

# Victims of Physical Violence Have a Higher Risk to Be Perpetrators: A Study in High School Students Population

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## Abstract

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**BACKGROUND:** Violence experienced by a person can trigger mental disorders. It was reported that 1 in 4 children in the world had experienced severe and sustained physical violence. The form of violence varies from various bullying actions that seem mild, to deadly physical violence.

**AIM:** This study aimed to see the association between the victim and perpetrator of violence in high school students.

**METHODS:** A Hundred and Forty-Four high school students were chosen by stratified random sampling. They were assessed using Hurt, Insulted, threatened with harm, and Screamed (HITS) assessment tool. Univariate, bivariate, and multivariate analysis were used in this analysis, along with a cross-tabulation table.

**RESULTS:** Out of the 144 subjects, 66 (45.8%) admitted that they experienced violence in different gradations. A total of 34 (47.2%) respondents revealed that the perpetrators of the most frequent acts of violence were either one or both of their parents. The odds ratio (OR) of the subjects who experienced violence to commit violence is 3.571 (Confidence Interval (CI) 95% = 1.792-7.120).

**CONCLUSION:** More than 60% of high school students who experienced acts of violence turned out to experience more than one type of violence. The most frequent perpetrators of violence are the parents (47.2%), followed by friends and siblings. Those who experienced violent acts are 3.5 times more likely to become a perpetrator of violence.

## Introduction

The problem of child abuse has become a global concern, as many children have become victims of mistreatment by adults, who eventually become perpetrators of violence. The United Nations Children's Fund (UNICEF) says that 1 in 4 children in the world has experienced severe and sustained physical violence [1]. Furthermore, UNICEF also said that this mistreatment could cause dangerous consequences in childhood, adolescents as well as adulthood, including mental disorders and become perpetrators of violence.

Child abuse occurring from 1999-2002 in 7 major cities in Indonesia found 3,969 cases with details of sexual abuse (65.8%), physical abuse

(19.6%), emotional abuse (6.3%), and child neglect (8.3%) [2]. Among high school students, this form of violence varies significantly from various bullying actions that seem mild, to acts of violence that are fatal. Some cases have to be reported to the authorities and processed according to the law in Indonesia. In the past decade, there has been an increase in the number of people who commit crimes and violence, which is 83% increase in adults and 50% increase in youths [3].

Human aggressiveness is often compared with aggressive behaviour in animals. There are various types of aggressive behaviour in mammals: efforts to look for food (predatory), self-defence (defensive), protecting their territory, dominance in a

relationship, competition, looking for sexual relations, protecting their couples, protecting their children (maternal), and infanticide [1]. Aggressive behaviour presented as acts of violence in humans in part or whole often also has reasons like those of mammals. However, it is more complex and usually occurs in different social contexts and is governed by social norms [4].

Until today there is no exact data on long-term effects of violence committed by students. The goal of this study was to see the association between the victim and the perpetrator of violence in high school students.

## Methods

The present study is a cross-sectional, case-control study, conducted in 2017. The research subjects were students from seven selected high schools in Denpasar. The study protocol was approved by the institutional review board of the Faculty of Medicine, Udayana University.

The tool used to assess violence was the Hurt, Insulted, threatened with harm, and Screamed (HITS) assessment tool [2]. The tool includes four questions that can be asked both written and verbally. The HITS screening tool has been proven to be useful as a diagnostic tool [2], [3]. HITS is a valid, consistent scale/screening tool, making it an excellent way for primary care physicians to identify victims of abuse.

A questionnaire-based on HITS screening tool was distributed to 500 respondents. All subjects agreed and signed an informed consent to be included in this study. Out of the 500, we recruited 144 subjects for this study by stratified random sampling. We used SPSS 20.0 software to analyse the data. Univariate, bivariate, and multivariate analysis were used in this analysis along with a cross-tabulation table. A p-value of < 0.05 was considered significant.

## Results

The 144 subjects were analysed, and their characteristics are presented in Table 1. There were more female compared to male students (78 vs 66) in our study. They are between the ages of 15 to 19 years, with the largest population aged 17 years (36.1%). The mean age of the subjects is  $16.69 \pm 0.94$  years and the median age was 17 (15-19) years old.

