

Aggression Level and its Associated Factors among High School Children in Lahore

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ABSTRACT

Background: Children in school age frequently engage in aggressive activities. Aggression has the greatest detrimental impact on both the child and the surroundings. Aggressive children are more likely to experience long-term behavioral issues and other emotional and social challenges. Violence that results from aggression is an issue that is getting more and more attention.

Objective:

1. To assess the level of aggression among high School Children in Lahore, Pakistan
2. To determine the association of level of aggression among high School Children in Lahore to their socio-demographic and education factors

Methodology: A cross-sectional analytical study was conducted in various high schools located in Lahore. A total of 278 participants were recruited using a simple random sampling approach. To gather data, the Buss Perry Aggression Scale was employed. This scale consisted of 29 questions, each offering five response options ranked from 1 to 5: 1= extremely uncharacteristic, 2= very much uncharacteristic, 3= somewhat characteristic, 4= very much characteristic, and 5= extremely characteristic. Written consent was obtained from each participant, and a proper introduction to the study was provided. Following data collection, the gathered information was entered and subjected to analysis using SPSS version 21.

Results: Finding revealed that 55.40% participants had mild aggression, 33.45% had moderate aggression and very few 2.16% had severe aggression. Findings also revealed that gender has significant association with the level of aggression ($\chi^2 = 22.008^a$) and (P. value .000). Similarly the academic performance also has significant association with aggression ($\chi^2 = 7.686^a$) and (P. value .021). Moreover, the history of physical abuse was also found to be significantly associated with aggression levels (Chi square value. 15.449^a) and p value (.000). The parents conflicts also found to be significantly associated with the aggression level among children ($\chi^2 = 10.464^a$) and (P. value .005). Furthermore, time spending in leisure activities was found to be negatively associated with the aggression levels (Chi square value. 11.078^a) and p value (.004).

Conclusion: In conclusion, majority of the children have mild and moderate levels of aggressions. Moreover various factors like gender, academic status, physical abuse and time spending in leisure time was found to have association with aggression level among high school children

Keywords: Aggression Level, High school children, factors, association.

INTRODUCTION

Children in school age frequently engage in aggression. The most harmful improper behavior, aggression has the greatest detrimental impact on both the child and the surroundings. Children that are aggressive are far more likely to experience long-term behavioral issues, as well as other emotional and social challenges. Violence that results from aggression is an issue that is getting more and more attention. The teaching-learning process is disrupted by school violence, which also affects the social, psychological, and physical health of both students and staff. (Tawfik, EL-Dakhakhny, & Mahmoud, 2019).

Any behavior that is carried out with the aim to hurt someone else is considered aggressive when we use the term. Although the aggressors are the ones who are most hurt, aggressive behavior victims can also exhibit psychosocial maladjustment. (Cabello, Gutiérrez-Cobo, & Fernandez-Berocal, 2017).

The "prevention window" for suicide has been recognized as mostly encompassing childhood and adolescence, with around 50% of mental and behavioral disorders that are well-established risk factors for suicide showing symptoms by age 14 years (Wyman, 2014).

According to reports, Egypt is one of the most violent nations in the world. In the Cairo governorate, there were more instances of various forms of physical violence in public schools (76%) than in private schools (62%) (Share, El-Shair, & Ismail, 2013).

Additionally, non-physical forms of aggression such as spitting, calling people names, and stealing were more common in public school students than in private school students. Comparatively, 60.9% of males and 60% of females reported experiencing violence while attending a public school, whereas 45% of males and 48.9% of females reported experiencing violence while attending a private school. (Unesco, 2018).

Teenage aggression is linked to detrimental short- and long-term effects on both victims and offenders. For instance, those who have experienced bullying experience higher mental health issues than adults who have not. (Singham et al., 2017). Aggressive behavior in children increases the risk of drug use, depressive symptoms, and adult arrest. (Rhoades, Leve, Eddy, & Chamberlain, 2016).

Nearly a million people are thought to commit suicide each year. For various reasons, suicide among children and young people is a huge global concern. The greatest increase in the overall number of suicide deaths occurs during the early years of human existence. (Adewuya & Oladipo, 2020). It's important to pay attention to this issue because of the high rate of violence in youngsters and the harm it causes to both individuals and society. (Calmaestra et al., 2016).

