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Prosocial Education: An Intercultural Perspective and School Coexistence in Ecuadorian Adolescents

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Abstract

Prosocial education is inevitably the path to improved educational quality in contemporary educational systems, and specifically at the basic levels of continuing education. In Ecuador, basic educational institutions still struggle to establish links between these essential categories in the teaching-learning process. The objective of this study is to characterize the correlation between interculturality and school coexistence in a group of adolescents in their first and second years of higher basic education at the Juan Jacob Rosseau and Juan Dagoberto Montenegro centers in the province of Santa Elena, Ecuador. A quantitative study was conducted with a relational cross-sectional design. The sample size was determined probabilistically through stratified random sampling by sections of the two educational institutions, with a confidence level of 95%. The sample consisted of 72 students, aged 11-15 years, with an $M=13$ and $SD=0.98$. The main results show the strongest correlations between: Diversity \leftrightarrow Attitudes ($r=0.86$), Communication \leftrightarrow Conflicts ($r=0.85$), and Attitudes \leftrightarrow Communication ($r=0.84$). The Nature of Help subscale shows the lowest correlations ($r\approx 0.67-0.70$) with the interculturality subscales (Diversity, Attitudes, Communication). In conclusion, the subscales Motivation, Nature of Help, Context, Impact and Outcome, Cultural Contact and Diversity, Attitudes and Perceptions, Communication and Adaptation, and Conflict and Resolution all had positive correlations with each other, revealing a positive relationship between prosocial behavior, interculturality, and school coexistence in these adolescents surveyed.

Keywords: Adolescents, School Coexistence, Prosocial Behaviors, Interculturality.

Introduction

Educational institutions are scenarios of learning and social interaction between diverse individuals, with thoughts, lifestyles, contrary or similar emotions, ages, desires, tastes, and ideas that lead to situations that affect coexistence among students (Medina, 2018).

Prosocial education emerges as a key pedagogical approach to foster positive behaviors in adolescents, promoting empathy, cooperation, and peaceful conflict resolution (Sánchez, 2025). During puberty, a stage marked by biological, cognitive, and social changes, young people develop their identity and interpersonal skills, which makes it crucial to integrate prosocial strategies into the school environment (Brass et al., 2022). This developmental stage acquires special relevance as it has a direct impact on the construction of socio-affective skills and the promotion of harmonious school coexistence (Pulido & Fontecha, 2024).

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According to UNESCO (2019), school coexistence not only implies the absence of violence, but also the creation of inclusive environments where respect, participation, and peaceful conflict resolution are encouraged.

The formation of rules of coexistence in students contributes to forming rules of behavior, customs, values, which socialize and assume a transformative and creative position of reality, through the influence of people and the culture of the environment in which they live (Andrades-Moya & Alvarez, 2024). This coexistence is the ability of people to live with others in reciprocal solidarity, mutual respect, which implies recognition and respect for diversity, the ability to value, accept differences, understand each other, respect the points of view of others and others, which means being prosocial (Euscategui & Saavedra, 2024).

These prosocial behaviors are very important behaviors that allow human beings to coexist in society (Ortega-Ruiz & Alcaide, 2017). An individual, by possessing them, can establish quality relationships due to the great influence they exert on people's interrelationships (Ricaurte, 2019). In this sense, these behaviors make it possible to establish positive relationship and communication mechanisms with others (Galeano, 2018).

Therefore, educational institutions have spaces dedicated to the development and different interaction processes of the people who are part of them (Samaniego-Santillán et al., 2024). However, this does not always guarantee harmony and a positive environment in them. And it is necessary to keep in mind a series of elements that can cause and affect these interactions (Calderón & Hernán, 2018): the escalation of school conflict (school violence), political ideology, the economic context, rivalries, discrimination, power, racism, social psychology, social networks, gender diversity, cultural diversity, beliefs, customs, individual habits and identity ranks of groups.

There are obstacles that prevent the development of cooperative work methods in educational institutions, according to Vilarrasa (2013), the traditionalist methodologies that are very widespread in the classrooms; the social situation currently caused by ethnic conflicts and interculturality, which have triggered negative situations of coexistence, competencies and individualism in students.

The most identified problems in the Ecuadorian school population are aggression between peers, mistreatment of teachers by students (Sierra et al., 2022), lack of competence in the socio-emotional field that denotes violent responses, lack of respect for and towards the other, poor appreciation of peers and their productions, lack of sensitivity in situations of peer deficit, inability to adapt to different scenarios, low self-esteem, poor social skills to participate in certain social situations, lack of control over their emotions, among others (Guinea, 2017).

From another dimension, positive coexistence reveals objectivity, condition and result of an education based on quality, so developing a plan to work on school coexistence in this type of educational context should contribute to promoting learning, the integral development of students and favor the resolution of conflicts in an affective environment. safe physical and social (Suárez & Soraya, 2020).

The development of a pleasant climate is a sine qua non condition for the appropriation of knowledge, skills, and attitudes that are determined in the curriculum (Almanza, 2021). The learning scenario must be characterized by respect, which facilitates teaching and learning, through prosocial relationships and interactions between all members of the educational community (Díaz et al., 2022).

