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Artículos científicos

Violencia y aprendizajes básicos

Violence and basic learning

Violência e aprendizagem básica

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Resumen

La violencia interfiere con la capacidad de los estudiantes para aprender y disminuye su rendimiento escolar. El objetivo es identificar la relación entre violencia y aprendizajes básicos de lectura y aritmética. En los estados mexicanos de Quintana Roo, Yucatán y Campeche, se analizaron los datos de 3438 niños, niñas y adolescentes (NNA) entre 7 y 17 años. Se utilizaron el instrumento Medición Independiente de Aprendizajes (MIA) de lectura y matemáticas y un cuestionario de violencia. Los resultados muestran que los NNA que refieren violencia presentan mayor rezago de aprendizajes básicos. Estos resultados develan algunas de las implicaciones de la violencia en el ejercicio pleno del derecho a la educación de los NNA implicados.

Palabras clave: derecho a la educación, lectura, logro académico, matemáticas, violencia.



Abstract

Violence interferes with students' ability to learn and decreases their school performance. The objective is to identify the relationship between violence and basic learning in reading and arithmetic. In the Mexican states of Quintana Roo, Yucatan and Campeche, data from 3438 children and adolescents between 7 and 17 years of age were analyzed. The Independent Measurement of Learning (MIA) instrument for reading and mathematics and a violence questionnaire were used. The results show that children and adolescents who report violence have a greater delay in basic learning. These results reveal some of the implications of violence on the full exercise of the right to education of the children and adolescents involved.

Keywords: right to education, reading, academic achievement, mathematics, violence.

Resumo

A violência interfere na capacidade de aprendizagem dos alunos e diminui seu desempenho escolar. O objetivo é identificar a relação entre violência e aprendizagem básica de leitura e aritmética. Nos estados mexicanos de Quintana Roo, Yucatán e Campeche, foram analisados dados de 3.438 crianças e adolescentes (NNA) entre 7 e 17 anos de idade. Foram utilizados o instrumento Independent Measurement of Learning (MIA) para leitura e matemática e um questionário sobre violência. Os resultados mostram que crianças e adolescentes que denunciam violência apresentam maior defasagem no aprendizado básico. Esses resultados revelam algumas das implicações da violência no pleno exercício do direito à educação das crianças e adolescentes envolvidos.

Palavras-chave: direito à educação, leitura, rendimento escolar, matemática, violência.

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Introduction

Education rights

One of the fundamental human rights that has been emphasized for decades is the right that every individual has to receive an education (General Assembly, 1948; Latapí, 2009; Robles, Degante and Ángeles, 2018), which “implies recognizing the State as guarantor of this right and responsible for its operation” (Álvarez and Reyes, 2013, p. 66). This right has been stipulated in international conventions transformed into frameworks of guidelines and commitments so that the countries of the world undertake policies, strategies and educational actions aimed at consolidating it. Experiencing the right to education implies that everyone has the opportunity to access basic education, and, above all, develop the basic learning tools and content such as reading, writing and calculation necessary for individuals to improve quality. life and continue learning (United Nations Educational, Scientific and Cultural Organization [Unesco], 1990), extend and improve the comprehensive education offered to infants (Unesco, 2000) and guarantee an inclusive education , equitable and of quality (Unesco, 2016).

In Mexico, access to primary education is almost universal (National Commission for the Continuous Improvement of Education [Mejoredu], 2020), however, as we will see below, there are limitations related to equity, educational quality, and safety in education. that the students live, given that children and adolescents (NNA) suffer situations of violence that affect their chances of achieving educational objectives, for which reason a basic personal right is violated (Aróstegui, 1994). This complexity invites us to remember that one of the conditions for children to learn consists of having a trustworthy, safe and fearless environment. (Román y Murillo, 2011).

Violence, school violence and bullying

In general terms, violence encompasses a diverse type of conduct aimed at causing harm (Sanmartín, 2007). It can be defined as "the set of acts, practices or omissions, in which an attack against oneself or against others, that causes or has the probability of causing damage, with the intention (conscious or not) of doing so" (Anzaldúa , 2017, p.107).

In Mexico, as in other countries in the region, violence is one of the main public problems for citizens (Economic Commission for Latin America and the Caribbean [Cepal], 2021). Regarding the situation of violence in Mexico, according to the National Survey of



Victimization and Perception of Public Safety (ENVIPE), around 33 million crimes were estimated (National Institute of Statistics, Geography and Information Technology [Inegi], 2019). For its part, the Executive Secretariat of the National Public Security System (2021) recorded 1,841,189 crimes, including 237,184 crimes against life and bodily integrity (such as homicide, injuries, and femicide), 19,791 crimes against personal liberty (such as kidnapping), 54,314 crimes against freedom and sexual security, and 868,933 crimes against property, among others. Similarly, the National Human Rights Commission [CNDH] (November 20, 2017) declared that, in Mexico, 4 out of 10 girls, boys, and young people are victims of physical and psychological punishment, aggression, and sexual abuse in the workplace, home, school and work.