Aggression has been found to be a result of multiple causes. The children are impacted by their families, schools, and communities. Children have a number of worries as they embark on new adventures. Every single child has specific worries related to how they interact with their families, schools, and communities. The family is in the person's immediate surroundings. (Reed, Ward, Tolman, Lippman, & Seabrook, 2021).

The General Aggression Model (GAM) states that an aggressive episode progresses through three stages. The first stage involves both individual factors (such as personality and attachment) and environmental factors (such as a defiant circumstance). The internal states (such as cognition and feelings) brought on by the first stage's variables are referred to as the second stage. The last stage is concentrated on the evaluation and decision-making procedures influenced by the second stage, which will result in the following result: a nonviolent or hostile reaction (Li, Yu, & Nie, 2021).

The level of education of parents, especially moms, is one element that contributes to violence in children. The parental

education is the level of education attained by the parents of the subject children. Parental education fits into the first stage as a person variable in the GAM's framework. It has been linked to a number of other aspects, including a child's academic achievement, food, and mental health, which can be linked to aggression in children. (Mekonnen et al., 2022). High parental educational attainment has also been associated with decreased incidences of aggressive conduct in kids. Additionally, it was discovered that higher levels of physical violence were linked to lower levels of mother education. Additionally, it was discovered that problematic behaviors like hostility were adversely connected with parental education. (Véronneau et al., 2014).

In actuality, parents who are more successful in today's society are those who have better adjusted to shifting from being the head of the household to being a facilitator of raising children. The majority of parents, however, choose this route without the required education and preparation and learn through trial and error. On the other hand, it cannot be said that there is just one right way to raise children and that each parent has the authority to instill in their child the values, abilities, and behaviors that they deem desirable while dealing with those that they deem undesirable. As a result, some parents make the error of believing that effective upbringing entails dominance and the child's presence in all parts of life, when in fact, raising children will be simpler in an environment where the tranquilly and needs of the parents are better satisfied. (Carroll, 2021).

It has long been recognized that positive parenting is essential for a child's growth. (Zubizarreta, Calvete, & Hankin, 2019). For instance, the authoritative parenting style, which combines high warmth with high limits, has been associated with children who are more academically capable, more mature psychosocially, and who experience less internalized distress and externalizing issues, including in samples of serious juvenile offenders. (Chen, Kawachi, Berkman, Trudel-Fitzgerald, & Kubzansky, 2019).

Another significant related issue to take into account is the climate of the institution. The importance of the school's role in fostering friendliness and social skills is thus recognized. According to several empirical investigations, school can either encourage or deter aggressiveness. The potential for violence at school is high. (Varela et al., 2019). Among school-age children, aggression can be influenced by a number of important characteristics, including academic performance, attendance history, and the type of study. (Labella & Masten, 2018).

In addition to an individual's financial situation and aggression level, gender may play a significant role in determining aggression. For both men and women, social position may determine the appropriate course of action in the event of hostility (Camilo, Garrido, & Calheiros, 2020).

One of the most important epidemiological problems is whether physical aggressiveness is more common in different age groups and genders. This knowledge can assist explain the causes, effects, and processes of continuity and discontinuity in physical aggressiveness across the lifespan. (Tremblay & Côté, 2019).

Objective of the Study

1. To assess the level of aggression among high School Children in Lahore, Pakistan
2. To determine the association of level of aggression among high School Children in Lahore to their socio-demographic and education factors

MATERIAL AND METHODS

A cross sectional analytical study was conducted. The study was conducted at the high schools of Lahore. The Study population consisted of children at the high schools of Lahore. A simple random sample of n=278 participants was recruited based on the inclusion criteria.