The development of the activities in the multiple training spaces must be carried out in a pleasant environment that motivates students, based on compliance with the regulations and their well-defined, consensual and well-known disciplinary rules (Duarte & Mendoza, 2021). This coexistence must occur through interpersonal and social communication, in different sociocultural educational spaces (Estévez et al., 2019). The development of the communicative potentialities of expressing, receiving and interpreting messages, in interpersonal communication relationships and within the group, allows the formation and development of the personality and determines the quality of life later (Cuadra-Martínez et al., 2018).

Cerda et al. (2018) state that "the school is not only a stage for training and the delivery of knowledge, but is also legitimized as a space to promote attitudes and values aimed at developing peaceful coexistence among human beings" (p. 35)

Vygotsky's sociocultural theory states that the psychological development of people is the result of their continuous interaction with the socio-historical context in which they live, and it is here that subjects construct their knowledge within the social environment in which they develop, that is, they learn in their interaction with others (Vera Sagredo et al., 2019).

The diversity that exists in society is evident in today's schools, which present a wide heterogeneity in their students, which accounts for the need to value interculturality as an essential element in school coexistence (Vásquez Arteaga, 2017).

Interculturality is defined as the relationship between cultures and currently, as García (2004) describes, states and national legislation, educational and communication policies that mandated the coexistence of groups in limited territories are insufficient in the face of the expansion of cultural mixtures.

The concepts of multicultural and intercultural are interconnected in the social and educational environment, from a multicultural world, to a globalized intercultural world, which focuses on maintaining the concept of interculturality, from studies of local native ethnic groups of the countries. For example, in Mexico, Valverde (2010) explains, education went from being bilingual bicultural to intercultural bilingual, supporting indigenous peoples and immigrants at the same time.

However, from another perspective, Novaro (2011) reveals the position of states and shows that the Western and capitalist state is the most ethnocidal of all. To this end, the authors point out that situations of marginality and disparity between minorities and politicians emerge on the part of the State, increasing the devaluation by society that leads to labeling and later predisposes to social conflict. Currently, according to González (2008) "the student body is today more heterogeneous than ever in its cultural, ethnic, linguistic, class, gender and ability composition" (p.82)

According to Guinea (2017) there are several types of diversity, one of them is cultural diversity, which consists of the increase in migratory movements of social groups with specific cultural characteristics and their continuous integration in the receiving countries, generating the existence of several cultures in the same context (p.18).

Another is social diversity, which originates from the great influence of social class on access to education, on the organisation of teaching and on the results that students obtain. The economic resources available to a family and its cultural and social wealth have a considerable influence on the educational possibilities of their children (Guinea, 2017, p.19).

In these diversities, the differences produced in student learning constitute the cognitive, motivational, affective, and relational dimensions (López et al., 2023). In today's schools, there are new groups of students who were not incorporated before, such as immigrants, students with special educational needs, students in school up to the age of sixteen or ethnic minorities (García, 2019). Having high concentrations of different cultures, the school must have the capacity to respond to each and every one of the differences that exist in schoolchildren (Guinea, 2017).

The progressive reduction of violence in order to improve learning environments must become the essence of school coexistence, in order to strengthen relations between the various members of the educational community, regardless of their educational level or the subject taught, to generate in the classroom a climate of security, trust, mutual support, conflict resolution, effective communication, and prosocial attitudes (Guajardo et al., 2019).

The objective of this study is to characterize the correlation between interculturality and school coexistence in a group of adolescents in the 1st and 2nd year of higher basic education in the Juan Jacob Rousseau and Juan Dagoberto Montenegro centers in the province of Santa Elena, Ecuador.

Materials and Methods

A quantitative study was conducted with a cross-sectional design of relational scope (Creswell & Creswell, 2018). This design was selected because most of the studies identified in the literature review focus on describing puberty with school coexistence in adolescents, without delving into the relationships between the variables associated with them.

This study is framed in a quantitative approach. From the perspective of Sánchez and Reyes (2015), the level of research is relational, since it focuses on determining the degree of correspondence between the categories of school coexistence and interculturality. It is of the basic type, also called fundamental or pure. The research design is non-experimental, correlational and transactional. The population was composed of students enrolled in the first and second year of the educational institution.

The sample size was determined probabilistically by means of a random sampling stratified by sections of the two educational institutions. The formula was used with a confidence level of 95% and a margin of error of 5%, obtaining a sample of 72 students. The research participants are adolescents in the developmental stage of puberty, of whom are females (37%) and males (35%), aged between 11-15 years, with an $M=13$ and $SD= 0.98$.

The sample was selected because it is a pre-adolescent age where it is ideal to instill innovative strategies to work on school coexistence inside and outside the classroom, highlighting cooperative work as an active methodology to develop adequate interpersonal teaching where it can contribute to the reduction of conflicts between peers and to be able to provide solutions to everyday problems.

The questionnaire was applied in the period of May 2024, to adolescents who are linked to the prosocial values training workshops of the Juan Jacob Rousseau and Juan Dagoberto Montenegro educational institutions in the province of Santa Elena, Ecuador. These results were obtained before the workshops were applied.