**Table 1: Subjects' characteristic**

Characteristics	N	%
Total subjects	144	100
Gender		
Male	66	45.8
Female	78	54.2
Age (years old)		
15	13	9.0
16	50	34.7
17	52	36.1
18	26	18.1
19	3	2.1
HITS score		
4	78	54.2
5	31	21.5
6	17	11.8
7	8	5.6
8	7	4.9
9	2	1.4
10	1	0.7

As many as 54.2% (78 people) of these high school students stated that they had never experienced an act of violence as asked in the HITS tool. The other 66 (45.8%) admitted that they experienced violence in different gradations. The highest score here is 10, found in one subject.

It turned out that the perpetrators of violence were people around their victims, as seen in Table 2. A total of 34 respondents admitted that the perpetrators of the most frequent acts of violence were either one or both of their parents.

**Table 2: Violence perpetrators**

Violence perpetrators of the victims	N	%
Father	11	15.2
Mother	9	12.6
Both parents	14	19.4
Sibling	11	15.2
Boyfriend / girlfriend	5	7.0
Others	22	30.6
Total	144	100

Table 3 tries to prove the causal relationship between being a violent-conduct victim and the perpetrators of violence. It turns out that there is a significant relationship between them.

**Table 3: Relationship between the victim of violence and violence perpetrator**

	Violence perpetrator	Not a violence perpetrator
Victim of violence	44 (61.1%)	28 (38.9%)
Not a victim of violence	22 (30.6%)	50 (69.4%)

The odds ratio (OR) of the subjects who experienced violence to commit violence is 3.571 (Confidence Interval (CI) 95% = 1.792-7.120). The risk of a perpetrator of violence to commit a subsequent act of violence is 2-fold (CI95% = 1.349-2.966), as seen in Table 4. While the risk of perpetrators of violence not to commit a subsequent act of violence was 0.56 (CI95% = 0.404-0.777).

**Table 4: Risk estimation analysis derived from Table 3**

Analysis	OR	CI95%
Victim to become a perpetrator	3.571	1.792-7.120
Perpetrator to repeat his/her violent act	2.000	1.349-2.966
Perpetrator not to repeat his/her violent act	0.560	0.404-0.777

## Discussion

Male and female students turned out to have the same opportunity to commit acts of violence. This result is similar to another study reporting that boys and girls have equal opportunities to be a victim and a perpetrator of violence [5]. That is why parents must continue to learn and understand many things, including understanding the media used for the act of violence. When parents understand the media, they will more easily supervise their children [6].

More than 60% of those who experienced violence said that they experienced more than one type of violence in their lives, according to Sherin's predictions that stated that when someone experiences sexual violence, at the same time, they also get various threats (verbal violence) and physical violence [7]. The incident was certainly very painful for the victims, even in their minds, often for life. Male victims often externalise, one of which appears to be the change in their behaviour that becomes naughtier and more aggressive. While women are just the opposite, they are more internalised and appear with various symptoms of depression and self-harm [8], [9].

Among the seventy-two respondents who experienced acts of violence before, turned out that 61.1% became perpetrators of violence in the future. This is by the theory of intergenerational violence, which continues to be repeated as a learning process in one's household [10]. In this study, the risk of someone who has experienced acts of violence to become a perpetrator of violence is twice as high, so it is necessary to think of an intervention for the recovery and therapy of victims so that the intergenerational cycle no longer occurs.

More than half of the respondents to this study claimed that the perpetrators of the most frequent acts of violence were the fathers and mothers of the children. Several studies reported that perpetrators of violence against children were either one or both of their parents [11], [12], [13]. Another study reported that the perpetrators of violence against children lived together in their home [14]. The other perpetrators, for example, their friends (30.6%), including their boyfriend and girlfriend (7%). That is why it is necessary to consider the existence of an instrument that can be used as an initial assessment of the presence or absence of the risk of violence in a group, including domestic violence [15].

In conclusion, more than 60% of high school students who experienced acts of violence turned out to experience more than one type of violence. The most frequent perpetrators of violence are the parents (47.2%), followed by friends and siblings. Those who experienced violent acts are 3.5 times more likely to become a perpetrator of violence.