In the school environment, the term school violence or violence at school has been coined to designate “acts, conditions, processes and forms of relationship through which an individual or a group intentionally harms another and violates their physical, social and emotional within the school building or in the surroundings” (Conde, 2011, p. 116). This violence includes school harassment or bullying, which refers to repeated negative actions over time carried out by one or more students against another. These negative actions happen when you intentionally cause harm, hurt, or make another person uncomfortable. They can be through words (threats and taunts), through physical contact (hitting, pushing, kicking, pinching, preventing another from passing) and without the use of words and without physical contact (grimaces, obscene gestures, excluding a group to someone or by refusing to comply with another person's wishes). There is bullying when there is an imbalance of forces (asymmetrical power relationship), that is, the student who suffers the negative actions has a hard time or cannot defend himself (Olweus, 2004, p. 25-26).

Due to its consequences, violence and bullying affect the social and psychological development —particularly the moral reasoning— of the subject: although they recognize morally incorrect actions, they believe and feel that the world is hostile, which makes them lose their sense of duty and opt for distrust and lack of solidarity, showing less ability to control aggressiveness (Posada and Parales, 2012). Violence also lowers self-esteem, accentuates interpersonal difficulties, affects school attendance, interferes with students' ability to learn, and lowers school performance (Unesco, 2014). Similarly, victims of armed violence present symptoms of anxiety, depression, mood disorders, suicide risk, post-traumatic stress disorder (Londoño et al., 2005) and self-concept deterioration (Ortega, 1998).

Indeed, within educational research, the systematic study of violent circumstances can provide relevant information to understand some problems that disrupt educational processes. In addition, it is a currently emerging issue due to the serious and overwhelming increase in violence, because the actors and educational institutions are victimized and because the students involved in violent events are increasingly younger (Charlot, 2008). Additionally, the severity of violence stands out due to the tendency to show a cyclical pattern, that is, if it is accepted that "children learn what they live" (Gómez, 2005, p. 695), and given that they live in violent environments, then it is probable that infants learn these behaviors and reproduce them in the future, closing and starting the cycle of violence again (Chaux, 2003); and, due to the negative consequences that it produces in the physical, psychological and social facets.

Basic learning

On the educational side, we are in a situation of significant learning lag, which has deepened with the pandemic (Hevia, 2020; Hevia, Vergara-Lope and Velásquez, 2022; World Bank-United Nations Educational, Scientific and Cultural Organization [Unesco]-United Nations Children's Fund [Unicef], 2021). According to Mejoredu (2020), in 28.1% of the secondary schools evaluated by the National Plan for the Evaluation of Learning (Planea) in 2019, more than 50% of the students obtained an insufficient level in language and communication and mathematics, that is, they lack the basic knowledge of the key learning of the curriculum; while the 2018 Program for International Student Assessment (PISA) test showed that 44.7% and 56.2% of 15-year-old students achieved low performance in reading and mathematics, respectively.

Based on these results, a situation of learning lag is visible, even in the most basic and fundamental learning (Hevia & Vergara-Lope, 2022; Vergara-Lope, 2018; Vergara-Lope & Hevia, 2018; Vergara-Lope, Hevia and Loyo, 2019).

Basic learning, also called basic learning tools and content (Unesco, 1990), basic or key competencies (Cuevas and Vives, 2005) or key learning (Secretariat of Public Education [SEP], 2017), are understood as:

Those fundamental skills, values, attitudes, practices and competencies that are considered necessary to be able to continue learning throughout life. They must occur in the first years of education because after that period their acquisition presents many difficulties. If this learning is not acquired at the

beginning of basic education, it limits personal and psychosocial development, leaves gaps that are difficult to fill in essential aspects of life, and places people at risk of social exclusion. They include learning called cognitive and non-cognitive. Reading and mathematics have generally been considered, but a wide variety of life skills are also basic, such as citizenship learning, self-care, and socio-emotional skills. (Hevia, Vergara-Lope y Velásquez, 2022, p. 6).

The basic learning lag, for its part, is defined as:

The situation that occurs when children and adolescents, even while attending school, do not have the fundamental basic learning that they would be expected to have acquired at the beginning of basic education, and that places them in situations of risk of failure, dropout, educational backwardness and social exclusion. In the short and medium term, it translates into difficulties both in continuing to learn and succeed in subsequent educational levels, and in performing satisfactorily on a personal, professional, and social level. (Hevia, Vergara-Lope y Velásquez, 2022, p. 11-12).

Relationship between violence and basic learning

As previously mentioned, violence interferes with students' ability to learn and decreases their school performance (Unesco, 2014), thus limiting students' development of basic learning skills and knowledge and, therefore, it increases the probability of falling behind in basic learning.

In Latin America, some studies have addressed the relationship between violence and learning. Román and Murillo (2011) and Lamónica (2018) concluded that primary school students who were victims of violence at school had significantly lower performance in reading and mathematics compared to those who were not victims (not including Mexico in the first study and referring to students from Argentina in the second study). Similarly, "the learning measured by Terce [Third Regional Comparative and Explanatory Study] is lower in violent contexts" (Trucco and Inostroza, 2017, p. 57). And bullying has been negatively associated with student achievement: as its frequency increases, the victim's reading ability score decreases (Baer, Baldi, Ayotte, & Green, 2017).

