# Characteristics and Factors Associated With Age and Gender Among Peruvian Children and Adolescents Who Are Victims of Sexual Violence

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#### **Abstract**

Objectives. To identify the characteristics and factors associated with the gender and age of victims and aggressors. Methodology. A cross-sectional study was conducted using data from the Ministry of Women and Vulnerable Populations. Linear regression and Poisson regression were used to determine  $\beta$  coefficients and prevalence ratios (PR) between general characteristics and victim gender and age. Results. A total of 6929 records were analyzed. Factors associated with victim gender included urban area of residence (P<.001), alcohol consumption (P<.001). Factors associated with older victim age were being female ( $\beta$ =3.08) and not being related to the aggressor ( $\beta$ =1.73). Aggressors were older if they were the father ( $\beta$ =7.58) or stepfather ( $\beta$ =5.08), and if the rape had occurred previously ( $\beta$ =6.11). Conclusions. There are factors directly associated with the gender and age of the victim. Strategies to prevent sexual assaults, especially within the family context, should be strengthened.

#### **Keywords**

rape, sex offenses, child, adolescent, age, gender

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# Introduction

Approximately 120 million girls under the age of 20 have been victims of sexual violence worldwide<sup>1</sup>; however, less than 1% have reported their perpetrators. The victims indicated that they experienced their first act of sexual violence between the ages of 10 and 14,<sup>2</sup> with the majority stating that the perpetrator was a friend or family member.

In a survey conducted by the National Institute of Statistics and Informatics in 2015, over 45% of adolescents in Peru experienced one or more instances of sexual violence.<sup>3</sup> By 2017, the reported cases of sexual violence against minors reached a total of 9012, including boys, girls, and adolescents. Furthermore, it was determined that over 50% of the perpetrators were family members, such as stepfathers, uncles, brothers, cousins, and grandparents.<sup>4</sup> Despite being a preventable occurrence, the figures continued to increase significantly, with a total of 9582 cases of sexual violence

reported in minors under the age of 17 in 2020, the majority of whom were adolescent girls.<sup>5</sup>

Although it is important to understand factors associated with sexual abuse in minors such as parental absence, single-parent households, rural living, and even alcohol consumption. In general, it is known that perpetrators are typically young or middle-aged adults toward

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underage victims, regardless of the victims' gender, however, the factors associated with these variables (age or gender) remain unknown.<sup>6</sup> It is also necessary to mention the impact of these acts of violence on children and adolescents, both physically and mentally. This is reflected in lifelong anxiety disorders, eating disorders, sleep disturbances, and post-traumatic stress.<sup>7</sup> Moreover, they are associated with gang involvement, organized crime, and the adoption of addictions to harmful substances such as drugs, tobacco, and alcohol.<sup>8</sup> They are even a risk factor for suicide attempts in underage victims.<sup>9</sup>

In general, it is known that perpetrators of sexual abuse are typically young or middle-aged adults targeting underage victims, regardless of their gender. 10,11 However, the factors associated with these variables (age or gender) remain unknown. In many cases, this type of violence progresses silently. Therefore, the objective of this research is to determine the factors associated with the age and gender of victims of sexual assault, as well as the characteristics of the perpetrators, such as their relationship and proximity to the victims. This information will help implement appropriate prevention measures in the future.

### **Methods**

# Study Design

A quantitative, cross-sectional, analytical, and correlational study was conducted using data from the year 2021 provided by the Statistical Portal of the National Program Aurora, which is part of the strategies of the Ministry of Women and Vulnerable Populations (MIMP) in Peru. The data is collected by the Center for Women's Emergency (CEM), which, in turn, receives records from the Peruvian National Police and the Public Ministry, or directly from CEMs at the national level.