Sample size of 278 cases was calculated with 95% confidence interval, 5% margin of error and expected percentage of children' aggression was 49% (19).

$$n = \frac{Z_{1-\alpha/2}^2 p(1-p)}{d^2}$$

Where,

1- α	95
P	0.49
d	0.05
n	278

Sample Size for Frequency in a Population

Population size (for finite population correction factor or fpc)(N): 1000
Hypothesized % frequency of outcome factor in the population (p): 49% +/- 5
Confidence limits as % of 100 (absolute +/- %)(d): 5%
Design effect (for cluster surveys - DEFF): 1

Confidence Level (%)	Sample Size
95%	278
80%	142
90%	214
97%	321
99%	399
99.9%	521
99.99%	603

Equation
Sample size n = [DEFF * N * p * (1-p)] / [(d^2 * Z^2 * (1-p) * p)]

Results from OpenEpi, Version 3, open source calculator - SSPropor
Print from the browser with ctrl-P
or select text to copy and paste to other programs.

Inclusion Criteria:

- ▶ Children from Public schools were recruited
- ▶ Children from classes 8, 9 and 10 were recruited
- ▶ School children age 12 to 16 years were selected for this study
- ▶ Both male and female students were included

Exclusion Criteria:

- ▶ Children having history of getting treatment for a childhood growth and development disorder were excluded.
- ▶ Children who were not available or out stationed with family at the time of data collection were not included in this study.
- ▶ Children with major medical conditions, who were not able to take part in study were also excluded.

All participants' rights were protected and the research was conducted in accordance with the guidelines established by the University of Lahore's research ethical council (REC). Parents and school administrators were consulted and given the go-ahead. Written informed consent was taken from all the participants and parents. All information and data collection was kept confidential. Participants were kept anonymous throughout the study. Data for the aggression level among school age children was collected through bus Perry Scale aggression tool as self-administered questionnaires. The aggression level among children was assessed by filling the aggression tool by children and then an average aggression scale was achieved. Participants were recruited based on their willingness with the help of a written informed consent. The filled questionnaires were collected and processed for the data analysis.

RESULTS

This chapter presents the main findings came from the data obtained from the study participants. a brief overview of the highlighted findings are given below

Tables 1: Age of the Participants (n=278).

	N	Minimum	Maximum	Mean	Std. Deviation
Age	278	12	16	14.26	1.029
Valid N (listwise)	278				

Table 1 provides descriptive statistics for the variable "Age" within the studied population. The table contains information about the minimum, maximum, mean, and standard deviation of ages among the participants. The following key points can be inferred from the data: A total of 278 participants included in the study, with an average age of 14.26 years. The ages of the participants in the study range from a minimum of 12 years to a maximum of 16 years.

Tables 2: Demographic Characteristics of Participants (n=278)

Variable	f	Percentage%
Gender		
Male	142	51.1
Female	136	48.9
Family Type		
Nuclear family	158	56.8
Extended Family	120	43.2
Academic Performance		
Below average	22	7.9
Average	152	54.7
Good	104	37.4
School Attendance		
Regular	246	88.5
Not regular	32	11.5
Medium of Education		
English	278	100
History of Physical abuse		
Yes	102	36.7
No	176	63.3
Parents Conflicts		
No	215	77.3
Yes	63	22.7
Exposure to violence on TV		
Less than or equal to 2 hours/day	148	53.2
More than 2 hours/day	130	46.8
Time Spent in leisure activities		
Less than or equal to 2 hours/day	140	50.4
More than 2 hours/day	138	49.6
Parents' Education		
Uneducated	36	12.9
Middle	54	19.4
Matric	120	43.2
Above matric	68	54.5

Table 2 presents a comprehensive overview of various demographic variables and their corresponding frequency and percentages within the given context. Below is the description of each variable and its associated percentages:

Table 3: Association of demographics and aggression among high school children

S. No	Demographic	Variable Status	Aggression Level			Chi Square Value	P. Value
			No Aggression	Mild Aggression	Moderate-severe aggress		
1	Gender	Males	15	60	67	22.008 ^a	.000
		Females	10	95	31		
2	Family Type	Nuclear family	17	86	55	1.432 ^a	.489
		Extended Family	8	67	45		
3	Academic	Poor Status	12	108	54	7.686 ^a	.021
		Satisfactory Status	12	47	45		
4	Attendance	Regular	22	126	98	.904 ^a	.636
		Not regular	3	19	10		
5	History of Physical	Yes	5	46	51	15.449 ^a	.000