In Mexico, Orraca (2018), in a sample of primary and secondary schools located in 1697 municipalities of the country, found that the increase in the homicide rate was



associated with a reduction in the average scores of Spanish and mathematics in the National Evaluation of Academic Achievements in School Centers (Link). Also, it was found that the reduction in student learning was the result of continuous exposure to high levels of violence (Michaelson and Salardi, 2018), and that exposure to criminal violence reduces math test scores in high school students. primary school and high school (Jarillo, Magaloni, Franco y Robles, 2016).

For all of the above, we ask ourselves: what will be the effect of violence on the basic learning of reading and mathematics in the southeast of Mexico? And the main objective of this document is to identify the relationships between basic reading and arithmetic learning and violence.

Methodology

Participants

A total of 3438 subjects between 7-17 years old participated, with an average age of 11.13 years ($SD = 2.96$). In terms of gender, 51% were women and 49% men. Other important data is that 14.3% come from rural areas and 85.7% from urban areas; 95% public schools and 5% private schools. Children from the first grade of primary school to upper secondary education from the states of Quintana Roo, Yucatán and Campeche participated (table 1).

Table 1. Sample by school grade and state

School grade	Quintana Roo	Yucatan	Campeche	Total	% total
1° grade	22	12	11	45	1.3%
2° grade	102	146	78	326	9.7%
3° grade	160	191	89	440	13.1%
4° grade	136	175	109	420	12.5%
5° grade	131	166	89	386	11.5%
6° grade	132	137	80	349	10.4%
7° grade	145	143	73	361	10.8%
8° grade	93	140	71	304	9.1%
9° grade	88	97	43	228	6.8%
10° grade	172	216	108	496	14.8%
Total	1,181	1,423	751	3,355	100.0%

Source: Own elaboration

Sampling

The sampling scheme used for the selection of the sampling units was probabilistic, multistage (stratified, by conglomerates and systematic). The first sampling unit was the federal electoral districts defined by the National Electoral Institute (INE), as they have more up-to-date geostatistical information and are homogeneous for the states analyzed. The next unit was the Basic Geostatistical Areas (AGEB) in urban areas and towns with 2,500 inhabitants in rural areas. The third unit was homes and the sampling subjects were all the children and adolescents between 7-17 years of age who lived in the selected home.

Instruments

To measure learning in reading and mathematics, the Independent Measurement of Learning (MIA) instrument by Hevia and Vergara-Lope (2016) was used, which has five items for reading: syllable, word, sentence, story and comprehension, and five items for mathematics: number identification, addition with carry, subtraction with carry, division and solving an arithmetic problem. Applying Cronbach's alpha test, the reliability index is

considered good (Celina and Campo, 2005) and is 0.82 for the instrument as a whole, 0.78 for reading, and 0.74 for mathematics (Hevia and Vergara-Lope, 2016).

For the measurement of violence, a questionnaire was generated with questions about physical and psychological violence, identifying the place and the aggressor. And for this, the modalities of school bullying proposed by the Law of Prevention and Attention to School Bullying for the State of Veracruz, art. 12 (Government of the State of Veracruz, 2016), as well as by the recommendations of the existing literature (Álvarez *et al.*, 2011; Carbajal, 2016; Tello, 2015; Treviño, 2017).

- Physical violence: when there is an assault or physical damage to a student, or to their property. Here he asked for robbery and blows/injuries.
- Psychological violence: when there is emotional damage to a student, or behaviors that hurt the dignity and self-esteem of another through insults, contempt and mockery in public or private. Here he wondered about mockery, offenses and threats.

It should be noted that, in this version, the questionnaire did not include the social dimension of school violence. It was questioned about the space where these behaviors occurred: at school, street and home; and about the aggressors, we sought to know if they were children or adults. The reliability index of this questionnaire was 0.84 (Cronbach's alpha).

Finally, a battery of sociodemographic data was applied to be able to relate the answers with attributes of the social subjects.

Procedures

The applications were carried out in the selected homes, participant by participant (NNA), in the form of an interview by volunteers previously trained for the application.

To analyze the data, descriptive statistics, means comparison tests, and correlations were used (Cooper and Hedges, 1993). All these procedures were carried out using the SPSS program.

