

The effect of practicing physical education and sports on aggressive behavior at teenager

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Abstract:

The purpose of the study is to identify both physical and verbal aggressive behavior during the physical educational class, for the 2nd grade students who are practicing and aren't practicing sport. A random simple sample of 300 students was selected from the Malika Gaid Highschool and Mohamed Kirwani Highschool in Setif. To reach the objectives of the study a questionnaire of 25 items was developed as a tool to collect data, and distributed over two dimensions; physical aggression and verbal aggression. The statistical methods used were: mean, and T Test.

The results of the study were as follows:

-In the first axis, it was found that the arithmetic mean value of the practicing students of physical education and sports is less than the arithmetic mean value of the non-practicing students.

-Through the second axis, where it shows that the results of the arithmetic mean of the practicing students are less than the arithmetic average of the non-practicing students of physical education and sports in this dimension.

The study recommends developing and enhancing the physical educational curriculum so as to absorb the students' potentials and vent them out properly through participations in sports and safe activities, which would allow students to attain emotional balance.

Keywords: Physical and Sports Education, Aggressive Behavior, Adolescenc.

The Problematic Issue:

Physical education and sports are considered part of general education that is achieved through activities involving the human motor system, leading to the acquisition of certain behavioral tendencies by the individual. (Charles, 1964, p. 30).

Additionally, physical education and sports, like other subjects, work on developing and refining the individual's personality from all sensory, psychological, and social aspects, relying on the motor activity that distinguishes them. This activity encompasses physical and sports activities as a cultural and social pillar, granting the learner a balance and harmonious interaction with the external environment, stemming from exemplary behaviors that provide real integration opportunities. (Marasim and Manashir, 2006, p. 02)

Aggressive behavior aims to harm others and their property, whether physically or verbally, directly or indirectly. This behavior may escalate to harm the individual themselves. (Naji, 1998, p. 13)

The extension of aggressive behavior to schools poses a danger, threatening the students' future and undermining the authority of teachers. If not addressed with psychological educational methods, it may extend beyond school boundaries, leading to more serious issues such as extremism, drug addiction, etc. (Mohamed El Gendy, 1999, p. 291)

Counter-societal behavior is more common in mid-adolescence and takes the form of escapism, truancy, vandalism, petty theft initially, which later escalates to theft of valuable items, lying, deliberate destruction of others' property, physical assault, and sexual assault. (Hamouda, 1991, p. 35)

Adolescents constantly need assistance in achieving balance in their psychological lives between overwhelming emotions and tangible deficiencies in their self-regulatory capacities, which could control these motives. (Saleh Zaki, 1979, p. 247)

From an educational perspective, physical education and sports develop innate qualities in adolescents such as obedience, patience, the sense of friendship, camaraderie, and sharing difficulties with peers. Physical education sessions can also alleviate psychological problems. Through engaging in various sports activities and playing, educators can divert children from undesirable inclinations like fear, anxiety, hatred, and jealousy. Thus, physical education classes can contribute to improving mental health by providing a healthy outlet for emotions and fostering an optimistic outlook on life. (Bouthelja, 1989, p. 38.)

Based on the aforementioned, the study's questions are formulated as follows: General Question: What is the impact of practicing physical education on adolescent aggressive behavior?

Branching from this question are a set of sub-questions:

1. Does practicing physical education and sports affect adolescent verbal aggressive behavior?
2. Does practicing physical education and sports affect adolescent physical aggressive behavior?

Hypotheses: General Hypothesis: Practicing physical education and sports affects adolescent aggressive behavior. Specific Hypotheses:

1. Practicing physical education and sports affects adolescent verbal aggressive behavior.
2. Practicing physical education and sports affects adolescent physical aggressive behavior.

Study Objectives: This study aims to:

- Clarify the relationship between engaging in various sports activities and building a well-rounded individual.
- Highlight the psychological, social, and educational importance of physical activities within educational institutions.
- Address the seriousness of behavioral and psychological disorders and methods to mitigate them.
- Determine the extent to which engaging in sports activities contributes to building a strong and balanced personality in adolescents.

Significance of the Study: The importance of the study and its subject lies in:

- Shedding light on the psychological, social, and educational importance of physical education and sports for adolescents in secondary education.
- Considering engaging in sports activities as a preventive measure to reduce common aggressive behaviors among teenagers.

