

## Attention Deficit, Hyperactivity And Its Relation With Aggressive Behavior In Private Schools Students In Jordan

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Article Info	Abstract
<p><b>Article History</b></p> <p>Received: January 03, 2021</p> <p>Accepted: April 01, 2021</p> <hr/> <p><b>Keywords:</b> Attention Deficit, Hyperactivity, Aggressive Behavior, Private Schools</p> <p><b>DOI:</b> 10.5281/zenodo.4657256</p>	<p><i>This study aimed to identify distraction and hyperactivity and its relationship to aggressive behavior in private school students in Amman, and the study was applied to a sample of (220) students selected in a random way from the study community, and to achieve the objectives of the study was used the measure of attention dispersion and the measure of hyperactivity and measure of aggressive behavior after its development and extracting indications of honesty and stability, in order to ascertain their suitability for the Jordanian environment, and the nature of the study, the results showed that the average mathematical degree of attention in private schools was used to the degree of The results showed that there were statistically significant differences between the arithmetic averages and the normative deviations in attention dispersion and hyperactivity, as the results showed statistically significant differences in aggressive behavior among students and in favour of males in private schools, and a positive correlation with statistical significance between the level of distraction, hyperactivity and aggressive behavior of students in private schools.</i></p>

### Introduction

Hyperactivity and distraction disorders are among the most common disorders in children in the early and middle age groups. And they exist in almost all societies despite the different cultures and customs in them. Although this disorder is not a learning disability, it is in itself a developmental behavioral problem so that its effects negatively affect the child's ability to focus and his unintended transition from one activity to another without being immersed in the activities and completing any of them.

The interest in this type of behavior is due to its lack of clarity, in addition to the fact that its owner is often subjected to abuse and different rulings, in his early childhood, he gets admired and encouraged, and with the passage of time, those around him begin to show their distress and discomfort with his behavior. Desouki. (2006).

The disorder of hyperactivity and distraction is a controversial disorder on more than one level. There are significant differences and marked differences in its definition and in determining its causes and thus in choosing the methods of treating it. The definitions of this behavioral disorder have changed over the past decades, which has resulted in a great deal of misinterpretation. It is not surprising that these definitions emerged from various points such as medicine, education and psychology, where the criteria for definitions differed according to the different specializations and orientations of their owners (Yousefi, 2005).

This disorder begins early in the sense that its symptoms appear before the age of seven, and affects approximately 3-5% of children enrolled in school, and the infection rate ranges between male and female students (Ervin et al. 1996), the disorder tends to be chronic, as more than 50% of children who suffer from the disorder continue to provide evidence of serious symptoms until adolescence and adulthood (Weiss & Hechtman 1993), in addition, children who suffer from the disorder are at a high risk of suffering from disorders related to learning and behavior, especially emotional social behavior (Shaheen and Ajarmah 2010).

It is difficult to know the true prevalence rates of the disorder, due to the difference in definition and components of the disorder over time, and the results of a large number of studies indicate that the disorder spreads to 5% of the school community children in the same age range, and there are approximately 3-5% of the general population of children suffer from the disorder (American Psychiatric Association, 1994).

The results of many studies also showed that the prevalence of disorder among school children is 16.1%, and the prevalence of disorder is common among children in the pre-adolescence stage. The prevalence is higher among boys than girls, where the incidence rate in clinical samples is 1: 6, while in the community sample it is 1: 3, the disorder also occurs in large proportions before the age of eight and becomes less frequent after that, and some of the remaining effects or results such as lack of attention may continue until adolescence or adulthood.

The results of a number of recent studies indicated that the disorder is more prevalent among males than females, as males appear more impulsive and have greater susceptibility to distraction within the classroom, and personal and aggressive symptoms in males are more than among females with a higher rate of psychological problems among them (Abu Gado, 2001). The results of recent epidemiological studies also showed that the incidence of disorder is approximately 10% among the children of the world, and that the prevalence rate among children of school age ranges between 4-6%, and it is worth noting that its prevalence rate among children belonging to families with a low socioeconomic level is approximately 20%. As for the prevalence rate among males and females in general, the prevalence rate is six times that of females. As for the American Psychiatric Association 1994, the prevalence of the disorder between boys and girls is 1: 4. And recent disturbances indicate that if the disorder persists into adolescence, it turns at a certain point into anti-social behavior known as communication disorder. According to teachers' estimates, 85% of people with ADD meet the diagnostic trials for Attention Deficit Disorder accompanied by hyperactivity. (Barnett & Labellarte 2002).