The reliability test was processed using Cronbach's Alpha statistic with the SPSS 26 program for each subscale, the result was a value that determines that the questionnaire is highly reliable for the categories of school coexistence and interculturality, through the subscales or indicators:

Motivation (P1-P5), Nature of help (P6-P10), Context, (P11-P15), Impact and Outcome (P16-P20), Contact and Cultural Diversity (P21-P25), Attitudes and Perceptions (P26-P30), Communication and Adaptation (P31-P35), and Conflict and Resolution (P36-P40). With a mean correlation between items: 0.36, which suggests that the items share a common construct, but are not redundant, and with high significance by subscale (Table 1).

Subscale	Number of Items	Cronbach's Alfa
Motivation	5	0.89
Nature of the aid	5	0.85
Context	5	0.82
Impact and result	5	0.88
Contact and cultural diversity	5	0.91
Attitudes and perceptions	5	0.87
Communication and adaptation	5	0.84
Conflicts and resolution	5	0.83

Table 1. Significance By Subscale Or Indicators Of Crombach's Alpha.

Source: Authors.

This study is framed in the quantitative descriptive paradigm to know the relationship problems of the students in order to then develop a cooperative learning proposal that would allow alleviating or eradicating the problems observed.

Through quantitative research, it was intended to analyze the data collected, objectively determining the results on the different variables, in order to develop an alternative proposal to improve coexistence among peers by implementing cooperative learning strategies in an interdisciplinary way, and the analysis will be carried out by subscales or indicators.

We had the approval of the Bioethics Committee of the Juan Jacob Rousseau and Juan Dagoberto Montenegro educational institutions in the province of Península de Santa Elena, Ecuador, whose requirements implied complying with the criteria of confidentiality, anonymity and voluntariness, without granting economic retribution to the participants. This was specified in the informed consent, accepted by the adolescents and teachers.

Results

Correlations for the Motivation Subscale (P1-P5).

Item	Key statement	Correlation	Interpretation
P1	"I feel motivated to help without expecting anything in return"	0.75	High correlation - Reflects intrinsic motivation.
Q2	"I am always willing to offer help when someone needs it"	0.72	Good correlation - Spontaneous prosocial behavior.
Q3	"I consider it important to contribute to the well-being of the community"	0.81	Higher correlation - Ethical basis of motivation.

Q4	"I feel fulfilled when I make a positive difference"	0.73	High correlation - Emotional reward.
Q5	"I try to be kind and understanding with others"	0.68	Acceptable correlation - Focus on constant attitude.

Table 2. Item-Total Correlations for the Motivation Subscale

Source: Authors.

Table 2 shows that the indicators P3 (0.81) and P1 (0.75) are the ones that contribute the most to the subscale, in both intrinsic motivation and community commitment highlight their relevance for school coexistence, in addition to P4 (0.73) which is linked to personal satisfaction that denotes high prosocial behavior.

The items that emphasize "community well-being" (P3) and "selfless motivation" (P1) have a greater influence than those focused on specific behaviors (P5), which may be caused by the effects of age and the bond it generates between peers and prosocial empowerment in these adolescents.

Correlations for the Nature of Help Subscale (P6-P10).

Item	Statement (Summarized)	Item-Total Correlation	Interpretation
Q6	"I sacrifice my time/resources to help"	0.62	Moderate correlation - Depends on external opportunities.
P7	"I am compassionate to those who face challenges"	0.68	Good correlation - Reflects active empathy.
P8	"I believe that we all have a responsibility to contribute to social welfare"	0.75	Higher Correlation - Ethical basis of support.
P9	"I enjoy doing small acts of kindness"	0.64	Acceptable correlation - Focus on everyday actions.
P10	"I strive to be a prosocial role model"	0.55	Lower correlation - Can be ambiguous.

Table 3. Item-Total Correlations for the Nature of Help Subscale

Source: Authors.

In Table 3, items P8 (0.75) and P7 (0.68) are the ones that contribute the most to the subscale because they show social responsibility and empathy, however P6 (0.62) and P9 (0.64) have moderate contributions, linked to concrete actions of the configurational system of help that is conditioned at puberty and generates actions of sharing difficult situations that make them unite to solve in the group and not necessarily with the parents.

The items with an ethical (P8) or emotional (P7) component correlate better than those with observable behavior (P6, P9, P10) and focus their action on the proposal of selfless help from moral values, rather than the one focused on acquiring secondary gains by helping the other.

Correlations for the Context Subscale (P11-P15)

Item	Statement (Summarized)	Item-Total Correlation	Interpretation
P11	"I get involved in volunteer activities"	0.38	Low correlation - Depends on external opportunities.
P12	"I put myself in the shoes of others to understand their needs"	0.71	High correlation - Reflects contextual empathy.
P13	"I automatically think about how to help when I see problems"	0.75	Higher correlation - Automatic prosocial behavior.
P14	"I feel good about performing acts of kindness"	0.68	Good correlation - Emotional reward in context.
P15	"I listen and offer emotional support"	0.69	Good correlation - Concrete prosocial skill.

Table 4. Item-Total Correlations for the Context Subscale

Source: Authors.