# **Data Extraction**

The CEM utilizes a nationally standardized data collection form developed by the National Program Against Family and Sexual Violence. Details of the form are in the Supplemental File. The data used is available on the National Violence Observatory portal, stored in IBM SPSS program format (.sav). Data extraction and cleaning were performed manually using MS Excel, with cleaning based on retaining observations that met the inclusion and exclusion criteria, as well as retaining those with the variables of interest. The variables were filtered and recoded according to the information from the data collection form, and then the data was saved in STATA v17.0 program format (.dta) for further analysis.

# **Participants**

The collected data resulted from the information provided by victims of violence during the year 2021. The inclusion criteria for this study included cases of sexual violence where the victim was under 18 years old and of Peruvian nationality. Cases that lacked the variables of interest, such as age or gender, were excluded (Figure 1). For this study, sexual assault was defined as "penetration by vaginal, anal, or oral route, or the introduction of objects or body parts." Based on the obtained information, the unit of analysis was the record of the violent incident. From this information, the variables of interest were extracted, as the event could have been reported to the mentioned instances (CEM), but not necessarily formally reported to the Peruvian National Police or the Public Ministry. The dependent variables considered were the age of the victim and the age of the perpetrator, as well as the gender of the victim to propose differences among the collected characteristics. Observations that did not have the variables of interest were excluded.

## **Variables**

The dependent variables were the age of the victim and the age of the perpetrator, as well as the gender of the victim. The independent variables included sociodemographic characteristics of the victim, such as mother tongue, ethnicity, region of residence, and area of residence. Other variables related to the specific aspects of the sexual assault were also considered, including the relationship between the victim and the perpetrator, specific familial relationship, whether the victim lives with the perpetrator, previous occurrence of violent acts, the condition of the perpetrator and victim (under the influence of alcohol or drugs), whether the victim has a disability, and whether a formal complaint was filed.

# Statistical Analysis

A descriptive analysis was conducted for categorical variables, which were summarized using absolute and relative frequencies. For quantitative variables, the median with interquartile ranges was used. A bivariate analysis between categorical variables was performed using Pearson's chi-square test or Fisher's exact test if assumptions were not met. The bivariate analysis of quantitative variables was conducted using the Mann-Whitney U test, and the results were summarized using box plots. To evaluate the relationship between the age of the victim and the age of the perpetrator with the independent variables, linear regression

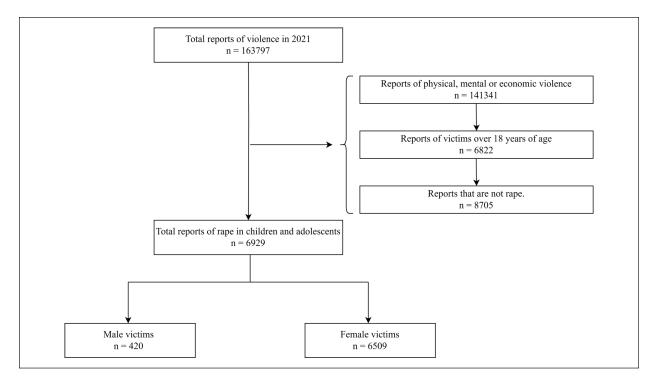


Figure 1. Flowchart for selecting study participants.

analysis was performed, and beta coefficients (β) with their respective 95% confidence intervals (CI) were reported. The age of the victim was recategorized as children (0-12 years) and adolescents (13-18 years) for the bivariate analysis with independent variables. Regression analysis was performed using generalized linear models with a log link function for robust variances, and prevalence ratios (PR) with their respective 95% CIs were reported. A *P*-value of less than .05 was considered statistically significant. The analysis and generation of figures were performed using STATA v17.0 software (STATA Corp., Texas, USA), and tables were created using MS Excel 2019.

# **Ethical Considerations**

This study was conducted using data provided by the MIMP, and the data accessed are publicly available, ensuring anonymity as they do not contain personal names or identifiers for the victims or perpetrators. The "Observatorio contra la Violencia" website contains this publicly accessible data (https://observatorioviolencia. pe/datospncvfs/). Due to the open access to anonymized information, no ethics committee approval was required. However, before data collection, informed consent was obtained from the victim or their legal representative (Supplemental File).