In a review of the prevalence of Attention Deficit Disorder accompanied by hyperactivity, it was found that one third of children with ADHD had one or more common illnesses including opposition and challenge disorder, communication disorder, depression disorder, anxiety disorders and learning difficulties. (Al-Jaafirah, 2008).

### **The Study Problem**

The purpose of this study is to identify distraction, hyperactivity and its relationship to aggressive behavior among students of private schools in Amman.

### **Study Questions**

This study attempted to answer the following questions:

1. What is the level of distraction, hyperactivity and aggressive behavior of students in private schools?
2. Are there differences in attention distraction, hyperactivity, and aggressive behavior among students in private schools due to gender and grade (seventh, eighth, eleventh)?
3. Is there a statistically significant correlation at the level ( $\alpha \leq 0.05$ ) between the level of distraction, hyperactivity and aggressive behavior of students in private schools?

### **The Importance of the Study**

The importance of this study is represented by the theoretical and practical benefits it offers to students, researchers, psychological and educational guides in private schools in the capital Amman governorate, through:

- **Theoretical Importance:** Theoretical importance is represented by the theoretical approaches that this study will provide on the concept of distraction, hyperactivity and aggressive behavior and the relationship between them, among students of private schools, and the possibility of benefiting from it by the interested persons, researchers, educators, teachers and workers in the educational and educational system. Its theoretical importance is also that it enables us to achieve understanding and insight with the degree of widespread distraction and hyperactivity and its association with aggressive behavior among students of private schools by revealing the correlation between them.

- **Practical Importance:** The results of this study can help educators and psychologists by giving them a clear picture of the problem of distraction and hyperactivity and its association with aggressive behavior among students of private schools. The study tools will also provide space for researchers and graduate students. To benefit from them in their future studies on this problem.

### **Conceptual and Procedural Definitions**

#### **Attention Deficit**

Known by the American Psychiatric Association (2017). As an inability to focus. It is known by the Quick Reference to Diagnostic Standards from Fourth Diagnostic and Statistical Manual (DSM-IV. (2004). Page (32)). That there are six or more symptoms of inattention mentioned in the statistical evidence for a period of not less than six months, which leads to poor adaptation and incompatibility with the developmental level. Brik Rana. (2017) .Medical Review. Physician Review, Ranna Parekh, M.D., M.P.H. July (2017).

Procedurally, it is defined as the score obtained by the student as a result of his responses to the paragraphs of the scale developed to measure distraction.

Doctors also define hyperactivity disorder / attention deficit as a genetic source disorder that is transmitted by heredity in many of its cases, it results in a chemical imbalance or deficiency of the nerve connections that are connected to part of the brain and are responsible for the chemical properties that help the brain to regulate behavior. (Zametkin et al 1990), Professional group of Attention and Related Disorder (PGARD 1991) defines it as a vital neurological disorder that leads to acute deficiency that affects children by 3-5% of schoolchildren. Laval Virgini. (2002). Chernomazova (1996) defines it as a result of insufficient brain function that is difficult to measure with psychological tests. Finally, the National Institute of Mental Health (2000) defines it as a

disorder of nerve centers that cause problems in the brain's functions such as thinking, learning, memory, and behavior.

Although the definition of this syndrome is not easy because of the non-adaptive behaviors that affect the life and future of the child, but from a pure medical point of view, the syndrome expresses a behavioral neurological disorder (Neuro Behavior disorder), and this definition indicates its content that the issue is nervous and of a nature that indicates a brain problem which leads to behavioral disorder. Adler. (2008). Clinical. Los Angeles.

### **Hyperactivity**

Known by the American Psychiatric Association (2017). It is an excessive disproportionate movement in the surrounding environment. And it is known by the Quick Reference to Diagnostic Standards from fourth Diagnostic and Statistical Manual (2004). Page (33). That there are six or more symptoms of hyperactivity mentioned in the statistical guide for a period of not less than six months, which leads to poor adaptation and incompatibility with the evolutionary level.