The gender distribution of the surveyed individuals shows a relatively balanced representation, with approximately 51.1% being male and 48.9% being female. The family composition of the participants is divided between nuclear families and extended families, with nuclear families constituting 56.8% and extended families making up 43.2%. When it comes to academic performance, the data is categorized into three levels. Around 7.9% of the participants fall into the "Below average" category, while the majority, 54.7%, fall into the "Average" category. A significant proportion, 37.4%, are categorized as having "Good" academic performance. Regarding school attendance, the majority of respondents, 88.5%, maintain regular attendance, while a smaller portion, 11.5%, have irregular attendance patterns. All participants in the study receive their education in the English language, accounting for 100% of the sample. A significant subset of participants, 36.7%, report experiencing physical abuse, while the majority, 63.3%, report not having experienced physical abuse. When it comes to conflicts between parents, 22.7% of participants have experienced such conflicts, while 77.3% have not. Approximately 53.2% of participants report exposure to violence on TV for up to 2 hours per day, while 46.8% report more than 2 hours of exposure. Participants are roughly evenly split in terms of time spent in leisure activities. About 50.4% spend up to 2 hours per day on leisure activities, while 49.6% spend more than 2 hours. Parental education levels vary, with 12.9% having an uneducated background, 19.4% having completed middle education, 43.2% having completed matriculation, and 54.5% having education beyond matriculation.

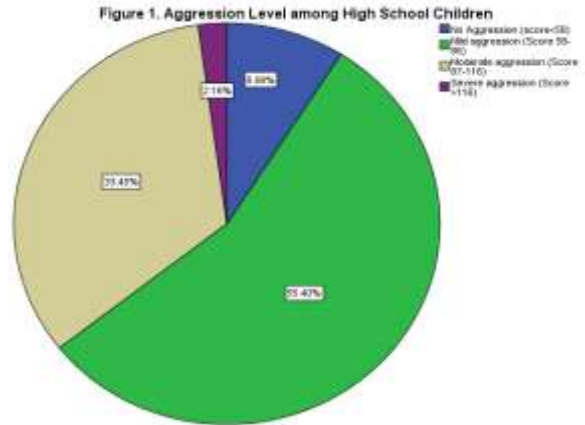


Figure 1: Level Of Aggression Among Participants:

Above Figure 1 indicated the aggression level among high school children. Finding revealed that 8.99% of the study participants had no aggression at all, 55.40% of the participants had mild aggression level, 33.45% of the study participants had moderate aggression level and very few 2.16% of the participants had severe aggression level according to the above given figure.

	abuse	No	20	108	48		
6	Parents Conflicts	Yes	23	126	66	10.464 ^a	.005
		No	3	27	33		
7	Exposure to violence on TV	Less than or equal to 2 hours/day	12	83	53	.306 ^a	.858
		More than 2 hours/day	13	71	46		
8	Time Spent in leisure activities	Less than or equal to 2 hours/day	9	60	71	11.078 ^a	.004
		More than 2 hours/day	14	81	43		
9	Parents' Education	Middle or less	9	46	35	.699 ^a	.705
		Matric and above	16	106	66		

Table 3 shows the associations of various demographic factors with the level of aggression among children. Findings revealed that gender has statistically significant association with the level of aggression, where the male children showed high aggression levels ($\text{Chi}^2 = 22.008^a$) and (P. value .000). Similarly the academic performance also showed a significant relationship with the aggression among high school children, indicating that those with poor academic performance had more high levels of aggression ($\text{Chi}^2 = 7.686^a$) and (P. value .021). Moreover, the history of physical abuse was also found to be significantly associated with aggression levels, where the children with the positive history of physical abuse also had high aggression levels as evident by the findings (Chi square value. 15.449^a) and p value (.000). The parents conflicts also found to be significantly associated with the aggression level among children, indicating that those with having history of parental conflicts at homes expressed more high levels of aggression ($\text{Chi}^2 = 10.464^a$) and (P. value .005). Furthermore, time spending in leisure activities was found to be negatively associated with the aggression levels among children. Findings of this study revealed that children had leisure time of less than 2 hours per day were found to have high aggression levels as evidenced by (Chi square value. 11.078^a) and p value (.004).