Results

The results are arranged in three parts. In the first, results on basic learning in reading and mathematics are delivered. The second presents the situation of violence according to

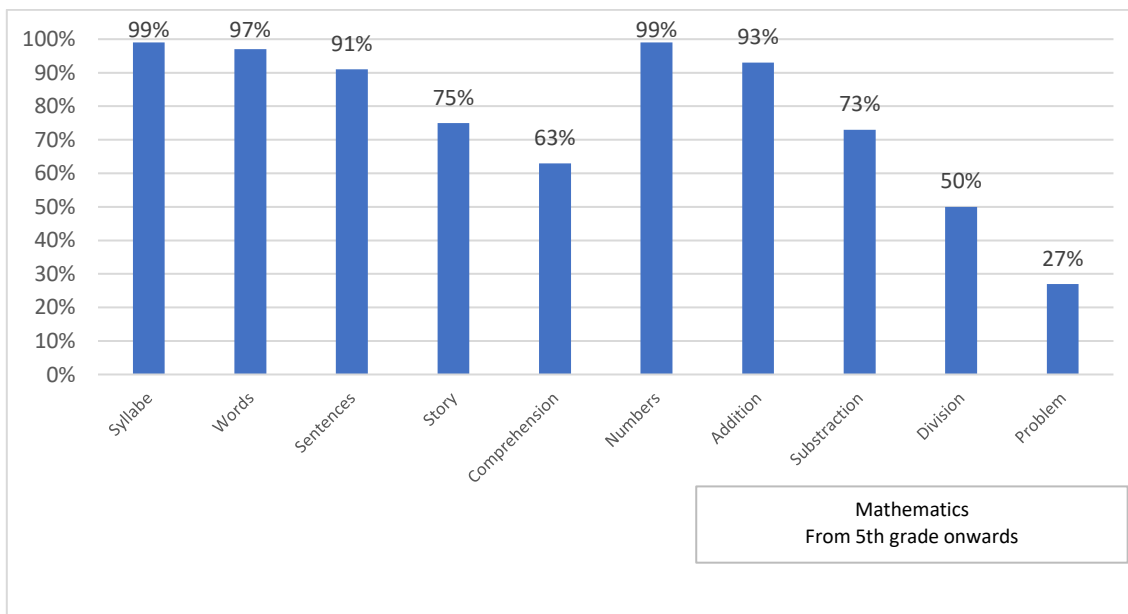
type, gender and locality. And in the third, relationships and associations between basic learning and violence are established.

Basic learning

Regarding basic learning, the results of the total sample indicate that, in reading, 98% of the sample could read syllables, 95% words, and 86% sentences. But only 69% could read a simple story and only 58% could answer an inferential comprehension question (table 2). In the case of arithmetic, 97% identified numbers, 84% could answer additions, 58% answered subtractions, 35% divisions and only 18% could solve a simple problem that requires two mathematical operations (table 3).

Due to the fact that the difficulty of the reading items goes up to 2nd grade and in mathematics up to 4th grade, the analysis of basic learning was carried out again, but this time only considering 3rd grade and above for reading. and from 5th grade onwards in mathematics, that is, only children and adolescents who, according to their school grade, should be able to answer the instrument in its entirety (figure 1).

Figure 1. Percentage of correct answers in reading and mathematics by item (in reading from 3rd grade onwards and in mathematics from 5th grade onwards).



Source: Own elaboration

The following tables provide these results broken down by grade. As can be seen, as students' progress, their results improve, however, even at the end of 6th grade, only 76.4% can read and 65.4% adequately answer an inferential comprehension question (table 2).

Table 2. Percentage of correct answers in reading, by grade level.

School grade	N	Syllabe	Words	Sentences	Story	Comprehension
1° grade	45	72.1%	58.1%	30.2%	18.6%	16.3%
2° grade	326	88.7%	78.5%	50.6%	20.6%	11.3%
3° grade	440	95.9%	91.1%	72.9%	42.1%	27.6%
4° grade	420	98.8%	95.9%	83.1%	55.6%	43.0%
5° grade	386	98.2%	97.7%	92.2%	72.5%	53.8%
6° grade	349	99.4%	98.6%	94.8%	76.4%	64.7%
7° grade	361	100.0%	99.2%	94.4%	86.6%	72.5%
8° grade	304	100.0%	99.3%	97.7%	92.1%	84.4%
9° grade	228	100.0%	99.6%	97.8%	92.5%	82.7%
10° grade	496	100.0%	100.0%	99.8%	95.9%	90.5%
Total	3,355	97.6%	95.1%	86.2%	69.1%	57.6%

Source: Own elaboration

In mathematics, the results show a greater learning lag. In 6th grade only 66% could answer subtractions and 40% divisions. The lag in solving problems is widespread throughout the sample (Table 3).

Table 3. Percentage of correct mathematical responses by grade level

School grade	N	Numbers	Addition	Subtraction	Division	Problem
1° grade	45	67.4%	34.9%	14.0%	2.3%	0.0%
2° grade	326	87.3%	49.7%	17.3%	2.8%	1.2%
3° grade	440	94.5%	70.5%	33.3%	6.4%	3.2%
4° grade	420	97.4%	82.5%	42.8%	15.6%	2.9%
5° grade	386	98.2%	90.1%	62.8%	30.1%	9.7%
6° grade	349	98.6%	92.2%	66.3%	40.1%	16.7%
7° grade	361	98.0%	93.0%	76.8%	53.5%	25.4%
8° grade	304	100.0%	92.4%	71.2%	51.0%	24.8%
9° grade	228	99.6%	93.3%	73.3%	55.4%	33.0%
10° grade	496	99.4%	95.5%	83.5%	67.9%	47.6%
Total	3,355	96.6%	83.7%	57.7%	34.9%	18.0%

Source: Own elaboration

Violent situation

Regarding the situation of violence, of the total sample, 42.3% (1455) reported having suffered at least one violent event; 44.4% of women and 40.2% of men; 49.7% from rural areas and 41.1% from urban areas, and 42.5% of those who attended public school and 34.9% of those who attended private school.