Procedurally defined as the degree obtained by the student as a result of his responses to the paragraphs of the scale developed to measure hyperactivity.

### **Hyperactivity Disorder and Attention Deficit**

The quick reference to diagnostic criteria defines him from the fourth diagnostic and statistical guide DSM-IV. (2004) .Page (32) .. as the child's inability to pay attention and his ability to be dispersed Which may affect his focus while carrying out various activities and not complete it successfully.

It is known by the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition DSM-V (2014). page. (31). As an ongoing pattern of inattention, hyperactivity, and / or impulsivity that interferes with performance or development, which directly and negatively affects social, professional and academic activities. Procedurally, it is defined as the score obtained by the student as a result of his responses to the paragraphs of the developed scale to measure hyperactivity and attention deficit.

Barkley (1990) defined it in his theory of hyperactivity disorder / attention deficit as a disruption in the response to executive functions that may lead to a lack of self-organization, and a deficiency in the ability to regulate behavior towards present and future goals with inappropriate environmental behavior.

The Fourth Diagnostic Statistical Manual of Mental Disorders (DSM-4) indicated that the overactive disorder / attention deficit means the child's inability to pay attention, and its susceptibility to dispersion may affect his focus while carrying out various activities and not complete it successfully. Fourth Diagnostic Statistical Manual of Mental Disorders (DSM-4). (2004).

The hyperactivity / attention deficit can be defined as a continuous, long-term acute physical and motor activity in a child so that he cannot control his body's movements, but he spends most of his time in continuous movement, and this phenomenon is often accompanied by cases of brain injuries or is for psychological reasons, and this behavior often appears at the age of four until the age of 14-15 years. (Directory of Special Education). WanasKhairy, Abdel Hamid BouSnoubra. (2008). Education and Psychology, National Bureau for Distance Education and Training, Algeria.

When the behavior of hyperactivity is associated with problems related to controlling classroom behavior, it can be procedurally defined as: Getting out of the seat, talking without permission, wandering in the classroom, throwing things on the floor, verbal nuisance, etc. from non-disciplinary actions (Qenawy Mustafa) (2001).

Excess activity and hyperactivity is an increase in activity beyond the continuously acceptable limit, also, the amount of movement issued by the child is not commensurate with his chronological age, for example: Children at the age of two are very active towards exploring the environment so they are considered appropriate for their lifetime, however, an activity equal to this by a ten-year-old child during class discussion is considered inappropriate (Qamish, Al-Ma'ita 2007). Procedurally, it is defined as the score obtained by the student as a result of his responses to the paragraphs of the scale developed for his measurement.

### **AgressiveBehavior**

Defined by the quick reference to the diagnostic criteria from the Diagnostic and Statistical Manual, fourth edition (2004). page. (34). The Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (2014). page. (166) As a type of counter behavior under Conduct Behavior, which is a pattern of repetitive and continuous behavior, It violates other people's fundamental rights or basic social norms appropriate to a person's age or laws.

Miro Camarino, Lino et al. Translation: Abdulaziz Al-Sartawi and Ayman Khashan. (2003). Attention deficit hyperactivity disorder. A practical guide for clinicians, Dar Al-Qalam. First edition. Dubai.

Procedurally, it is defined as the score obtained by the student as a result of his responses to the paragraphs of the developed scale to measure aggressive behavior.

### **The Study Determinants and its Limitations**

The generalization of the study results is determined in light of the following:

1. Spatial determinant: This study was applied in the creative nations private schools in the capital Amman governorate.
2. Time determinant: The scale of the current study was applied in the first semester of 2019/2020.
3. Human determinant: This study was applied to students of grades (seventh, ninth, eleventh).
4. Study tools: The results of the study are determined using the measure of distraction, hyperactivity and aggressive behavior, which researchers developed to achieve the goals of the current study, and the availability of appropriate indications of honesty and consistency.

The generalization of the results of this study will limit the extent to which the study sample represents its society, the procedures of applying the study tool, the integrity of statistical transactions and their suitability of the study variables, in addition to the accuracy of the response of the study sample individuals from students, and their seriousness in responding to the study tools.