# Results

A total of 6929 records were analyzed. Descriptive results show that only a small portion of sexual assault cases have a male victim (6.06%) or a female perpetrator (0.53%). The majority of victims spoke Spanish (92.54%), were of mestizo or white ethnicity (96.83%), attended a public institution (88.59%), had a familial relationship with the perpetrator (50.54%), and filed a complaint (79.55%). Bivariate analysis to establish gender differences (women vs men) with respect to variables of residence in the capital (23.12%vs 32.14%, P < .001), urban residency area (70.95%) vs 79.52%, P < .001), male perpetrator (99.57% vs 97.86%, P < .001), perpetrator without effects of alcohol or drugs (87.08%vs 96.76%, P < .001), and if the victim is disabled (2.15%vs 4.52%, P=.004) (Table 1). The distribution of victim age according to victim gender and the distribution of perpetrator age according to victim gender showed statistically significant differences (P < .001) (Figure 2).

Linear regression analysis shows that certain characteristics are related to victim age and perpetrator age. With respect to victim age, it is higher if the victim is female ( $\beta$ =3.08; 95% CI: 2.82-3.33, P<.001), of mixed-race ethnicity ( $\beta$ =.23; 95% CI: 0.11-0.36, P<.001), has no relationship with the perpetrator

Table 1. General Characteristics and Gender Differences of Rape Victims.

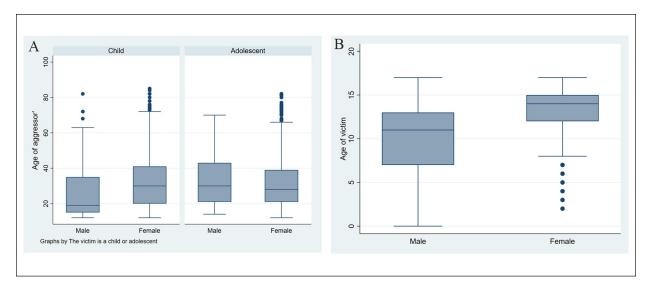
	Total n = 6929 (100%)	Female n = 6509 (93.94%)	Male n = 420 (6.06%)	P-value
The Victim is informant	989 (14.27%)	956 (14.69%)	33 (7.86%)	<.001*
Spanish Language	6401 (92.54%)	6005 (92.37%)	396 (95.19%)	.106**
Ethnicity Mixed/White	5557 (96.83%)	4913 (96.79%)	644 (98.02%)	.092**
Resides in the Capital (Lima)	1640 (23.67%)	1505 (23.12%)	135 (32.14%)	<.001*
Region of residence				
Coast	3571 (51.54%)	3321 (51.52%)	250 (59.52%)	.001*
Highlands	2360 (34.06%)	2252 (34.60%)	108 (25.71%)	
Jungle	998 (14.40%)	936 (14.38%)	62 (14.76%)	
Area of urban residence	4952 (71. 47%)	4618 (70.95%)	334 (79.52%)	<.001*
Study in a public institution	4914 (88.59%)	4626 (89.00%)	288 (82.52%)	<.001*
Type of relationship with the aggressor				
Family Bond	3502 (50.54%)	3283 (50.44%)	219 (52.14%)	<.001**
Affective Bond	3049 (44.00%)	2849 (43.77%)	200 (47.62%	
No bond	378 (5.46%)	377 (5.79%)	I (0.24%)	
Type of family bond				
Father	484 (15.87%)	459 (16.11%)	25 (12.50%)	<.001*
Stepfather	771 (25.29%)	753 (26.42%)	18 (9.00%)	
Uncle	536 (17.58%)	500 (17.55%)	36 (18.00%)	
Cousin	490 (16.07%)	409 (14.36%)	81 (40.50%)	
Another	768 (25.19%)	728 (25.55%)	40 (20.00%)	
The victim lives with the aggressor				
No	5863 (84.62%)	5497 (84.45%)	366 (87.14%)	.364**
Sporadically	131 (1.89%)	125 (1.92%)	6 (1.43%)	
Yes	935 (13.49%)	887 (13.63%)	48 (11.43%)	
The assailant is male	6892 (99.47%)	6481 (99.57%)	411 (97.86%)	<.001**
This is the first time the violent act has occurred.	3570 (51.52%)	3361 (51.64%)	209 (49.76%)	.456**
The assailant was sober and drug-free.	6066 (87.55%)	5668 (87.08%)	398 (94.76%)	<.001*
The victim is disabled	159 (2.29%)	140 (2.15%)	19 (4.52%)	.004**
Filed a complaint	5512 (79.55%)	5168 (79.40%)	344 (81.90%)	.236**