Some of the factors studied did not presented any significant association with the aggression levels among high school children. Findings revealed that the family type, attendance status, exposure to violence on television and parents education did not show any association with the anxiety levels with chi square test values (1.432^a, .904^a, .306^a, and .699^a) and (p. values .489, .636, .858 and .705) respectively.

DISUSSION

In this current study, majority 75% of the participants with breast cancer were 46 years and above

In this current study, a total of 278 participants included in the study, with an average age of 14.26 years. The ages of the participants in the study range from a minimum of 12 years to a maximum of 16 years. Similar findings were found in a past study where 14-19 years participants were studied, with an average age of 15 years (Çoban & Yildirim, 2018). Similarly another past study also found congruent results where the mean age in years was 11.4 +2.0, ranging from 8–15 years (Perkins, Ajeeb, Fadel, & Saleh, 2018). In contrast to this study findings, a past study showed different age findings where the participants' mean age was less than this current study with a mean age of 10.3 years (SD=.90) (Garrido, Weiler, & Taussig, 2018). Similarly another research was also with less mean age in years where the mean age was 8.55 years, with minimum of 7 years and maximum of 10 years with standard deviation of 1 (Cabello, Gutiérrez-Cobo, & Fernandez-Berrocal, 2017).

The gender distribution of the surveyed individuals shows a relatively balanced representation, with approximately 51.1% being male and 48.9% being female. A past study revealed consistent findings where 492 students were recruited, and among them 241 were males and 251 were females (Perkins et al., 2018). Similarly another study also found consistent results with males and females 50%, 50% (Çoban & Yildirim, 2018). Another study also showed similar findings where the sample was 52.0% (n=268) male (Garrido et al., 2018). This similarity trend in all studies might be

because of the same ratio in the schools or studying various boys and girls schools simultaneously.

Findings of this study revealed that 88.5%, maintain regular attendance, while a smaller portion, 11.5%, have irregular attendance patterns. The current study also indicated that nuclear families accounted for 56.8% of respondents, while extended families accounted for 43.2%. Previous research indicated that while the majority of students (66%) come from nuclear families, only 34% come from joint or extended families (Sehgal & Nayak, 2020). A different survey found that whereas 44.44% of children lived in nuclear families, 55.56% did so in joint families (Riaz, Bano, Anjum, & Ansari, 2021).

In addition, 37.4% of the sample achieved "Good" levels of academic success in the present investigation. Previous research has also shown that the vast majority of students (91% in this case) regularly attend class, with only 9% doing so on an ad hoc basis. Thirty-four percent of pupils had above-average academic performance (defined as a 75% or higher average on the annual exam) (Sehgal & Nayak, 2021).

In this current study, 12.9% parents were uneducated, 19.4% having completed middle education, 43.2% having completed matriculation, and 54.5% having education beyond matriculation.. Somewhat mixed findings presented by a past study regarding parents' education in which the illiterate were 3%, Primary were 33%, high school were 23.7 % and 37% were above high school (Çoban & Yildirim, 2018). Similarly, another study conducted in the past also found that 2.9% parents were illiterate, 12.2% parents had elementary education, 20.1% were having middle education and 31% of the parents had college and above education (Salimi et al., 2019).

Finding of this current study revealed that 8.99% of the study participants had no aggression at all, 55.40% of the participants had mild aggression level, 33.45% of the study participants had moderate aggression level and very few 2.16% of the participants had severe aggression level according to the above given figure.

A past study found somewhat similar findings that 14% of children had severe aggressive behaviors, 19% had moderate aggressive symptoms, and 35% had mild aggressive symptoms (Naveed, Waqas, Aedma, Afzaal, & Majeed, 2019).

A prior study conducted by Mukul Sehgal and Ajita Nayak in India in 2021 also found that 4% of other youngsters shown high levels of hostility while 8% displayed moderate levels which seems in the agreement with findings of current study (Sehgal & Nayak, 2021).