Table 4 shows the context subscale, where P13 (0.75) and P12 (0.71) are the ones that contribute the most from the attitude of help to solve problems present in rapport that requires enhancing help to the other and both contribute indirectly to active empathy and prosocial automatic response.

P14 (0.68) and P15 (0.69) that complement emotional well-being and concrete support from interaction in the context, however participation in voluntary activities decreases with P11 (0.38) which may be given by the meaning that has been given to the "voluntary" from the capitalist social system and that is incorporated in the individual as a principle of negation, more than acceptance.

Correlations for the Impact and Outcome Subscale (P16-P20)

Item	Key statement	Correlation	Interpretation
P16	Community satisfaction	0.74	High correlation - Clearly reflects the positive emotional impact.
P17	Collaboration with charities	0.68	Good correlation - Linked to specific actions.
P18	Making the world a better place	0.79	Highest correlation - Central to the construct.
P19	Inclusive Change Agent	0.72	High correlation - Related to proactive actions.
P20	Valuing solidarity	0.70	Good correlation - Focus on values.

Table 5. Item-Total correlations for the Impact and Result Subscale.

Source: Authors.

In Table 5, P18 (0.79) and P16 (0.74) are the ones that contribute the most to the subscale, from the importance revealed by the perceived impact and social responsibility learned by the pubescent in the workshops and the ideality of a better possible world, through the conversion of everyday behavior to prosocial behavior in intercultural diversity. as a basis for acceptance of the other.

P19 (0.72) also stands out, linked to change actions to promote school coexistence. The items that mention "responsibility" (P18) and "satisfaction" (P16) have greater weight than those focused on specific actions (P17, P19), which may be given by the social representation of the benefits that help the other brings, in addition to the characteristic of the stage of the adolescent's evolutionary development that frames him in helping and collaborating with his fellow man due to the dependence he creates on the group of peers.

Correlations for the Subscale "Contact and Cultural Diversity" (P21-P25)

Item	Statement (Summarized)	Item-Total Correlation	Interpretation
P21	"I feel comfortable interacting with people from other cultures"	0.78	High correlation - Practical ability to interact.
P22	"I enjoy learning about cultural traditions"	0.75	High correlation - Active cultural curiosity.
P23	"I believe that cultural diversity enriches our society"	0.85	Higher correlation - Positive attitude towards diversity.
P24	"I strive to understand different cultural perspectives"	0.80	Excellent correlation - Focus on cross-cultural empathy.
P25	"I feel welcome in culturally diverse settings"	0.72	Good correlation - Perception of inclusion.

Table 6. Correlations for the Contact and Cultural Diversity Subscale.

Source: Authors.

Table 6 shows that P23 (0.85) and P24 (0.80) have a high correlation in the subscale because they both reflect positive attitudes and active effort towards diversity, practices that mark the lives of adolescents in their daily interactions at school and in the community of friends. In groups of peers they must transcend the expectations of others and prosocial actions link them to a popular and accepted group image, which implies a better coexistence.

Items P21 (0.78) and P22 (0.75) are also solid, measuring comfort and cultural learning, which denote the need for constant learning among peers and the need for recognition by the peer group that places them in a position of comfort and human growth. Items with an attitudinal component (P23, P24) have greater correlations than those with a perception component (P25), due to the very nature of the interaction that is established in the evolutionary stage of adolescence.

Item-Total Correlations for the "Attitudes and Perceptions" Subscale (P26-P30)

Item	Statement (Summarized)	Item-Total Correlation	Interpretation
P26	"I value learning new languages"	0.69	Good correlation - Related to cultural openness.
P27	"I respect cultural differences"	0.77	High correlation - Core attitude toward diversity.
P28	"I feel grateful for interacting with diverse cultures"	0.81	Higher correlation - Positive emotion towards cross-cultural contact.
P29	"Cultural diversity should be celebrated"	0.79	High correlation - Pro-diversity attitude.
P30	"I challenge my cultural prejudices"	0.72	Good correlation - Critical self-reflection.

Table 7. Correlations for the Attitudes and Perceptions Subscale.

Source: Authors.

In Table 7, items P28 (0.81) and P29 (0.79) are the ones with the highest significant correlation, measuring gratitude and active celebration of diversity, signifying the importance of the relationship with the other in pursuit of the learning of the different and new that reaches high levels of appreciation at this stage of adolescence and allows recognizing diversity and integrating it into the common.

Item P27 (0.77) is high, reflecting respect as part of the attitudinal basis for participating in the group and accepting individual differences and incorporating it into the processes of group development for the growth of individuals in their space of sociocultural interaction. Items with an emotional component (P28, P29) correlate better than those of skill (P26) or self-regulation (P30) due to the high emotional charge that typifies relationship systems in adolescents.

Correlations for the "Communication and Adaptation" Subscale (P31-P35)

Item	Statement (Summarized)	Item-Total Correlation	Interpretation
P31	"I enjoy participating in intercultural events"	0.70	Good correlation - Active participation.
P32	"I like to share my culture with others"	0.68	Acceptable correlation - Cultural reciprocity.
P33	"I think we all have something to learn from other cultures"	0.76	High correlation - Cultural humility.
P34	"I strive to be an ally against cultural discrimination"	0.72	Good correlation - Prosocial activism.
P35	"Interculturality is fundamental for an inclusive society"	0.78	Higher correlation - Structural vision.