<sup>\*</sup>Pearson's chi-square test was used. \*\*The fisher exact test was used. Statistically significant results are in bold.

 $(\beta = 1.73; 95\% \text{ CI: } 1.45-2.02, P < .001)$ , and is disabled  $(\beta = 1.27; 95\% \text{ CI: } 0.84\text{-}1.69, P < .001); \text{ and age is lower}$ if the victim resides in the jungle ( $\beta$ =-.39; 95% CI: -0.58 to -0.20, P < .001) or has an emotional relationship with the perpetrator ( $\beta$ =-.58; 95% CI: -0.71 to 0.46, P < .001). With respect to perpetrator age, it is higher if the victim is female ( $\beta$ =2.73; 95% CI: 1.30-4.16, P < .001), has an emotional relationship with the victim ( $\beta$ =6.64; 95% CI: 6.01-7.28, P<.001), specifically if the perpetrator is the father ( $\beta$ =7.58; 95% CI: 6.26-8.90, P < .001) or stepfather ( $\beta = 5.08$ ; 95% CI: 3.92-6.24, P < .001), if the violent act had occurred previously ( $\beta$ =6.11; 95% CI: 5.48-6.74, P<.001); and age is lower if the victim resides outside of Lima's capital  $(\beta = -1.59; 95\% \text{ CI}: -2.35 \text{ to } -0.83, P < .001)$ , if the victim is from the highlands ( $\beta = -1.57$ ; 95% CI: -2.28 to

-0.86, P < .001), if there is no relationship ( $\beta = -5.92$ ; 95% CI: -7.28 to -4.56, P < .001), or if the perpetrator is the victim's cousin ( $\beta = -13.3$ ; 95% CI: -14.65 to -11.97, P < .001) (Table 2).

The Poisson regression analysis shows that in cases of sexual assault among adolescents, there is a higher prevalence of female victims (RP=1.32; 95% CI: 1.27-1.36, P < .001), no relationship with the perpetrator (RP=1.15; 95% CI: 1.14-1.16, P < .001), perpetrator consumption of alcohol or drugs (RP=1.12; 95% CI: 1.10-1.14, P < .001), or disability of the victim (RP=1.11; 95% CI: 1.08-1.14, P < .001). There is a lower prevalence if there is a partner relationship (RP=0.94; 95% CI: 0.93-0.95, P < .001) or if the victim cohabitates with the perpetrator (RP=0.95; 95% CI: 0.93-0.97, P < .001) (Table 3).



**Figure 2.** Box plot comparing (A) the age of the aggressor and sex of the victim by age group, and (B) the age of the victim by age group and sex of the victim. The distributions of the age of the victim by sex and the age of the aggressor by sex are statistically significant according to the Mann-Whitney U Test (P < .001).

Table 2. Linear Regression Analysis Between Age and Victim and Offender Characteristics.