When analyzing the differences between the means of the number of violent events, it is observed that women and children living in rural areas present significantly more violent events, in relation to supporting the school, although violence is higher in the public school, this difference is not significant (table 4).

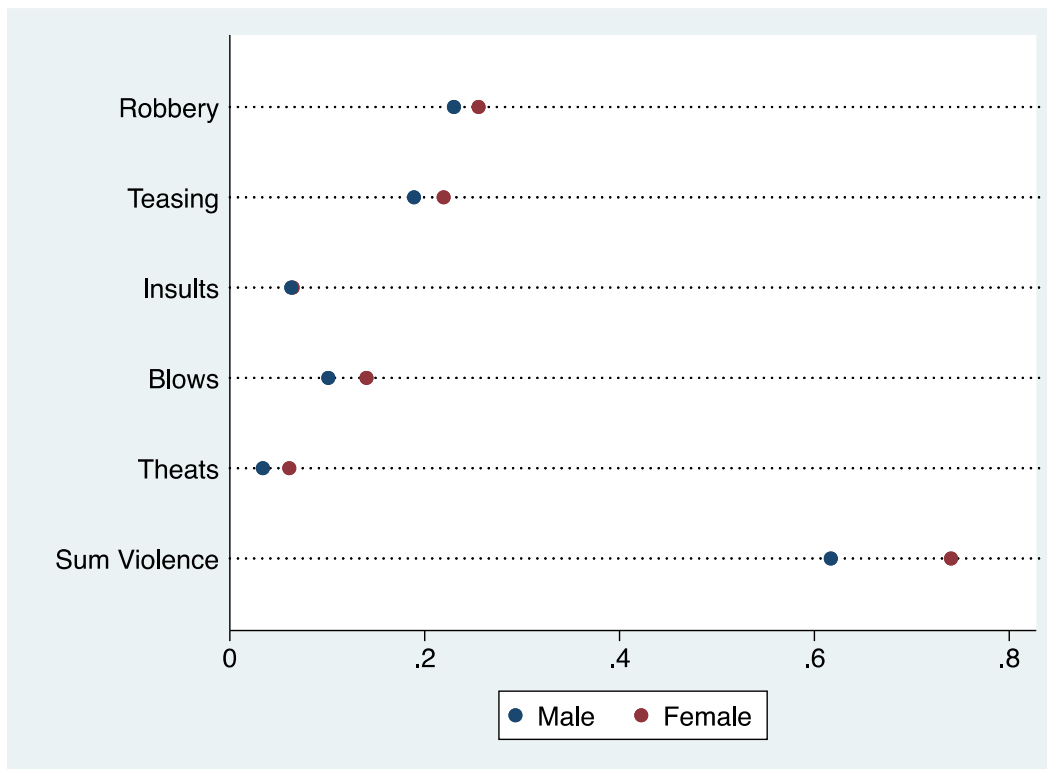
Table 4. Differences between means of sum of violence events by gender, area of origin and school support.

Variable	Categoría	N	Media	SD	t	gl
Gender	Male	1683	0.62	1.002	-3.263***	3364
	Female	1755	0.74	1.21		
Locality	Urban	2945	0.65	1.086	-3.268***	621
	Rural	493	0.85	1.257		
School	Private	166	0.55	0.891	-1.488	3330
	Public	3166	0.68	1.118		

Source: Own elaboration (* Sig. al 0.05; ** sig. al 0.01; *** sig. al 0.001).