Table 8. Correlations for the Communication and Adaptation Subscale.

Source: Authors.

In Table 8, P35 (0.78) and P33 (0.76) are the most significant, reflecting intercultural values and openness to learning, these results may be conditioned by knowledge of interculturality and prosocial behaviors acquired by the need for cooperation and growth in this evolutionary stage, in addition to the interrelational factor that sustains the codependent relationships of adolescents with the group of contemporaries and their links rooted in the constant incorporation of new knowledge and diverse experiences.

Item P34 (0.72) is linked to action against discrimination and shows a direct relationship with empathy and rapport that develops in educational group spaces with these pubescents, which strengthens cultural reciprocity, and is also supported by the structural focus items (P35, P33), which correlate better than those of individual action (P31, P32).

Correlations for the "Conflicts and Resolution" Subscale (P36-P40)

Item	Statement (Summarized)	Item-Total Correlation	Interpretation
P36	"I respect social norms of other communities"	0.71	High Correlation - Basic Cultural Adaptation
P37	"I value different cultural perspectives"	0.75	High correlation - Cognitive openness
P38	"I adapt my behavior to avoid cultural misunderstandings"	0.79	Higher Correlation - Practical Adjustment Skill
P39	"I learn about the history of other cultural groups"	0.68	Good correlation - Knowledge effort
P40	"Cultural diversity enriches the human experience"	0.73	High Correlation - Positive View

Table 9. Correlations for the Conflicts and Resolution Subscale.

Source: Authors.

The results of Table 9 reveal that items P38 (0.79) and P37 (0.75) show the greatest correlations, reflecting practical skills of adaptation and open-mindedness to new activities, this coincides with the expectations generated in adolescents in the face of novel experiences, tasks and actions that are developed in the groups to which they belong and the possibility of adapting and incorporating Modern trends, styles different from those presented at home, maxim of the popular saying "*the young person looks more like his time than his parents*", in the case of adolescents show more similarities with their peers than those expected by parents in the place of residence.

Items P40 (0.73) and P36 (0.71) show robustness, and measure the positive assessment of diversity. This result may explain the degree of interest of puberty in the acquisition of new values and attitudes that have been shared with their peers and this is directly related to the adaptive action items (P38, P36) that correlate better than those of knowledge (P39).

Correlational analysis between all subscales or indicators.

Subscales	Motivation	Nature	With	Impact	Diversity	Activities	Communication	Conflict
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		Help	text					tos
Motivation (P1-P5)	1.00							
Nature Help (P6-P10)	0.82	1.00						
Background (P11-P15)	0.76	0.78	1.00					
Impact (P16-P20)	0.85	0.81	0.80	1.00				
Diversity (P21-P25)	0.72	0.68	0.75	0.77	1.00			
Attitudes (P26-P30)	0.74	0.70	0.72	0.79	0.86	1.00		
Communication (P31-P35)	0.71	0.69	0.73	0.75	0.83	0.84	1.00	
Conflicts (P36-P40)	0.73	0.67	0.70	0.74	0.81	0.82	0.85	1.00

Table 10. Matrix of Correlations between Subscales (Pearson).

Source: Authors.

Among the strongest correlations can be seen: Diversity ↔ Attitudes ($r=0.86$), Communication ↔ Conflicts ($r=0.85$), Communication Attitudes ↔ ($r=0.84$). In the case of the Nature of Help subscale, it shows the lowest correlations ($r \approx 0.67-0.70$) with the intercultural subscales (Diversity, Attitudes, Communication). However, the subscales of interculturality (Diversity, Attitudes, Communication, Conflicts) correlate more with each other ($r > 0.80$) than with those of basic prosocial behavior and Motivation and Impact, they are the ones that best connect both domains (prosocial and intercultural). They are associated with Prosocial Behavior (Motivation, Nature Help, Context, Impact) and Intercultural Competence (Diversity, Attitudes, Communication, Conflicts).

Comparative Analysis of Subscales by Sex

Subscale	Or	P-Value	P-Adjusted	Significant	Size Effect (R)	Interpretation
1. Motivation	510.0	0.018	0.144	No	0.28	Small
2. Nature helps	498.5	0.012	0.096	No	0.31	Small
3. Context	472.0	0.005	0.040	Yes	0.35	Moderate
4. Impact	520.0	0.025	0.200	No	0.26	Small
5. Cultural contact	385.5	0.003	0.024	Yes	0.38	Moderate
6. Attitudes	412.0	0.007	0.056	Marginal	0.34	Small

Subscale	Or	P-Value	P-Adjusted	Significant	Size Effect (R)	Interpretation
7. Communication	398.5	0.004	0.032	Yes	0.36	Moderate
8. Conflicts	412.0	0.007	0.056	Marginal	0.34	Small

Table 11. Mann-Whitney U results. Subscales and sex.

Source: Authors.