	Age of victim		Age of aggressor	
	Beta (95% CI)	P-value	Beta (95% CI)	P-value
Female victim*	3.08 (2.82to 3.33)	<.001	2.73 (1.30 to 4.16)	<.001
Age of the aggressor	0.007 (0.002 to 0.118)	.003	-	-
Mixed raced victim*	0.23 (0.11 to 0.36)	<.001	-0.60 (-1.66 to 0.46)	.268
The victim resides outside the capital city*	-0.17 (-0.32 to -0.02)	.027	-1.59 (-2.35 to -0.83)	<.001
Region of residence				
Coast	Ref		Ref	
Highlands	0.82 (-0.06 to 0.22)	.252	-1.57 (-2.28 to -0.86)	<.001
Jungle	-0.39 (-0.58 to -0.20)	<.001	0.28 (-0.67 to 1.24)	.56
Rural area	-0.16 (-0.30 to -0.02)	.024	0.08 (-0.62 to 0.79)	.816
Aggressor bond				
Family bond	Ref		Ref	
Affective bond	-0.58 (-0.71 to 0.46)	<.001	6.64 (6.01 to 7.28)	<.001
No bond	1.73 (1.45 to 2.02)	<.001	-5.92 (-7.28 to -4.56)	<.001
Specific family bond				
Other family member	Ref		Ref	
Father	-0.07 (-0.40 to 0.27)	.687	7.58 (6.26 to 8.90)	<.001
Stepfather	0.003 (-0.289 to 0.298)	.979	5.08 (3.92 to 6.24)	<.001
Uncle	-0.12 (-0.45 to 0.20)	.452	0.75 (-0.53 to 2.03)	.253
Cousin	-0.51 (-0.84 to -0.17)	.003	-13.31 (-14.65 to -11.97)	<.001
The violent act has occurred before*	0.47 (-0.08 to 0.17)	.47	6.11 (5.48 to 6.74)	<.001
The aggressor consumed alcohol or drugs*	0.99 (0.80 to 1.18)	<.001	-3.64 (-4.63 to -2.66)	<.001
The victim is disabled*	1.27 (0.84 to 1.69)	<.001	2.12 (-0.90 to 4.33)	.06
The victim filed a complaint*	0.21 (0.50 to 0.37)	.01	-0.52 (-1.32 to 0.29)	.208

Abbreviations:  $\beta$ , beta coefficient; CI, confidence interval; Ref, reference category.

<sup>\*</sup>The opposite or complementary category was taken as reference. Statistically significant results are in bold.

 Table 3. Poisson Regression Between Age and Characteristics of the Victim and the Aggressor.

	0-12 years (n = 2032)	13-18 years (n = 4897)	PR (95% CI)	P-value
Sex of victim				
Male	287 (14.12%)	133 (2.72%)	Ref	
Female	1745 (85.88%)	4764 (97.28%)	1.32 (1.27-1.36)	<.001
Victim's ethnicity				
Mixed race/White	769 (91.99%)	4307 (89.95%)	Ref	
Another	67 (8.01%)	590 (12.05%)	1.03 (1.01-1.04)	<.001
Victim's place of residence				
Lima	480 (23.62%)	1160 (23.69%)	Ref	
Other cities	1552 (76.38%)	3737 (76.31%)	0.99 (0.98-1.01)	.953
Victim's region of residence				
Coast	1068 (52.56%)	2503 (51.11%)	Ref	
Highlands	616 (30.31%)	1744 (35.61%)	1.02 (1.01-1.03)	.001
Jungle	348 (17.13%)	650 (13.27%)	0.97 (0.95-0.99)	.004
Type of institution where the victim studies				
Public	1536 (89.51%)	3378 (88.18%)	Ref	
Private	180 (10.49%)	453 (11.82%)	1.02 (0.99-1.04)	.137
Relationship between the victim and the agg	ressor			
Family bond	924 (45.47%)	2578 (54.64%)	Ref	
Affective bond	1108 (54.53%)	1941 (39.64%)	0.94 (0.93-0.95)	<.001
No bond	0 (0%)	378 (7.72%)	1.15 (1.14-1.16)	<.001
Specific family bond				
Father	167 (15.07%)	317 (16.33%)	1.00 (0.97-1.03)	.887
Stepfather	272 (24.55%)	499 (25.71%)	0.99 (0.97-1.03)	.875
Uncle	194 (17.51%)	342 (17.62%)	0.99 (0.96-1.02)	.63
Cousin	207 (18.68%)	283 (14.58%)	0.96 (0.92-0.98)	.01
Other	268 (14.19%)	500 (25.75%)	Ref	
The victim lives with the aggressor				
No	1658 (81.59%)	4205 (85.87%)	Ref	
Yes	343 (16.88%)	592 (12.09%)	0.95 (0.93-0.97)	<.001
Sporadically	31 (1.53%)	200 (2.04%)	1.03 (0.98-1.07)	.214
Occurrence of the violent act				
This is the first time this has happened	1024 (50.39%)	2546 (51.99%)	Ref	
This has already happened in the past	1008 (49.61%)	2351 (48.01%)	0.99 (0.98-1.00)	.226
State of the aggressor at the last violent act				
Sober	1875 (92.27%)	4191 (85.58%)	Ref	
Effects of alcohol or drugs	157 (7.73%)	706 (14.42%)	1.07 (1.06-1.09)	<.001
Status of the victim at the last violent act				
Sober	1989 (97.88%)	4490 (91.69%)	Ref	
Effects of alcohol or drugs	43 (2.21%)	407 (8.31%)	1.12 (1.10-1.14)	<.001
Disabled victim				
No	2014 (99.11%)	4756 (97.12%)	Ref	
Yes	18 (0.89%)	141 (2.88%)	1.11 (1.08-1.14)	<.001
Complaint filed				
No	457 (22.49%)	960 (19.60%)	Ref	
Yes	1575 (77.51%)	3937 (80.40%)	1.02 (1.01-1.03)	.008