Reasons for Choosing the Topic: Our motivation for choosing this topic stems from several reasons, including:

Objective Reasons:

- The prevalence of aggressive behavior within communities in general and educational institutions in particular.
- The psychological problems faced by teenagers classified as deviant in aggressive behavior.
- The inadequate attention given to physical education and sports within educational institutions.

Personal Reasons:

- A strong desire to address this valuable topic and support previous research and studies on it.

Terms and Concepts of the Study:

Definition of Physical Education and Sports: Physical education and sports, through their activities, are considered part of general education or a manifestation of the overall educational process. It involves caring for the body and its health as much as educating and refining the mind. (Muhanna, 1998, p. 45)

Definition of Behavior: In its general sense, behavior includes any psychological, mental, social, educational, or emotional activity performed by a living being. It encompasses all actions and activities undertaken by a living being, whether driven by internal or external motives. Behavior thus includes both objective and subjective aspects. Human behavior has several definitions. Some see it as "a means of communication between individuals and groups, through which ideas, principles, and directions are transmitted from one person to another." Others define it as "everything an individual does, including visible activities like sports and internal activities like perception, thinking, and feeling." Still, others view it as "the means by which an individual navigates towards a goal, thus being the means for humans to satisfy their motives." (Abdel Salam, p. 22)

Definition of Aggression: Aggression is an instinct, motive, fundamental energy source, emotion, or intention to harm others. It is an instinct that triggers a series of emotions towards a source of anger. Aggressive tendencies, in their various forms, stem from an ingrained readiness in human nature that can lead either destructively or beneficially for both the individual and society. (Ahmed Fawzi, 2003, p. 265)

Definition of Adolescence: Adolescence is a transitional stage from childhood to adulthood, characterized by a complex period of transformation and growth, involving noticeable physical and

psychological changes, making the young child a member of the adult community. (Michael, Ibrahim Saad, 1991, p. 220)

Zahran defined adolescence as the transition from childhood to maturity. Adolescence is a state of readiness for adulthood, spanning the second decade of a person's life from around thirteen to nineteen years old, or a year or two earlier or later (between 11-11 years). (Zahran, Hamed Abdel Salam, 2000, p. 34)

Adolescence is the period in which individual behavioral tendencies are characterized by emotions, reactions, and intense tensions. It is the age of problems and crises. (Said, Mohamed Ali Bahawer, 1992, p. 22) It also signifies the progression towards sexual, mental, social, and behavioral maturity. (Hussein, Farouk El-Sayed, 1999, p. 41)

Research Methodology:

The methodology in scientific research refers to a set of rules and principles established to reach the truth. It is defined as "the method followed by the researcher in studying the problem to acquire the truth." (Bakhoush, Nadyat, 1995, p. 129) It is also defined as a method of scientific and organized analysis and interpretation to reach specific purposes for a social situation or social problem. (Qasim, 1995, p. 89)

Based on the subject of our study, which focuses on understanding the impact of practicing physical education and sports on adolescent aggressive behavior, we adopted the descriptive methodology. Descriptive research deals with describing a subject, phenomenon, or describing relationships between one variable and another or between a group of variables. Descriptive studies focus more on a case as a group of individuals or a group of organizational units. Descriptive methodology may use various methods in dealing with the studied phenomena. These methods include case studies, survey studies, sequential studies in specific topics, historical studies, and others. (Mziane, 1999, p. 13)

Research Sample:

The research sample was selected from Melika Kaïd High School (practitioners of physical education and sports) and Mohamed Kirouani High School (non-practitioners of physical education and sports) in the province of Setif. The original research population consisted of 300 students, including practitioners and non-practitioners of physical education and sports. Through simple random sampling, we obtained 30 students, representing 10% of the original population. The research sample included second-year high school students. Second-year high school students were chosen to avoid emotional disturbances in first-year students that could be caused by the transition from middle school to high school. This also avoids the anxiety, fear, and pressures resulting from the preparation for the baccalaureate exam for third-year high school students.

Research Domains:

Human Domain: The research sample consisted of 30 high school students studying in Melika Kaïd and Mohamed Kirouani High Schools.

Spatial Domain: The research was conducted at Melika Kaïd and Mohamed Kirouani High Schools in the municipality of Setif.

Temporal Domain: The topic was chosen, and approval was obtained from the supervising teacher on February 7, 2021, marking the start of theoretical study on February 10, 2021. The questionnaire was presented to expert teachers on February 14, 2021.

The questionnaire was printed and distributed to the research sample between February 21, 2021, and April 8, 2021.