Table 11 reveals significant differences (p -adjusted < 0.05) for Context (P11-P15) reveals a greater female willingness to help in community settings ($U=472$, $p=0.040$). In the case of Cultural Contact (P21-P25), women express greater comfort in intercultural interactions ($U=385.5$, $p=0.024$), and for Communication (P31-P35), there is also a greater communicative adaptability in women ($U=398.5$, $p=0.032$). This indicates that women significantly outperform men in practical intercultural skills (contact and communication) and community engagement (helping context) and there are no differences in basic motivations or types of help, which could be due to gender socialization (greater female training in empathy and relational roles) and the normative pressure (cultural expectations about prosocial behavior).

In general, there is a consistent pattern of female advantage in prosocial competencies linked to cultural interaction (3/8 subscales with moderate effects), while the basic motivational aspects are similar between both sexes.

Subscale	H	p-value	Age Differences (post-hoc)	Effect Size
Motivation	10.25	0.036	11-14, 12-15	$h^2=0.12$
Nature helps	14.32	0.006	11-15, 13-15	$h^2=0.18$
Context	18.47	0.001	11-14, 11-15, 12-14	$h^2=0.23$
Impact	9.87	0.043	12-15	$h^2=0.11$
Cultural contact	15.73	0.003	11-15, 12-14, 13-15	$h^2=0.20$
Attitudes	12.85	0.012	11-15	$h^2=0.16$
Communication	16.24	0.003	11-15, 12-15	$h^2=0.21$
Conflicts	14.17	0.007	11-14, 11-15	$h^2=0.18$

Table 12. Comparative Analysis Of Subscales By Age (Kruskal-Wallis Tests With Post-Hoc Comparisons).

Source: Authors.

Among the most significant results, it can be seen that ages 11 vs 15 years old have differences in 7/8 subscales (excluding "Impact") and those of 12 vs 15 years old 5/8 subscales with marked differences. This may be caused by the fact that between 13-14 years of age are the ages where prosocial competencies are consolidated and between 11-12 years of age is the period of greatest individual variability. In addition, between 11-13 years of age there is greater acquisition of basic competencies and between 14-15 years of age the internalization of complex social norms occurs.

In general, there is a clear evolutionary pattern in prosocial and intercultural competencies, with significant differences ($p < 0.01$) in 6/8 subscales. The most important gaps occur between preadolescents (11-12) and older adolescents (14-15), which can be considered as a critical period for educational interventions in these categories.

Subscale	H	p-value	Significant ($\alpha=0.05$)	Effect size (η^2)
Motivation	2.15	0.341	No	0.03
Nature helps	3.01	0.222	No	0.04
Context	4.12	0.128	No	0.06
Impact	1.98	0.372	No	0.03
Cultural contact	3.57	0.167	No	0.05
Attitudes	2.89	0.236	No	0.04
Communication	3.25	0.197	No	0.05
Conflicts	2.45	0.294	No	0.04

Table 13. Comparative Analysis Of Subscales By Ethnic Identification. (Kruskal-Wallis Tests With Groups: White=1, Mestizo=2, Mulatto=4, Other=5).

Source: Own elaboration

It can be seen that no subscale shows significant differences (all $p > 0.05$) and minimal effects ($\eta^2 \leq 0.06$) in all cases, and the one with the highest tendency was Context ($p=0.128$). Therefore, there are no significant differences in any subscale, according to ethnic identification. This may be induced by cultural homogenization with socialization in these two similar educational contexts and universal constructs based on prosocial and intercultural competencies that can transcend ethnicity in this adolescent population.

Discussion

In Jiménez's (2019) studies, I determine that codes of coexistence are very important for the learning process and development of academic, social, community skills, etc., since, by establishing coexistence agreements, it is determined how to learn to live together, to listen to and respect each other, in order to make schools a democratic place of meeting, of learning and of real citizenship. These results show similarities with those obtained in this research, where adolescents have practical skills and community commitment to achieve a better school coexistence.

According to Barbada (2014), they created social norms for common coexistence by the members of a community, generating new tools for conflict resolution, which made possible a harmonious coexistence between cultural groups of different social contexts, leading to a space for reciprocal learning of different cultures and a relationship of tolerance and equality between people. This study is related to the findings of this research because adolescents show positive relationships between the categories of prosocial behaviors, school coexistence and interculturality.

In this study, adolescents show high correlations between conflict resolution and school coexistence. This coincides with what was determined by Venegas et al. (2016), since, according

to their results, there is a relationship between school coexistence and arbitration in conflict resolution, considering the Nagelkerke coefficient of 0.735, implying that the variability of arbitration in conflict resolution depends on 73.5% of school coexistence.

For Ramírez (2021), interculturality allows for interactive relationships and development with all cultures, recognizing each of the differences and their contents strengthen and contribute to children's direct involvement in recognizing the essential characteristics of the context. This reveals similarity in the results obtained in this research with adolescents, where there is a positive correlation between context (P11-P15) and interculturality (P21-P25) for school coexistence.

Having a direct relationship between the subscales that respond to interculturality (P1-P20) and prosocial behavior (P21-P40) generates a proactive school coexistence. These results coincide with those shown by Peñaloza (2019) when he determines that it is necessary to comply with the intercultural guidelines in which education is required to generate a harmonious coexistence respecting each of the regulations present in the school context.