Statistically significant results are in bold. Abbreviations: PR, prevalence ratio; Cl, confidence interval; Ref, reference category.

# **Discussion**

This study presents results on the characteristics and gender and age differences in cases of sexual assault in minors under 18 years of age. We found significant differences that will be discussed in each section. The findings indicate a low proportion of male victims compared to other studies. A cross-sectional study conducted in Brazil revealed that approximately 40% of victims were male,12 while another study in South Africa reported only 9% of the total victims were male.<sup>13</sup> Although previous studies show considerable variability in their results, the large number of female victims is an important group to consider in formulating strategies. However, the number of male victims should not be overlooked, as they may be underreported and not reported due to biases from the victim and their surroundings.

Regarding age, this study focused on victims under 18 years of age, which represents the age group with the highest number of rape cases or other forms of sexual assault. While there may be differences between the findings of this study and the evidence found in previous research<sup>14</sup> concerning adolescent and child victims, it can be asserted that this population is vulnerable to such acts. There is a significant proportion of victims under 18 years of age compared to adults or older adults. Additionally, minors under 18 tend to remain silent and not report violent acts, especially if they are young children who may not know how to express themselves, 15 and they may perceive such behavior as normal. It is imperative to develop strategies targeting sexual abuse in minors that promote reporting and enhance their awareness and self-perception of body care and safety.

Regarding the age of the perpetrator, this study characterizes them as a young or adult individual. The evidence found can support and reaffirm the mentioned age range, as previous studies<sup>16,17</sup> indicate a similar average age to what was found in this research. Surveillance and screening through some form of assessment, particularly targeting those with a prior history within that age group,<sup>18</sup> may have an impact on reducing the number of victims, especially repeat offenders.