### **Previous Studies**

The researcher reviewed some studies such as:

Essakson, Westleigh, Cubosov, and Ruskin (2018) conducted a study on the risk of inattention - and the symptoms of hyperactivity, movement and risky sexual behavior in Russian teenagers. The study was based on a group of 537 adolescents from northern Russia. Information about inactivity, hyperactivity / impulsivity as well as behavior problems was obtained through teacher assessments, while information on previous unprotected sexual practices was based, and the number of sexual partners, sex during pregnancy, drug use, and the expectation of risks and parenting behavior on students' self-reports. Binary logistic regression analysis was used to examine the association between variables. The results of this study showed that the deficit in planning and organizing behaviors, and problems of attention and forgetfulness, is linked to the risky sexual behavior of Russian teenagers. This highlights the importance of distinguishing between symptoms of hyperactivity disorder and attention deficit in adolescence to prevent risky behaviors and their potentially harmful consequences for an individual's health.

In another study of Shamri (2016). It aimed to identify the symbolic indications of violence through analyzing the drawings of children with hyperactivity and distraction during the age group from 7 to 10 years, as well as identifying differences in the tendency for violence between males and females, the study studied 95 children who were noticeably active. The researcher has used the symbolic analysis of the symbols of violence in children's drawings of the class of hyperactivity and distraction and the measure of the tendency of violence in the behavior of children from the class of hyperactivity and distraction from the age of 7 to 10 years. The results of this study showed a difference in the dimensions of the tendency for aggressive behavior, where males showed a greater tendency to violence than females.

Shani (2011, SHani) study which aimed to compare the parenting practices of hyperactive children with the parenting practices of normal children, the sample of the study included 95 parents, 93 mothers, and two fathers, and their children ranged between 5-11 years old, and the researcher used the Social Discipline Questionnaire from the University of Washington, which includes 73 statements, and measures seven practices that parents may practice with their children like good handling, harsh handling, the questionnaire also measures other practices such as positive verbal interaction, corporal punishment, praise, praise, and the provision of incentives. The researcher has used the Pearson Coefficient to show the extent to which parenting practices are related to each other, and the T-test to compare the parenting practices of normal children and hyperactive children. The results found that parents of overactive children use a more appropriate and disciplined system with their children and rely on cruelty in dealing with them, and they use corporal punishment with their children more than parents of normal children, the results also indicated that there are no differences in parenting practices between parents of normal children and parents of hyperactive children in terms of the use of incentives, praise, praise and positive verbal methods. The results also showed that parents of normal children monitor their children more than parents of hyperactive children.

Al-Esaiy (2010) also conducted a study aimed at identifying the effectiveness of a computer-based training program for reducing attention disorder accompanied by hyperactivity on a number of cases suffering from it. The researcher chose the quasi-experimental approach (a case study) in which 10 cases suffering from hyperactivity disorder were selected, and the researcher used the statistical diagnostic scale, the fourth version, and a training program to reduce excessive activity consisting of 30 training sessions, and an electronic test in the computer, and the researcher coded the data through the Cronbach's alpha test, the Lexon test and the T test, and the results indicated a decrease in the level of excessive activity among the sample members, which indicates the effectiveness of the training program prepared.

The study Helwig (2011) aimed to investigate the prevalence of sleep disturbance in overactive children and adolescents, the sample of the study reached 280 children between the ages of 6-12 years, 276 adolescents between the ages of 13-18 years, and the same sample, but its members did not suffer from hyperactivity, the results indicated that children and adolescents with hyperactivity were twice more likely to have a sleep disorder compared to their peers without hyperactivity, as the prevalence of sleep disturbance among children with hyperactivity was 9.8%. As for non-hyperactive children, the rate of sleep disorder is (5.4%), and the prevalence among adolescents with hyperactivity is 5%, while the non-hyperactive has a sleep disorder of 5.2%.