Another study conducted in Iran by Salimi et al. in 2019 revealed that 29% of students displayed moderate levels of aggressiveness and 10% displayed high levels of violence. Parents' knowledge (p=0.005) and attitude (p=0.012) had statistically significant correlations with the students' aggressive behavior. (Salimi et al., 2019).

Incongruent results showed by a past study where majority of the children in the study from both government and private schools—96.7% and 76.7%, respectively—had excessive aggression. Additionally, it was shown that their high levels of hostility were linked to issues in their families. (Tawfik, EL-Dakhkhny, & Mahmoud, 2019). Similar to the present study, a previous survey, found a large percentage of schoolchildren in India in 2018 scored extremely high on an aggression scale. (Kumari, Kishore, & Mandal, 2018).

A prior study also showed inconsistent results, with only 4% displaying severe aggression and 8% of the children finding

themselves in the moderate range. Sehgal and Nayak (2021) found that low levels of hostility were attained among 88% of the youngsters surveyed. This indicates that, in contrast to the present study, most people exhibited relatively modest levels of hostility.

Findings of this current study revealed that gender has statistically significant association with the level of aggression, where the male children showed high aggression levels ($\chi^2 = 22.008^a$) and (P. value .000). A similar finding was obtained in a recent study (Sehgal & Nayak, 2021): boys' aggression scores were considerably greater than girls' (p.05). In addition, Salimi et al. (2019) observed that male students' levels of physical, verbal, and social aggressiveness were considerably higher than those of female students (p0.001).

Consistently, another past research also go in agreement with the findings of this current study where Males were having significantly more likely aggression than females to engage in violence, $\chi^2 (1, N = 515) = 31.94, p < .001$, and delinquency, $\chi^2 (1, N = 515) = 14.52, p < .001$, (Garrido et al., 2018). According to another past study the aggression scores also rose as school age increased, with males being shown to be more aggressive than females. And these outcomes met the statistical threshold for significance ($p < 0.05$) (Kumari et al., 2018). On other past study found that boys were discovered to be more violent than girls (p-value 0.003). (Sehgal & Nayak, 2021).

One past study also found that there was no statistically significant difference in male and female students' aggression scores. According to that study the males $n=59$ with mean aggression level of $62.7+6.48$, versus female $n=41$ with $62.34+7.56$, with (p. value 0.55), showed no significant difference in aggression (Chamundeswari & Arulsamy, 2019). This unexpected results might be due to nature of that region or cultural practices.

The current study also revealed that academic performance has a significant relationship with the aggression among high school children, indicating that those with poor academic performance had more high levels of aggression ($\chi^2 = 7.686^a$) and (P. value .021). Previous research has also found that students with low aggressiveness scores tend to do well in school (Sehgal & Nayak, 2020). Another study indicated that age (p.001), education level (p.001), and length of time using Android and video games (p.001) all have a role in addiction to these technologies (Salimi et al., 2019).

According to the present study, physical abuse was also found to be significantly associated with aggression levels, where the children experience of physical abuse also had high aggression levels (Chi square value. 15.449^a) and p value (.000).

Children with a history of physical abuse consistently showed significantly higher aggressiveness scores (p.05; Sehgal & Nayak, 2021).

The parents conflicts also found to be significantly associated with the aggression level among children, indicating that those with having history of parental conflicts at homes expressed more high levels of aggression ($\chi^2 = 10.464^a$) and (P. value .005).

However, Sehgal and Nayak 202 found that aggression levels were not substantially correlated with reports of parental conflict. In addition, children's hostility levels were found to be inversely related to the amount of time they spent engaging in leisure activities. Based on the results of this study, we know that children who spend less than 2 hours a day on leisure activities had higher rates of aggression (Chi square value = $11.078a$, $p = .004$).

Children who watched more than two hours of violent television had considerably higher aggressiveness ratings (Figure 9). People who played for more than two hours per day also fared better (Figure 10) (Sehgal & Nayak, 2021).

Age (p.001), education (p.001), and time spent with Android and video games (both p.001) were all found to be significant in a separate study (Salimi et al., 2019).

Another past study also discovered that there are many factors that cause aggression like social, cultural, psychological,

economical and educational. Each one had its impact on our covert thinking and overt behaviors (Mushtaq & Kayani, 2013).

