover, this study agrees with research that demonstrates a positive correlation between social skills and family functionality, providing valuable insight into the interrelationship between these skills in adolescents and their family environment. This connection is crucial for designing interventions that promote the development of positive social competencies and strengthen family relationships, which are fundamental aspects of this research (Esteves et al., 2020).

On the other hand, Córdova-Cruz et al. (2022) revealed that 87.1% of participants exhibited deficient levels of social skills, with male adolescents under 17 being the most affected, primarily due to risk factors such as low self-esteem and deficiencies in assertive communication. Complementarily, León et al. (2024) found that advanced social skills, related to adaptation and a sense of belonging to a group, are the most developed among adolescents, while initial social skills present greater challenges.

Regarding the mother's education level, Florez-Oviedo et al. (2022) evidenced a direct association between family type and the preferred learning methodology for achieving meaningful learning. Although previous studies have explored this relationship, specific research in the university context is still lacking. Therefore, a deeper analysis is recommended to demonstrate how the family environment and other sociodemographic factors influence the choice of learning strategies, considering their impact from prior education to university adaptation.

These results are supported by Vergara-Moncada (2023), who notes that social skills are a set of behaviors that allow individuals to express their emotions, needs, and opinions in different contexts. Their development depends on factors such as upbringing, social and cultural environment, and personal experiences. Having well-developed social skills facilitates the creation of healthy interpersonal relationships, while their absence can negatively affect behavior and emotional well-being. However, these skills can be strengthened through practice and learning effective communication strategies in settings such as school and home.

Additionally, Freitas et al. (2019) indicated that variables such as self-exposure to strangers and new situations, confidence in expressing positive feelings, conversation and social wit, self-control of aggression, and coping abilities, as well as confidence in risky situations and participation in vocational courses, predict a more positive self-assessment of public speaking skills among university students.

Finally, Soto-Romero et al. (2023) demonstrated that the development of social skills and emotional intelligence influences learning styles, showing different levels of association with academic performance. They also identified three groups of socio-emotional factors in students, allowing for the suggestion of strategies aimed at strengthening their holistic development and improving educational quality within institutions.

Conclusions

According to the general objective, it was found that sociodemographic factors, specifically the mother's education level and the number of siblings, are significantly associated with students' social skills. In particular, a higher educational level of the mother corresponds to a higher level of social skills achieved by the students. Similarly, those students with siblings tend to exhibit better social skills, highlighting the influence of the family environment on the development of these competencies.

Regarding the sociodemographic characteristics of the sample, it was evident that 86% of the students are female and 14% are male. In terms of age, 39% are between 12 and 14 years old, while 61% fall within the 15 to 17 age range. Concerning the father's education level, 4.9% have primary education, 45.8% have secondary education, 14.6% have incomplete higher education, and 34.7% have completed higher education. For the mother's education level, 4.9% have primary education, 41.2% have secondary education, 20.1% have incomplete higher education, and 33.8% have completed higher education.

These results underscore the importance of analyzing the development of social skills within the family and educational context. Such analysis provides key elements for the formulation of pedagogical and social strategies that promote the holistic growth of students.

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