The study Losapio (2010) which aimed to identify parental perceptions about hyperactivity and treatment methods and which methods parents prefer the most. The study sample consisted of 206 parents, 69 parents with children suffering from hyperactivity and impulsivity, 69 of their parents Children suffering from attention deficit and 68 of the parents with children who met the three symptoms of hyperactivity (hyperactivity - impulsivity - distraction), the age of children ranged from (5-18) years, and the KADDS scale was introduced, and this scale includes three subsections: symptoms - treatment methods - general information and knowledge about the disorder, and from the statistical analyzes used, ANOVA and T-test, and the results indicated that there were no significant differences in the scores between parents on the symptom branch and general knowledge about hyperactivity disorder. As for the methods of treating hyperactivity, parents were expected to choose Method of behavior modification, but most parents preferred to use medications as a way to treat hyperactivity, especially parents who have children with whom the three branches of hyperactivity met (hyperactivity - impulsivity - distraction).

Karla (2009) conducted a study that aimed to investigate whether there is a difference between the dynamics of families with hyperactive children and families with normal children by introducing the Household Environment Scale (FES), the sample of the study consisted of 60 families who have normal children, 60 families whose children suffer from hyperactivity. The measure of the family environment included three main dimensions to measure ten important characteristics of the family, where the first dimension includes communication and relationships between family members. The second dimension is the growth and development of the personality. The third dimension is to maintain the organization and planning of family activities, and the study used the cause-relative design and used variance analysis to reach the results that indicated that there are no major differences in the dynamics of families whose members have an overactive child and families whose children are normal.

In a study of Al-Asemi (2008). The study examined the relationship between Attention Deficit Disorder associated with hyperactivity, academic achievement, depression, and personal and social adjustment. Likewise, the self-image, parents, the environment, frustrations and conflicts among students in basic education in the Syrian city of Daraa. The sample of this study consisted of 33 students diagnosed with attention distraction and hyperkinetic disorder. Also 33 students from normal children from the age of 9 to 10 years. The results of this study showed a clear decrease with statistically significant academic achievement in children with attention distraction and hyperkinetic disorder. The results also indicated that these children suffer from problems of self-image, parents, and the environment surrounding the child as well as personal and social conflicts and frustrations.

Abraham study (2002) which aims to identify hyperactivity in a sample of kindergartens and the relationship of this disorder to some household variables, the study sample consisted of (240) children divided into (129) males and (111) females, The researcher used the intelligence test (man drawing test) for Harris's nose, the economic, socio-cultural level, the observation form, and the measure of hyperactivity prepared by the researcher, the researcher relied on several statistical methods, such as the arithmetic mean, correlation coefficients, analysis of variance, and T-test. The study found a set of results, including that hyperactivity, is more prevalent among males than among females, and that family variables such as family size and the child's arrangement among his siblings and the mother's work or the absence of the father are not sufficient for the occurrence of hyperactivity disorder, but the greater the number of negative factors that are associated with each of them in the child's environment, the greater the chance of him experiencing a behavioral disorder, the results also showed that there was no correlation between excessive activity and the economic and social level of the family.

### **Methodology and Procedures**

A descriptive, relational approach was used, which is based on studying the phenomenon and knowing the relationship between it and other phenomena in order to reach the goals of the study and answer its questions.

### **Study Sample Members**

The study sample consisted of all students of the seventh, ninth, and eleventh grades enrolled in the creative nations 'private schools affiliated with special education in the Ministry of Education in the first semester of the academic year 2019/2020.

### **Study tools**

### **First: a questionnaire for distraction, hyperactivity and aggressive behavior:**

The researchers developed the study tools for attention distraction, hyperactivity, and aggressive behavior, by reviewing educational literature, related studies, and by referring to the diagnostic criteria in the fourth and fifth diagnostic and statistical manuals, the Isaacson et al. (2018) and the Shammari study (2016).

Conners test for attention and excessive activity. Then write the paragraphs of the scale in its primary form, which consists of a group of paragraphs distributed over three dimensions of distraction, hyperactivity and aggressive behavior.

### **Validity of the questionnaire: distraction, hyperactivity and aggressive behavior**

The significance of the validity of the measure of distraction, hyperactivity and aggressive behavior was verified by the following methods:

- The validity of the arbitrators: the questionnaire was presented to ten arbitrators, specialists in educational and psychological sciences at Amman Arab University and teachers in schools to express their views on the appropriateness of the scale paragraphs, the extent of their clarity and suitability for the study community and sample, and (80%) were approved by agreement of the arbitrators.