Research Tools: The research tools included a questionnaire presented to high school students.

Table (01): Illustrates the distribution of sample individuals

Category	Number
Practicing physical education and sports	20
Non-practicing physical education and sports	10
Total	30

Table No. (02): Distribution of Questions in Each Dimension

Axis	Number of Questions
Verbal aggressive behavior	10
Physical aggressive behavior	15
Total	25

Psychometric Characteristics of the Tool:

Questionnaire Stability: To measure the stability of the study tool, we used the test-retest method on a sample of 10 individuals, 5 students from Malika Kaïd High School in Setif and 5 students from Mohammed Qirwani High School in Setif. After a week, the questionnaire was redistributed to the same sample under the same conditions. The correlation coefficient between the results of its application and the results of its re-application was 0.82, which is significant at the 0.05 level, indicating that the test is stable.

Questionnaire Validity: Internal Consistency Validity of Axes

Table No. (03): Internal Consistency Validity of the Questionnaire Axes:

Axis	Correlation Significance	Significance Ratio	Statistical Decision
Verbal aggressive behavior	0.00	0.05	Significant
Physical aggressive behavior	0.00		

We notice from the above table that the Pearson correlation coefficient has been calculated as 0.00 for both the verbal aggressive behavior axis and the physical aggressive behavior axis, which is lower than the significance level of 0.05. This indicates a correlation between the statements of the axes and thus the validity of the tool.

Presentation and Analysis of Study Results:

Table No. (04): Represents the Results and Grades Obtained by the Sample Individuals Practicing Physical Education and Sports

Category	Individuals	Verbal Aggression	Physical Aggression
Individuals Practicing Physical Education and Sports	Individual 01	23	44
	Individual 02	16	28
	Individual 03	12	31
	Individual 04	23	43
	Individual 05	20	43
	Individual 06	21	37
	Individual 07	16	31
	Individual 08	18	41
	Individual 09	26	45
	Individual 10	20	42
	Individual 11	18	35
	Individual 12	19	49
	Individual 13	18	37
	Individual 14	16	42
	Individual 15	21	44
		Individual 16	19
Individual 17		18	43
Individual 18		18	40
Individual 19		18	38
	Individual 20	19	42
Arithmetic Mean		19	39

Table No. (05): Represents the Results and Grades Obtained by the Non-Practicing Physical Education and Sports Sample

Category	Individuals	Verbal Aggression	Physical Aggression
Individuals Practicing Physical Education and Sports	Individual 21	33	49
	Individual 22	34	50
	Individual 23	36	46
	Individual 24	34	50
	Individual 25	31	50
	Individual 26	31	51
	Individual 27	36	44
	Individual 28	35	47
	Individual 29	30	50
	Individual 30	36	49
Arithmetic Mean		34	49

Presentation and Analysis of the First Sub-Hypothesis:

We presented 10 questions in this axis to understand the impact of practicing sports activities on verbal aggressive behavior among adolescent students in a sample consisting of 30 randomly selected students, including 20 practicing and 10 non-practicing physical education and sports. Student No. 09 (practicing) obtained the highest score of 26, while student No. 03 obtained the lowest score of 12. The scores of the remaining students ranged from 16 to 23, with an arithmetic mean score of 19.

As for the non-practicing physical education and sports students, student No. 23, 27, and 30 obtained the highest score of 36, while student No. 29 obtained the lowest score of 30. The scores of the remaining students ranged from 31 to 35, with an arithmetic mean of 34.

In this axis, the arithmetic mean for non-practicing physical education and sports students was higher than the arithmetic mean for practicing students.

Presentation and Analysis of the Second Sub-Hypothesis:

We presented 15 questions in this axis to understand the impact of practicing physical education and sports on physical aggressive behavior among adolescent students in a sample of 30 students from Malukah Qaid and Mohammed Qirwani High Schools. They were selected using a simple random sampling method, including 20 practicing students and 10 non-practicing students.

Student No. 09 obtained the highest score of 45, while student No. 02 obtained the lowest score of 28. The rest of the students scored between 31 and 44.

In this axis, the arithmetic mean for non-practicing physical education and sports students was 49, which was higher than the arithmetic mean for practicing physical education and sports students, which was 39.

Discussion and Interpretation of Study Results:

Discussion and Interpretation of the First Sub-Hypothesis: The first hypothesis states: Practicing physical education and sports affect verbal aggressive behavior among adolescent students.