Conclusions

The subscales Motivation, Nature of Help, Context, Impact and Outcome, Contact and Cultural Diversity, Attitudes and Perceptions, Communication and Adaptation, Conflicts and Resolution have positive correlations between them, revealing an interconnection between prosocial behavior, interculturality and school coexistence in these adolescents Surveyed.

In the case of ages and their correlation, the subscales showed significant differences between adolescents aged 11 and 15 years in 7 scales, except in impact, which could refer to the processes of psychological changes that occur at this stage between those years.

The correlation between the subscales and sex shows that women significantly outperform men in practical intercultural skills and community commitment, however there are no differences in basic motivations or types of help and interculturality, which could be given by gender socialization and normative pressure in these educational contexts.

The correlation between ethnicity and subscales does not show significant differences and is based on the possible cultural homogenization in these two similar educational contexts and universal constructs based on prosocial and intercultural competencies that could transcend ethnicity in this adolescent population.

References

- Almanza, O. H. (2021). Factors that influence decision-making in secondary school students. *Journal of the Academy*, (4), 42-62. <https://doi.org/10.47058/joa4.4>
- Andrades-Moya, J., & Alvarez, E. P. (2024). Approaches to the Concept of Educational Community, From the Perspective of School Coexistence: A Participatory Dialogic Study. *Educational Research for Social Change*, 13(2), 1-24.
- Barabas, A. M. (2014). Multiculturalism, cultural pluralism and interculturality in the context of Latin America: the presence of native peoples. *Configurações, Revista de Ciências Sociais*, (14), 11-24. <https://doi.org/10.4000/configuracoes.2219>
- Brass, N. R., Memmott-Elison, M. K., Brockmeier, L., Hung, C., & Bergin, C. (2022). Prosocial behavior and school engagement during adolescence: The mediating role of self-regulation. *Journal of Applied Developmental Psychology*, 83, 101477. <https://doi.org/10.1016/j.appdev.2022.101477>
- Cerda, G., Salazar, Y., Guzmán, C., & Narvaez, C. (2018). Impact of school coexistence on academic

- performance, from the perception of students with typical development and special educational needs. *Purposes and Representations*, 6(1), 247-300. <http://www.scielo.org.pe/pdf/pyr/v6n1/a06v6n1.pdf>
- Calderón, Z., & Hernán, B. (2018). School coexistence and its impact on performance, Ecuador. [Master's Thesis in Management and Occupational Leadership, Universidad Técnica Particular de Loja]. <https://dspace.utpl.edu.ec/handle/20.500.11962/22488?locale=es>
- Creswell, J. W., Creswell, J. D. (2018). *Research design. Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE.
- Cuadra-Martínez, D., Castro-Carrasco, P. J., Tognetta, L. R. P., Pérez-Zapata, D., Véliz-Vergara, D., & Menares-Ossandón, N. (2021). Subjective theories of school coexistence: What do parents say? *School and Educational Psychology*, 25. <https://doi.org/10.1590/2175-35392021221423>
- Díaz, D., Velásquez Sánchez, M. I., Rincón Barreto, D. M., Blanco Belén, O. A., & Correa López, R. A. (2022). Relationship between personality traits, decision-making and academic permanence. *Revista Virtual Universidad Católica del Norte*, (65), 263–283. <https://doi.org/10.35575/rvucn.n65a10>
- Duarte, J., & Mendoza, A. (2021). Schools as spaces for the construction of peace and coexistence. A possible proposal with elementary school boys and girls in Mexico. *Revista Innova Educación*, 3(1), 94–119. <https://doi.org/10.35622/j.rie.2021.01.005>
- Estévez, E., Flores, E., Estévez, J. F., & Huéscar, E. (2019). Intervention programs in bullying and cyberbullying in secondary education with evaluated effectiveness: A systematic review. *Konrad Lorenz Editores*, 51(3), 210–225. <https://doi.org/10.14349/rlp.2019.v51.n3.8>
- Euscategui, B. M. E., & Saavedra, L. R. (2024). Attitude towards students with disabilities and their relationship with school coexistence. *International Journal of Instruction*, 17(2), 667-684.
- Galeano, K. (2018). Communicative processes that underlie the educational strategy for risk management with emphasis on the prevention of forest fires implemented by the CVC in Valle del Cauca 2010-2015, Colombia. [Master's Thesis in Education, Universidad Santiago de Cali]. <https://red.uao.edu.co/bitstream/handle/10614/10843/T08416.pdf?sequence=5>
- García, C. (2019). Learning models as tools and techniques to enhance the academic career of the university student. *Cuban Journal of Higher Education*, 38(3), 3-18.
- García, P. G. (2004). Culture, a shared universe?: Intercultural didactics in language teaching. *RedELE: Electronic Journal of ELE Didactics*, 12. <https://dialnet.unirioja.es/servlet/articulo?codigo=826464&orden=0&info=link>
- González, M. T. G. (2008). Diversity and educational inclusion: some reflections on leadership in the school. *REICE: Ibero-American Journal on Quality, Efficacy and Change in Education*, 6(2), 82-99.
- Guajardo, G., Toledo, M., Miranda, C. & Sáez, C. (2019). The use of definitions of school violence as a theoretical problem. *Moebio Tape*, 65, 145-158. <https://doi.org/10.4067/s0717-554x2019000200145>
- Guinea, S. (2017). The influence of cooperative learning on coexistence among primary school students. Retrieved from University of Seville: https://www.researchgate.net/publication/317780427_La_influencia_del_aprendizaje_cooperativo_en_la_convivencia_entre_el_alumnado_de_Educacion Primaria
- Jiménez Culqui, L. E. (2019). Code of coexistence in citizen participation. [Bachelor's thesis, University of Guayaquil. Faculty of Philosophy, Letters and Education Sciences]. <http://repositorio.ug.edu.ec/handle/redug/45136>
- López, B. G., Cerveró, G. A., García-García, F. J., López-Francés, I., & Mateo, P. M. S. (2023). Profiles of University Students in the Learning to Learn Competition and its relationship with Academic Performance. *Spanish Journal of Pedagogy*, 81(286), 2.
- Novaro, G. (Coord.). (2011). *Interculturality in debate. Formative experiences and identification processes in indigenous and migrant children*. Buenos Aires, Argentina: Biblos.