Regarding gender differences, this study reveals significant and novel information for the development and implementation of targeted strategies and timely surveillance within each age group. One of the most important findings pertains to the relationship with the perpetrator, specifically the type of familial relationship. The differences in proportions in these results suggest that fathers and stepfathers are more frequently identified as aggressors against female victims, while uncles and cousins

are more often implicated in male victims. Although previous literature does not indicate a specific relationship between the victim's gender and the type of relationship with the perpetrator, <sup>19,20</sup> reports with a relatively small sample size contrast their findings with the results presented in this study, particularly in terms of highlighting the different family members who perpetrate violence against female and male victims. It is noteworthy that the prevalence of cousin as the perpetrator is higher in male victims, <sup>21</sup> similar to the findings of this study. Based on the findings presented in this research, there may be a need for further investigation into male victims who have experienced abuse by a family member, even if the violence was not sexual. <sup>22</sup>

Regarding the variable of alcohol consumption by the perpetrator, although there is evidence that both short-term and long-term alcohol consumption by the perpetrator can be associated with a higher risk of sexual assault,<sup>23</sup> this research reveals a lower proportion of alcohol consumption in cases of sexual assault against male victims. In most instances, the perpetrator is male, so the sexual assault on a male victim likely involved anal penetration and a higher likelihood of premeditation by the perpetrator.

Regarding age, in this study, the analysis was divided by chronological age and age groups. The findings suggest that there is a difference in age between male and female victims, with male victims being younger and experiencing sexual assault at an earlier age. Al-Asadi<sup>24</sup> also found similar results, indicating that the ratio of experiencing first sexual assault in childhood compared to adolescence was 4:1 for girls and 9:1 for boys. While male victims may not surpass female victims in that age group, the numbers are similar. 25,26 Vulnerability does not solely depend on gender but rather on age, and extremely young victims, particularly children, are more susceptible to pedophiles, who are not necessarily adults or older individuals.<sup>27</sup> This raises concerns about possible future repercussions and recurrences of such offenses.

Regarding age and the victim's relationship with the perpetrator, this research shows that approximately half of the victims have a familial relationship with the perpetrator. It is important to note that the average age of the perpetrator is higher when there is an emotional bond, while it is lower when there is no familial relationship compared to perpetrators with a familial bond. Although evidence specifically addressing age is scarce, there are reports that do demonstrate cases of incest or intrafamilial sexual assault when the victim is under 18 years of age, 14,28 or when the perpetrator is someone known or close to the family. 16 As mentioned earlier,

self-care strategies for minors are of vital importance, even when dealing with individuals who may be considered trustworthy. Self-care strategies should be promoted within families and educational institutions. However, it is concerning that within a "traditional" family consisting of a father, mother, and children, one of them may be a potential perpetrator, making prevention of such assaults seem almost impossible.

Despite the valuable information provided by this study, it is important to acknowledge its limitations. While we have data from all over Peru, there is a potential selection bias as we only include cases that have been reported, excluding those that went unreported due to various reasons such as shame, family conflict avoidance, victim prejudice and stigma, as well as threats from the perpetrator toward the victim. This missing information could potentially impact our results. However, we can extrapolate these findings to victims who have reported and had their information registered. It is also important to note that, being an exploratory study, some variables with statistical significance may have a spurious relationship, highlighting the need for studies with more rigorous methodology. Sample size was not calculated as we had access to all the cases registered by the Ministry of Women and Vulnerable Populations (MIMP); nonetheless, the number of observations analyzed serves as an initial reference for future research in Peru. We emphasize the need for specific exploration of variables related to this study to identify potential causality or increased risk factors for sexual assault cases involving victims under 18 years of age.

# Conclusions

Based on the findings of this study, an association can be established between the age of the victim and the age of the perpetrator, with a relatively proportional relationship. Regarding gender, male victims are more likely to be victimized by someone close or within the family, particularly younger relatives such as cousins. It is noteworthy that even when the victim is male, the perpetrator is also male. In terms of age, it is described that male victims tend to be younger than female victims, and in the case of younger victims, the perpetrator is primarily someone close to the family or the victim's environment. Further research should focus on exploring the causal relationships among the variables identified in this study.

#### **Author Contributions**

VR-L conceived the idea, curated the data, performed the formal analysis, wrote the initial draft, and approved the

final version. LAR and MKG-T performed data curation, formal analysis, initial draft writing and approval of the final version.

# **Declaration of Conflicting Interests**

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# Supplemental Material

Supplemental material for this article is available online.

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