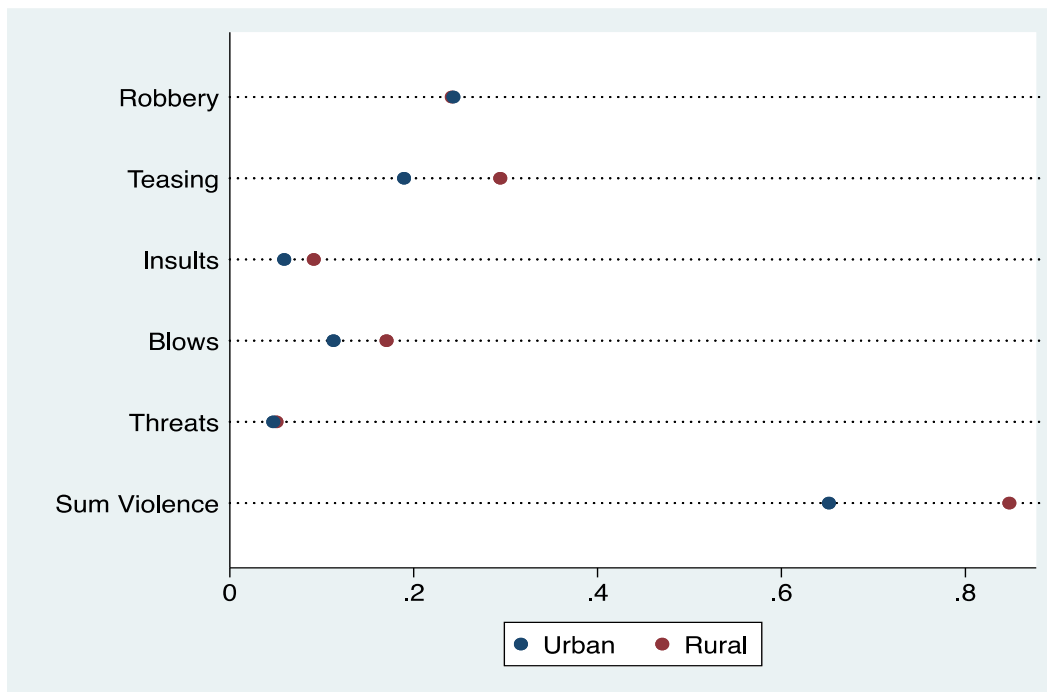
When analyzed by type of violence, it is observed that the most common occurrences are robberies (23%), followed by teasing (18.8%) and beatings/injuries (11.4%), offenses (6.4%) and threats (4.8%). Figures 2, 3 and 4 show the differences in the percentages of presentation of the types of gender violence by location and support of the school.

Figure 2. Average Types of violence by gender.



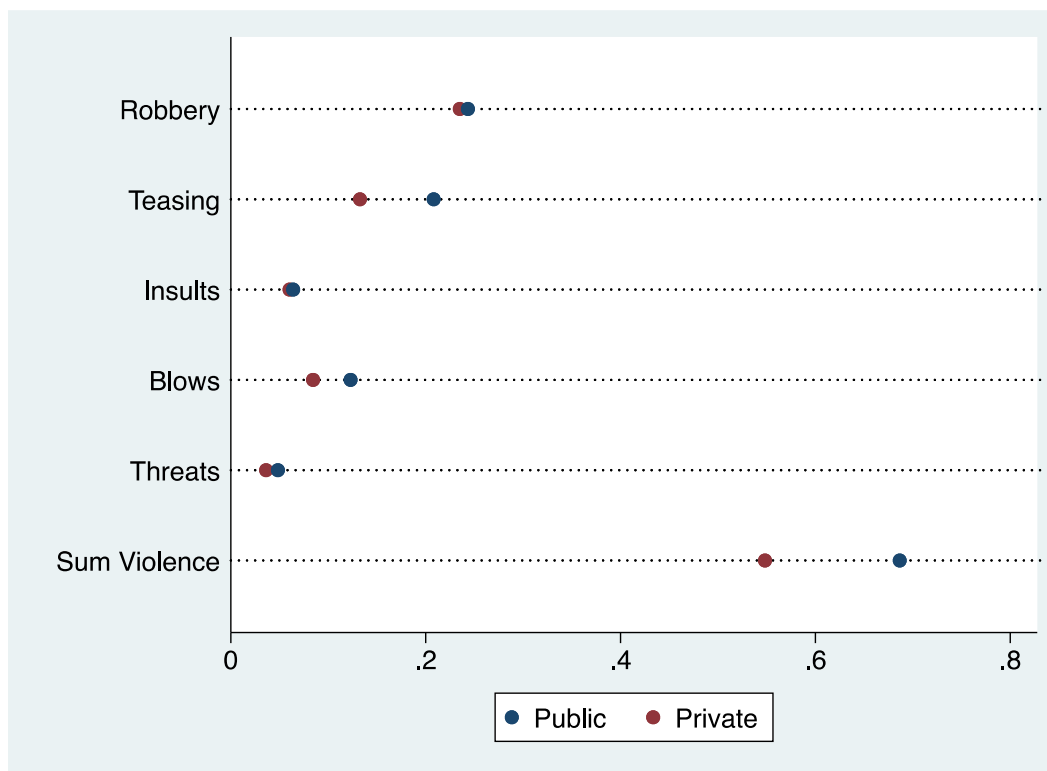
Source: Own elaboration

Figure 3. Average types of violence, by locality.



Source: Own elaboration

Figura 4. Average types of violence, by school support.



Source: Own elaboration

Classifying the types of violence into physical violence (robbery and beatings) and psychological violence (teasing, insults and threats), it is observed that both have a higher percentage of presentation in women from rural areas and women from public schools (table 5).

Table 5. Percentage of children and adolescents who presented at least one episode of physical and psychological violence by gender, locality, and school support.