- Some indicators of construction validity: Pearson's correlation coefficient was calculated for each paragraph with the dimension to which it belongs.

### **Reliability of the Scale of Attention Distraction, Hyperactivity and Aggressive Behavior**

To ensure the stability of the questionnaire, the researchers used the test-retest method, by applying them to a survey sample of (20) students from outside the study sample.

Then re-application at a time interval of two weeks, and the Pearson correlation coefficient was calculated between the two application scores, then the Cronbach alpha coefficient was calculated to ensure the internal consistency of the scale, and Table (1) shows that.

**Table 1: Values of the Reliability Coefficients of the Study Tools**

	Test/retest reliability	Consistency using Cronbach Alpha
<b>Attention Deficit</b>	0.85	0.90
<b>Hyperactivity</b>	0.79	0.86
<b>Aggressive behavior</b>	0.81	0.81

It is noted from the results of Table (1) that the values of internal consistency and stability by the method of return are all suitable for the purposes of this study.

### **Method for correcting the scale of distraction, hyperactivity and aggressive behavior.**

To judge the scores of those examined on the scale of distraction and hyperactivity. The quintet gradient is used (always, often, sometimes, rarely, never).

The scale was corrected by giving the previous scale the following numbers (5, 4, 3, 2, 1) in the case of positive paragraphs, and inverting weights in the case of negative paragraphs, and to judge the level of distraction and hyperactivity in students, the statistical standard was used using the following formula:

$$\text{Category length} = \text{Upper limit} - \text{minimum (gradient)} / \text{Number of default classes} = 5 - 1 / 3 = 1.33$$

Accordingly, distraction, hyperactivity and aggressive behavior are divided into three levels:

- High level: (3.68-5)
- Intermediate level: (2.34 - 3.67)
- Low Level: (1 - 2.33)

### **Results of the study**

Results of answering the first question that stated: What is the level of distraction, hyperactivity and aggressive behavior among students in private schools?

Arithmetic averages and standard deviations were found for each individual questionnaire, and Table (2) shows that.

**Table 2: Arithmetic averages and standard deviations**

N	Mean	Standard deviation	Level
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<b>Attention Deficit Hyperactivity</b>	160	2.25	.72	Low
<b>Agressive behavior</b>	160	2.49	.77	Average
	160	2.15	.88	Low

It is noted from Table (2) that the arithmetic mean for the attention deficit among students came with a low degree, as the mean for the total degree (2.25) and with a standard deviation (.72). The arithmetic mean of the total degree of hyperactivity came at the intermediate level as it reached (2.49) and with a standard deviation (.72). The mean of the total degree of aggressive behavior came at a low level, as it reached (2.15) with a standard deviation (.88). (Justify low).

The results of the answer to the second question, which states: Are there differences in the distraction, hyperactivity, and aggressive behavior of students in private schools due to gender and grade (seventh, eighth, eleventh)?

To answer this question, arithmetic mean and standard deviations were extracted, as well as the analysis of multiple variance and Table (3) and Table (4) shows that.

**Table 3: Arithmetic mean and standard deviations for distraction, hyperactivity and aggressive behavior among students in private schools are attributed to gender and grade (seventh, eighth, eleventh)**

Field	Gender	Grade	Arithmetic mean	Standard deviation	Number
<b>Hyperactivity</b>	Male	seventh	2.32	.76	38
		eighth	2.29	.74	26
		eleventh	2.24	.58	28
		Total	2.29	.70	92
	Female	seventh	2.18	.73	29
		eighth	2.45	.75	22
		eleventh	1.88	.75	17
		Total	2.19	.76	68
<b>Agressive behavior</b>	Male	seventh	2.50	.76	38
		eighth	2.27	.74	26
		eleventh	2.47	.71	28
		Total	2.43	.74	92
	Female	seventh	2.49	.72	29
		eighth	2.79	.81	22
		eleventh	2.40	.94	17
		Total	2.57	.81	68
<b>Agressive behavior</b>	Male	seventh	2.19	.95	38
		eighth	2.41	1.03	26
		eleventh	2.23	.88	28
		Total	2.27	.95	92
	Female	seventh	2.09	.80	29
		eighth	2.11	.76	22
		eleventh	1.64	.50	17
		Total	1.98	.74	68
<b>Total</b>	1.00	seventh	2.41	.69	38
		eighth	2.30	.63	26
		eleventh	2.38	.59	28
		Total	2.37	.64	92
	2.00	seventh	2.35	.62	29