- <https://cir.nii.ac.jp/crid/1130000798138195968>
- Ortega-Ruiz, R., & Alcaide, F. (2017). The Building Coexistence Model to prevent bullying and cyberbullying. <https://doi.org/10.15304/ie.27.4287>
- Peñalosa Daqui, S. M. (2019). Cultural diversity and intercultural training of students of the ninth year parallel to basic general education of the Santiago de Pillaro Millennium Educational Unit. Technical University of Ambato. <https://repositorio.uta.edu.ec/items/63650e8e-6c02-45f0-be53-31c771e51f9f>
- Pulido, C. A. H., & Fontecha, M. M. (2025). The development of socio-emotional education, the prevention and resolution of conflicts in school from physical education. *Bastcorp International Journal*, 4(1), 349-373. <https://doi.org/10.62943/bij.v4n1.2025.242>
- Ramírez, Y. (2021). Interculturality in Peruvian society and intercultural teacher training. Retrieved from file:///C:/Users/Johana/Downloads/editor_sfjd,+Art.+129+SFJD.pdf
- Ricaurte, D. (2019). Playful-pedagogical strategies for the strengthening of autonomy and the development of social skills in students of the 8th grade of the Manuel Atencia Ordoñez Educational Institution Henequén headquarters, Magangué Bolívar. [Bachelor's thesis, Open and Distance University]. <https://repository.unad.edu.co/handle/10596/25970>
- Samaniego-Santillán, P., Maldonado-Garcés, V. G., & Delgado-Quilismal, M. (2024). Inclusion and Equity in Higher Education: The Case of Ecuador, a Plurinational and Intercultural Country. *Intercultural and Inclusive Education in Latin America*, 24, 175-196.
- Sánchez, K. T. (2025). Education in moral competencies with a humanistic and social perspective as a strategy to improve school coexistence. *Revista Boletín Redipe*, 14(3), 39-56. <https://doi.org/10.36260/6ya6d048>
- Sierra, K., Cassiani, S., & Méndez, J. (2022). Playful activities to strengthen interaction and communication between parents and children of the first grade 01 belonging to the Diversity program of the Cafam school. Colombia. [Specialist Thesis in Pedagogy of Play, Los Libertadores University Foundation. Universitaria los Libertadores]. <https://repository.libertadores.edu.co/handle/11371/4876>
- Suárez, C., & Soraya, M. (2020). Basic communication skills for the development of school coexistence of fourth grade students of the Dieciocho de Agosto Basic Education School, Santa Elena canton, Santa Elena province, 2018-2019 school year. *La Libertad: Santa Elena Peninsula State University*, 2020 <https://repositorio.upse.edu.ec/handle/46000/5283>
- UNESCO. (2019). L'Oréal-UNESCO For Women in Science Programme. International Rising Talents. <https://en.unesco.org/science-sustainable-future/women-in-science/rising-talents>
- Valverde, A. (2010). Teacher training for intercultural education in secondary school. *Cuicuilco*, 17(48), 133-147. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-16592010000100008&lng=es&tln=es
- Vásquez Arteaga, É. A. (2017). Study of prosocial behaviors in children from San Juan de Pasto. *Psicogente*, 20(38), 282-295. <https://doi.org/10.17081/psico.20.38.2549>
- Venegas, R., Zamora, S., & Galdames, A. (2016). Towards a rhetorical-discursive model of macrogenre. *Revista signos*, 49, 247-279. <http://dx.doi.org/10.4067/S0718-09342016000400012>
- Vera Sagredo, A., Poblete Correa, S., & Días Larenas, C. (2019). Perception of learning strategies and styles in first-year university students. *Cuban Journal of Higher Education*, 38(1). <http://scielo.sld.cu/pdf/rces/v38n1/0257-4314-rces-38-01-e6.pdf>
- Vilarrasa-Comerma, A. (2013). Cooperative learning and improvement of coexistence inside and outside the classroom. [Bachelor's thesis]. <https://reunir.unir.net/handle/123456789/1831>.