At least one episode of	Locality				School support			
	Urban		Rural		Private		Public	
	M	F	M	F	M	F	M	F
Physical violence (robbery and blows)	27.5 %	32.3 %	32.3 %	34.5 %	21.6 %	30.8 %	28.7 %	32.3 %
Psychological violence (teasing, insults and threats)	20.9 %	23.3 %	27.7 %	34.5 %	19.3 %	16.7 %	21.6 %	25.1 %

Source: Own elaboration

When we separate the violence by space where it was carried out, we observed that where more violent events occurred was at school, followed by home. Public schools, rural contexts and women continue to be the highest percentages of violence (table 6).

Table 6. Spaces where violence occurs by school support, locality, and gender (in bold the differences that are significant).

Space	Total	School		Locality		Gender	
		Private	Public	Urban	Rural	Male	Female
School	32.1%	25.9%	32.4%	31.5%	35.3%	30.8%	33.3%
Street	7.4%	5.4%	7.0%	7.0%	9.7%	5.5%	9.1%
Household	11.1%	8.4%	11.3%	10.0%	17.8%	11.1%	11.2%

Source: Own elaboration

At school and on the street, it is observed that there are more robberies and teasing, while at home more beatings and teasing (table 7).

Table 7. Percentages of type of violence by place where it occurs

	School	Street	Household
Robbery	18.8%	3.0%	2.4%
Teasing	15.4%	2.0%	3.1%
Insults	2.7%	1.9%	1.8%
Blows (or injuries)	3.8%	1.5%	6.7%
Threats	1.9%	1.2%	1.7%

Source: Own elaboration

In relation to the people who exercise violence, at school, which is where violence is most often referred to, classmates, friends and other children and young people are listed as perpetrators, although family members and adults also appear in the context school. On the street, the insults and mockery come mainly from other children/young people and from friends; and the robberies and threats come from adults and neighbors. Violence at home comes mainly from family members and other adults and, as can be seen in table 7, beatings are the ones that occur the most.

Violence-basic learning relationship

In order to establish relationships between violence and basic learning, two procedures were carried out: comparison between means, using Student's t, and Spearman's correlations. For the analysis of this relationship, only children from 3rd grade onwards were taken into account for reading and, for mathematics, only 5th grade onwards (due to the fact that the difficulty of the reading items reaches 2nd grade of primary school and in mathematics up to 4th grade of primary school).

For the comparison of means, Table 8 shows that children and adolescents who suffered at least one episode of violence in general, psychological violence or violence at home presented significantly lower means in reading learning.

Table 8. Comparison between means of basic learning in reading by presence/absence of at least one episode of general violence, physical, psychological, at school, in the street or at home. Considering only children in 3rd grade and above.

	Violence	N	Media literacy	SD	t	gl
General Violence	No	1711	4.2987	1.10934	2.278*	2614.688
	Yes	1255	4.2016	1.17252		
Physical violence (Robbery and blows)	No	2062	4.2590	1.13172	NS	NS
	Yes	904	4.2544	1.15061		
Psychological violence (Teasing, insults and threats)	No	2281	4.3104	1.10744	4.403***	1047.669
	Yes	685	4.0818	1.21601		
School Violence	No	2009	4.2822	1.12580	NS	NS
	Yes	957	4.2059	1.16002		
Street Violence	No	2755	4.2555	1.13537	NS	NS
	Yes	211	4.2844	1.16484		
Household Violence	No	2637	4.2768	1.12158	2.404*	396.984
	Yes	329	4.1033	1.24754		

Source: Own elaboration (* sig. al 0.05; **sig. al 0.01; *** sig. al 0.001).

Table 9 shows that children and adolescents who suffered at least one episode of violence in general have lower averages in mathematics learning. Specifically, the children and adolescents who presented psychological violence, violence at school and at home obtained lower averages in basic mathematics learning.

Table 9. Comparison between means of basic mathematics learning by presence/absence of at least one episode of general, physical, psychological, school, street or home violence. Considering only children in 5th grade and above..

	Viol.	N	Media numeracy	SD	t	gl
General Violence	No	1266	3.4818	1.29336	2.707**	2099
	Yes	835	3.3257	1.29350		
Physical violence (Robbery and blows)	No	1470	3.4435	1.30319	NS	NS
	Yes	631	3.3645	1.27626		
Psychological violence (Teasing, insults and threats)	No	1682	3.4768	1.29741	4.057***	2099
	Yes	419	3.1909	1.26295		
School Violence	No	1473	3.4657	1.31011	2.491*	2099
	Yes	628	3.3121	1.25455		
Street Violence	No	1935	3.4171	1.29641	NS	NS
	Yes	166	3.4518	1.28656		
Household Violence	No	1902	3.4427	1.28710	2.507*	2099
	Yes	199	3.2010	1.35580		

Source: Own elaboration (* sig. al 0.05; **sig. al 0.01; *** sig. al 0.001).

When looking for Spearman correlations between basic reading and mathematics learning and the number of violent events, negative and significant correlations are found, although very low, between reading and mathematics learning, and violence in general, psychological violence, violence at home, taunts and blows; only for mathematics with the total sum of events of violence, violence at school and threats; and only for reading with robberies (table 10).