## References

1. United Nations Children's Fund. Hidden in plain sight: a statistical analysis of violence against children. New York: UNICEF, 2014. [https://www.unicef.org/publications/index\\_74865.html](https://www.unicef.org/publications/index_74865.html). Accessed January 20, 2019.
2. Bennett LR, Andajani-Sutjahjo S, Idrus NI. Domestic Violence in Nusa Tenggara Barat, Indonesia: Married Women's Definitions and Experiences of Violence in the Home. *The Asia Pacific Journal of Anthropology*. 2011; 12(2):146-63. <https://doi.org/10.1080/14442213.2010.547514>
3. Boothby N, Stark L. Data surveillance in child protection systems development: An Indonesian case study. *Child Abuse & Neglect*. 2011; 35(12):993-1001. <https://doi.org/10.1016/j.chiabu.2011.09.004> PMID:22036695
4. Rumble L, Ramly AA, Nuryana MM, Dunne MP. The importance of contextual factors in carrying out childhood violence surveys: a case study from Indonesia. *Child Indicators Research*. 2017; 11(2):405-421. <https://doi.org/10.1007/s12187-017-9457-8> PMID:29527242 PMID:PMC5838122
5. Devries K, Knight L, Petzold M, et al. Who perpetrates violence against children? A systematic analysis of age-specific and sex-specific data. *BMJ Paediatrics Open*. 2018; 2(1):e000180. <https://doi.org/10.1136/bmjpo-2017-000180> PMID:29637183 PMID:PMC5842994
6. Kidman R. Child marriage and intimate partner violence: a comparative study of 34 countries. *International Journal of Epidemiology*. 2016; 46:662-75. <https://doi.org/10.1093/ije/dyw225> PMID:27733435
7. Hayati EN, Högberg U, Hakimi M, Ellsberg MC, Emmelin M. Behind the silence of harmony: risk factors for physical and sexual violence among women in rural Indonesia. *BMC Womens Health*. 2011; 11(1):52-9. <https://doi.org/10.1186/1472-6874-11-52> PMID:22112243 PMID:PMC3257195
8. Abrahams N, Devries K, Watts C, et al. Worldwide prevalence of non-partner sexual violence: a systematic review. *The Lancet*. 2014; 383(9929):1648-54. [https://doi.org/10.1016/S0140-6736\(13\)62243-6](https://doi.org/10.1016/S0140-6736(13)62243-6)
9. Peterman A, Bleck J, Palermo T. Age and intimate partner violence: an analysis of global trends among women experiencing victimization in 30 developing countries. *Journal of Adolescent Health*. 2015; 57(6):624-630. <https://doi.org/10.1016/j.jadohealth.2015.08.008> PMID:26592331
10. Hillis S, Mercy J, Amobi A, Kress H. Global prevalence of past-year violence against children: a systematic review and minimum estimates. *Pediatrics*. 2016; 137(3):e20154079. <https://doi.org/10.1542/peds.2015-4079> PMID:26810785 PMID:PMC6496958
11. Rumble L, Febrianto RF, Larasati MN, Hamilton C, Mathews B, Dunne MP. Childhood Sexual Violence in Indonesia: A Systematic Review. *Trauma, violence, & abuse*. 2018:1-16. <https://doi.org/10.1177/1524838018767932> PMID:29629637
12. Barth J, Bermetz L, Heim E, Trelle S, Tonia T. The current prevalence of child sexual abuse worldwide: a systematic review and meta-analysis. *International Journal of Public Health*. 2012; 58(3):469-83. <https://doi.org/10.1007/s00038-012-0426-1> PMID:23178922
13. Cannon EA, Bonomi AE, Anderson ML, Rivara FP. The Intergenerational Transmission of Witnessing Intimate Partner Violence. *Archives of Pediatrics & Adolescent Medicine*. 2009; 163(8):706-8. <https://doi.org/10.1001/archpediatrics.2009.91> PMID:19652101
14. Zimmerman C, Michau L, Hossain M, Kiss L, Borland R, Watts C. Rigged or rigorous? Partnerships for research and evaluation of complex social problems: Lessons from the field of violence against women and girls. *Journal of Public Health Policy*. 2016; 37(S1):95-109. <https://doi.org/10.1057/s41271-016-0006-3> PMID:27638245
15. Fulu E, Jewkes R, Roselli T, Garcia-Moreno C. Prevalence of and factors associated with male perpetration of intimate partner violence: findings from the UN Multi-country Cross-sectional Study on Men and Violence in Asia and the Pacific. *The Lancet Global Health*. 2013; 1(4):e512-e522. [https://doi.org/10.1016/S2214-109X\(13\)70074-3](https://doi.org/10.1016/S2214-109X(13)70074-3)