To verify the validity of the first hypothesis, we studied the significance of differences using a t-test. The results are shown in Table No. 06

Category	Arithmetic Mean	Calculated t-value	Significance percentage	Level of Significance	Statistical Decision
Practicing Physical Education and Sports	19	13.515	0.00	0.05	Significant
Non-Practicing Physical Education and Sports	34				

The results from Table 06 indicate that the calculated t-value, which is 13.515, suggests statistically significant differences at a significance level of 0.05. Additionally, the results obtained in the first axis show that the arithmetic mean for students practicing physical education and sports is lower than that for non-practicing students.

This implies that engaging in physical education and sports contributes to refining their language and manners, as they become less likely to shout at others who disagree with them or use unacceptable language. This is confirmed by Mohamed Hassan Alawi, who noted that those with higher scores in this dimension tend to exhibit more aggression compared to others.

Based on these findings, we can conclude that engaging in physical education and sports reduces verbal aggression among adolescent students, as indicated by the validity of the hypothesis.

Discussion and interpretation of the results of the second partial hypothesis:

The second hypothesis states that engaging in physical education and sports affects physical aggression among adolescent students. To verify this, we studied the significance of the differences using the t-test, and the results are presented in the following table:

Table 07: Illustrates the results obtained in the second axis

Category	Arithmetic Mean	Calculated t-value	Significance percentage	Level of Significance	Statistical Decision
Practicing Physical Education and Sports	39	70.05	0.00	0.05	Significant
Non-Practicing Physical Education and Sports	49				

The t-value calculated from Table 07, which is 70.05, indicates statistically significant differences at a significance level of 0.05.

Furthermore, the results obtained from the second axis demonstrate that the arithmetic mean for practicing students is lower than that for non-practicing students in this dimension. Engaging in physical education and sports has endowed them with significant confidence and rationality compared to their peers. They now control themselves better and are less prone to physical violence against others. They also refrain from initiating attacks when they sense aggression from others or feel provoked, exhibiting more self-control and restraint. This is supported by Mohamed Hassan Alawi's observation that individuals with higher scores in this dimension tend to be more aggressive compared to their peers.

These findings are consistent with previous studies, such as the study by Bougarra titled "The Role of Educational Sports Activities in Reducing Aggressive Behaviors among Primary School Students," which found statistically significant differences in favor of practicing students. Similarly, the study by Habi Tarek and others titled "The Role of Physical Education Class in Reducing

"Aggression among Middle School Students" concluded that physical education class contributes to reducing physical aggression among middle school students.

In conclusion, based on the results, analysis, and discussion presented in this study, and drawing on theoretical background and previous research, we can confidently assert the following conclusions:

- Physical education and sports practice reduce verbal aggression among adolescent students.
- Physical education and sports practice reduce physical aggression among adolescent students.

The findings of this study align with all previous research results mentioned earlier regarding the positive impact of sports practice on aggressive behavior and overall mental health. For instance, the study by Ben Kounab El Haj titled "The Importance of Recreational Physical Activity in Reducing Aggressive Behavior among Secondary School Students," and the study by Reynes Eric and Lorant Jean titled "The Effect of Practicing Judo and Karate on the Aggressiveness of Male Youth." These longitudinal studies conducted over two years on 43 children practicing Judo and Karate demonstrated the positive impact of sports on controlling aggression. Additionally, studies by Hassan and Khalaf (2009) and Omar (2001) aimed to design proposed sports programs for children to address various behavioral issues, such as aggression and social behavior. The results favored the effectiveness of the programs in modifying behavior. Similarly, the study by Rabahi Abdelaziz and Belbaki Saleh (2012) on the role of physical education classes in reducing psychological anxiety among intermediate school students found that team sports have a greater role in reducing anxiety compared to individual sports, emphasizing the significant role of physical education in alleviating adolescent problems.

Suggestions and Recommendations:

- It is necessary to conduct similar research to the current study, by expanding the research to various age groups.
- Organize conferences and seminars on the role of physical education and sports in reducing aggressive behaviors, highlighting their importance.
- Develop guidance and counseling programs for families of adolescents with aggressive behavior, providing them with effective strategies for dealing with it.
- Raise awareness among families about the importance of the adolescent stage in individual growth and personality formation, through awareness days held within schools.
- Accompany adolescents within the school environment, identify their problems, and assist them in overcoming them through counseling sessions conducted by school counselors.

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