Some of the factors studied during this study did not presented any significant association with the aggression levels among high school children. Findings revealed that the family type, attendance status, exposure to violence on television and parents education did not show any association with the anxiety levels with chi square test values (1.432^a , $.904^a$, $.306^a$, and $.699^a$) and (p. values .489, .636, .858 and .705) respectively.

Inconsistent findings were found in a past study where children who watched violence and physical abuse on television exhibited noticeably high levels of aggressiveness. When compared to other characteristics, aggressiveness ratings had the strongest correlation with watching violent television for more than two hours each day (11.67 versus 3.19 , p-value 0.001) (Sehgal & Nayak, 2021).

Another study with contradictory results revealed that children from nuclear homes were more aggressive than those from joint families ($m4.28$ SD vs. $m3.94$ SD, respectively). Nonetheless, earlier research has shown that there is no association between school attendance and other factors (Sehgal & Nayak, 2021).

Moreover according to a past study, the family system (0.166, 66.8%), and gender (123, 49.6%) were each significant predictors of aggression in children (Riaz et al., 2021).

It was discovered that those who did not exhibit aggression slept well (85.90%), experienced no parental conflict (59.40%), benefited from parental support (90.40%), expressed positive feelings toward their parents (89.60%), were content with the way they interacted with their parents (84.80%), and could talk to their parents about their problems. (Heizomi et al., 2021).

CONCLUSION

Based on the findings of the study conducted among high school children, the following conclusions can be drawn.

In conclusion, the analysis of aggression levels among the study participants revealed. Notably, a small minority, comprising 2.16% of the participants, exhibited severe aggression levels, underscoring the presence of a distinct subgroup with intense aggressive tendencies. These findings highlight the heterogeneity of aggression within the studied population and emphasize the need for tailored interventions that consider the varying degrees of aggression present among individuals. Such insights contribute to a more comprehensive understanding of aggression and pave the way for targeted strategies aimed at promoting healthier behavioral responses and emotional well-being among individuals across the aggression spectrum.

Moreover it is also concluded that this study examined various factors influencing aggression levels among high school children. The findings underscored the significance of gender, academic performance, and history of physical abuse, parental conflicts, and leisure time in relation to aggression. Male children exhibited higher aggression levels, while those with poor academic performance, a history of physical abuse, and exposure to parental conflicts displayed elevated aggression tendencies. Conversely, children who devoted less than 2 hours a day to leisure activities demonstrated reduced aggression levels. On the other hand, the study did not identify any significant associations between aggression and family type, attendance status, exposure to television violence, and parents' education. These results provide valuable insights into the complex interplay of factors that contribute to aggression among high school children, emphasizing the importance of targeted interventions to mitigate aggression and promote healthier emotional well-being.

Recommendations: Based on the findings of this study, several recommendations can be drawn to address and manage aggression levels among high school children:

1. **Gender-Specific Interventions:** Given the significant association between gender and aggression, it's important to develop tailored interventions that consider the differing needs of

male and female students. Strategies should aim to provide constructive outlets for expression, emotional regulation techniques, and conflict resolution skills, particularly for male children who exhibited higher aggression levels.

2. Academic Support Programs: The observed link between academic performance and aggression underscores the importance of academic support programs. Schools should prioritize providing additional assistance to students with poor academic performance to help alleviate stress and frustration that may contribute to aggressive behaviors.

3. Prevention of Physical Abuse: The study's identification of a connection between a history of physical abuse and aggression highlights the necessity of effective child protection policies and support systems. Preventive measures, such as awareness campaigns and counseling services, should be implemented to address and prevent physical abuse within families.

4. Conflict Resolution Training for Parents: Recognizing the impact of parental conflicts on children's aggression, workshops and resources on effective communication and conflict resolution strategies should be provided to parents. Empowering parents with these skills can foster healthier family dynamics and reduce the negative influence of conflicts on children's behavior.

5. Promotion of Leisure Activities: The negative association between leisure activity duration and aggression suggests the value of promoting structured leisure pursuits among high school children. Schools and communities should offer diverse recreational opportunities that engage students in positive and constructive ways during their free time.

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