Table 10. Correlations between reading scores and type of violence (Rho Spearman)

Tipos de violencia	MIA lectura	MIA matemáticas
General Violence	NS	NS
Violencia psicológica (sumatoria de burlas, ofensas, amenazas)	-.089***	-.096***
Physical violence (Robbery and blows)	NS	-.067**
Violencia en calle	NS	NS
Psychological violence (Teasing, insults, and threats)	-.048**	-.053*
Robbery	.061***	NS
Teasing	-.091***	-.093***
Insults	NS	NS
Blows (or injuries)	-.073***	-.046*
Threats	NS	-.059**
Sum of all violence events	-.050**	-.073***

Source: Own elaboration (* sig. al 0.05; **sig. al 0.01; *** sig. al 0.001).

Discussion

The findings of this research show that in reading, one in four children from 3rd grade of primary school onwards cannot read a short story fluently and one in three does not understand it. In mathematics, only half of children from 5th grade onwards can solve division and one in three cannot do subtraction in 3rd grade.

These results expose the lag in basic learning that is consistent with what is reported in the literature (Hevia and Vergara-Lope, 2022; Vergara-Lope, 2018; Vergara-Lope and Hevia, 2018; Vergara-Lope et al., 2019).

The data on violence in this research show that almost one in two children and adolescents has suffered some event of violence, this is higher than what is reported in other studies (National Electoral Institute [INE], 2017; Joffre et al., 2011; Mejoredu, 2020; Velázquez, 2010; Zavaleta, 2020; Zavaleta, Castillo and Cervantes, 2020;).

The highest percentages found are in women, in schools in a rural context and in public schools. The highest incidence in women is also reported by Mejoredu (2020), however, they affirm that violence occurs more in schools in urban areas, unlike what was found in this investigation.

According to the data found, the place where more episodes of violence are recorded is at school (more robberies and mockery), then at home (more beatings) and then on the street (more robberies).

Different investigations relate the presence of violence on the street and at school, but not violence at home (Córdova and González, 2020; National Electoral Institute [INE], 2017; Treviño, 2020; Zavaleta, 2020; Zavaleta, Castillo and Cervantes, 2020).

This and several other investigations agree that verbal violence, in general, is one of the most common in schools (teasing, insults, nicknames, and humiliation) (Córdova and González, 2020; Joffre et al., 2011; Carro and Lima, 2020; Treviño, 2020; Zavaleta, 2020; Zavaleta, Castillo and Cervantes, 2020;)

In general, the literature agrees that a large number of children and adolescents do not feel safe on the streets, but the percentages vary greatly depending on the context.

According to the relationships found, violence in general, and specifically psychological violence and violence at home, have a negative effect on basic learning in both reading and mathematics. This relationship agrees with what was mentioned by Unesco (2014), which ensures that violence affects school attendance, interferes with students' ability to learn and decreases school performance; and with other studies that mention similar relationships (Baer *et al.*, 2017; Jarillo *et al.*, 2016; Lamónica, 2018; Michaelsen y Salardi, 2018; Orraca, 2018; Román y Murillo, 2011; Trucco e Inostroza, 2017).

Conclusions

The presence of basic learning lag in Quintana Roo, Yucatán and Campeche, the presence of episodes of violence in half of the participating sample, and the negative relationship between these two variables are confirmed.

It is logical to assume that the violence experienced by children and adolescents is not only an attack against their corporeality and general well-being, but is also an obstacle to school and social success: how could a child learn at school when his center of Attention is trying to avoid a beating or trying to forget the recent humiliation? What social representation can a student form when being a victim of violence? If taken in a literal sense, the victimized students are being denied their inherent humanity, because the human being is reified and the figure of the citizen vanishes under the prevailing and lacerating face of violence.

On the other hand, the present learning crisis in Latin America forces us to continue investigating and analyzing the factors that are affecting learning and school achievement,



especially those that are susceptible to change and intervention, and to find new and better ways of evaluating them. and measure them, to later detect and break them down, and thus be able to influence them.

In conclusion, we can say that if the right to education is the result of access, quality and respect in the learning environment, the results presented suggest that, although access to education is satisfied in Mexico, there are great challenges in relation to educational quality and safe environments for the development and learning of children.

Research agenda

The agenda proposes to undertake more studies and educational measurements that provide data to support political proposals and educational practices directed at violence and the learning lag that help students to appropriate the basic and fundamental learning that is socially required.

As we know, violent events can occur in different contexts and be perpetrated by different actors, some not related to the school and therefore also outside the scope of the policies that could be implemented in that environment. For this reason, the research agenda that is proposed, in addition to being aimed at the measurement and evaluation of these variables, has, as its ultimate goal, the search for solutions to this problem. Thus, two lines of research aimed at the development of individual capacities are considered. The first from the study of citizenship and peace learning (respect for others, solidarity, interaction, social responsibility, etc.), considering that the school can be one of the places with the capacity for social transformation. And the second from the analysis of the ways of coping that children and adolescents have in violent situations, in the process of developing ways to influence them and thus provide them with tools that help them deal with said situations. And then yes, from school, from the framework of socio-emotional learning, help develop skills for life.

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