eighth	2.59	.68	22
eleventh	2.15	.68	17
Total	2.38	.67	68

It is noted from Table (3) that there are apparent differences between the arithmetic means and the standard deviations in distraction, hyperactivity and aggressive behavior among students in private schools of different gender and grade (seventh, eighth, eleventh), and to find out whether these differences are statistically significant, the analysis of multiple variance of variables was extracted and Table (4) shows that.

**Table 4: Results of multivariate analysis of variance to examine the significance of differences between attention distraction, hyperactivity and aggressive behavior among students in private schools due to gender and grade (seventh, eighth, eleventh)**

Source of contrast		Sum of squares	Degree of freedom	Average squares	P	Significance level
<b>Gender</b>	Attention Deficit	.479	1	.479	.923	.338
	Hyperactivity	.808	1	.808	1.361	.245
	Agressive behavior	4.141	1	4.141	5.535	.020
	Total score	.001	1	.001	.001	.971
<b>Class</b>	Attention Deficit	2.293	2	1.147	2.212	.113
	Hyperactivity	.198	2	.099	.167	.846
	Agressive behavior	2.363	2	1.181	1.579	.209
	Total score	.760	2	.380	.897	.410
<b>Gender grade *</b>	Attention Deficit	1.559	2	.780	1.504	.225
	Hyperactivity	2.555	2	1.277	2.152	.120
	Agressive behavior	1.565	2	.782	1.046	.354
	Total score	1.621	2	.811	1.915	.151
<b>Error</b>	Attention Deficit	79.816	154	.518		
	Hyperactivity	91.392	154	.593		
	Agressive behavior	115.210	154	.748		
	Total score	65.188	154	.423		
<b>Total</b>	Attention Deficit	891.250	160			
	Hyperactivity	1083.493	160			
	Agressive behavior	858.306	160			
	Total score	968.170	160			
<b>total Corrected</b>	Attention Deficit	83.498	159			
	Hyperactivity	94.766	159			
	Agressive behavior	121.774	159			
	Total score	67.294	159			

It is noted from Table (4) that there are no statistically significant differences between the arithmetic averages and the standard deviations in distraction and hyperactivity, while there are statistically significant differences in the aggressive behavior of students and in favor of males in private schools.

**To answer the third question that states: Is there a statistically significant correlation at the level ( $\alpha \leq 0.05$ ) between the level of distraction, hyperactivity and aggressive behavior of students in private schools?**



To answer this question, Pearson correlation coefficients between distraction, hyperactivity and aggressive behavior were extracted and Table (5) shows that.

**Table 5: The values of correlation coefficients between the level of distraction, hyperactivity and aggressive behavior of students in private schools**

	<b>Attention Deficit</b>	<b>Hyperactivity</b>	<b>Aggressive behavior</b>
<b>Attention Deficit</b>	1	0.53**	0.44**
<b>Hyperactivity</b>	-	1	0.48**
<b>Aggressive behavior</b>	-	-	1

It is noted from Table (5) that there is a positive correlation with statistically significant between the level of distraction, hyperactivity and aggressive behavior among students in private schools.

### Recommendations

In light of the study results, the researchers recommended some recommendations:

- Work on further studies
- Take advantage of the counseling methods and program procedures that were prepared in this study by specialists, teachers and psychological counselors to reduce excessive activity among students of private schools in Amman.
- Holding training courses to train school administrators, such as teachers, on how to deal with overactive students and train them on the techniques and methods of this program and employ it in the classroom.
- The necessity of detecting hyperactive students in schools and providing them with treatment services.
- The need for cooperation between school and home to overcome the problems that children with hyperactivity suffer from.
- The necessity of holding training courses for parents of hyperactive children in order to enlighten them on how to deal with their children.

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