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The Effectiveness of the Hijaashi Method to Reduce Aggressive Behavior in Children with Autism Spectrum Disorder in Jordan

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Abstract

Children with autism spectrum disorder suffer from behavioral problems represented in aggressive behavior towards themselves and others, therefore, the child's inability to perform basic life skills, his isolation and his inability to integrate with others. As such, the present study aimed to prepare a training program based on the Hijaashi method in alleviating aggressive behavior in children with autism spectrum disorder in Jordan and verifying its effectiveness in the pre and post measurements. The present study used a quasi-experimental quantitative descriptive approach. To achieve the objectives of the study, an aggressive behavior measure consisting of 23 paragraphs was divided into two dimensions. The sample of the study consisted of (30) children with autism spectrum disorder chosen intentionally and distributed randomly to two control groups and consisted of (15) children, and experimental consisted of (15) children. Appropriate statistical analyzes were performed, such as manova, accompanying multiple variance (mancova), ancova analysis, arithmetic mean, and standard deviations. The results showed that there were statistically significant differences at the level of significance ($\alpha = 0.05$) between the mean ranks of the experimental and control groups' scores on the scale of aggressive behavior in the dimensional measurement, and the presence of statistically significant differences at the level of significance ($\alpha = 0.05$) between the average ranks of the experimental group on the scale of aggressive behavior in telemetry. Conclusion: The current study contributes to alleviating aggressive behavior in children with autism spectrum disorder in Jordan and developing basic life skills, increasing their effectiveness with others, avoiding isolation, introvertedness, and contributing to training specialists on how to prepare training programs that help these children to modify their behavior.

Keywords: Children with Autism Spectrum Disorder, Aggressive Behavior, Hijaashi Style.

Introduction

Autism spectrum disorder is at the forefront of the special education classes that need more care, training and qualification of specialists qualified to deal with this group in order to improve their skills,

interactive social, behavioral and communicative capabilities and the possibility of integrating them with their peers in society.

LeoKanner, a pediatrician and psychiatrist and author of *Child Psychology* in 1953, was the first to refer to autism as a childhood disorder in 1943 when he examined a group of children at Harvard University in the United States of America and drew his attention to the presence of Unusual behavioral patterns that are characterized by these children who were classified as mentally retarded. Their behavior was characterized by what was later termed as infantile self-disorders. This had been noticed from their complete self-closure, detachment from reality, convergence, isolation and lack of response to the stimuli that surround them (Al-Qamish, 2013).

The Problem Statement

Autism spectrum disorder affects the natural development of children in the areas of thinking, social and emotional interaction, skills of verbal and nonverbal communication. Thus it affects their abilities to communicate with others and not interact and integrate with their social environment, and in many cases this results in the emergence of hostile behaviors or responses to self-harm and harm to others, and this leads the child to withdrawal, isolation and a feeling of frustration and failure as the child resorts to expressing his feelings, emotions and desires through aggressive behaviors toward oneself, others or properties. This is confirmed by Bakhsh study (2002), Al-Balawi study (2011) and study of Ziyaadaat (2013).

The Hijaashi method has been in use since 1964 when the Hijaashi School in Japan followed the kinetic treatment method for autistic children through its students' daily curriculum, which is known as "daily life therapy". It focuses on group learning and the reduction of individual learning. Its goal is to find a balance in the various areas of the autistic child and the stability of his behavioral emotions and increase their social interactions. Its goal is to find a balance in the various areas of the autistic child and the stability of his behavioral emotions and increase their social interactions.

Study Questions

It was represented by the following question:

How effective is the training program based on the Hijaashi method in alleviating aggressive behavior in children with autism spectrum disorder?

Objectives of the Study

The current study sought to prepare a training program based on the Hijaashi method in mitigating aggressive behavior in children with autism spectrum disorder to get rid of the undesirable behaviors represented in this study by aggressive behaviors towards oneself and the others, through the techniques and activities involved in the Hijaashi method, through sports play that expresses child's personality. It is one of the important methods in educating children and helps in dealing with behavioral and emotional problems, and learning desirable behavior (Mutawalli, 2015).

The main objective is to verify the effectiveness of the Hijashi-method training program in mitigating aggressive behavior in children with autism spectrum disorder in Jordan.

Hypotheses of the Study

1- There are no statistically significant differences at the level of significance ($\alpha = 0.05$) between the mean levels of the experimental group and the control group scores on the aggressive behavior scale in the pre and post measurements.

2- There are no statistically significant differences at the level of significance ($\alpha = 0.05$) between the average ranks of the experimental group scores on the aggressive behavior scale in the pre and post measurements.

Methodology of the Study

A quasi-experimental approach was used that depended on the choice of an intentional sample from the indigenous community and based on the design of the pre and post measurements and relied on two experimental and control groups (Al-Rousan, 2014).

Sample and Population of the study

The population of the study consisted of all second semester 2018/2019 children with autism spectrum disorder in the special education centers of the governorate of Irbid.

As for the sample of the study, it was intentionally chosen from (Wassan Specialized Center for People with Special Needs). It consisted of (30) children with autism spectrum disorder. They were randomly divided into two control groups and consisted of (15) experimental children and (15) children.

Applied Importance

The importance of the current study lies in the fact that it seeks to alleviate aggressive behavior in children with autism spectrum disorder through a set of sports and drawing and music activities that underlie the Higashi style. And get acquainted with the reality of practicing these activities in centers for people with special needs and the most important obstacles they suffer from, and drew the attention of colleges of physical education in Jordanian universities to include and motivate students to specialize in it.

Tools of the Study

Aggressive Behavior Scale

The goal of the scale: to reveal manifestations of aggressive behavior in children with autism spectrum disorder.

Dimensions of the scale: A list of common aggressive behaviors in children with autism spectrum disorder was prepared in two dimensions: aggressive behavior towards oneself, aggressive behavior towards others.

Stability of the Aggressive Behavior Scale

The stability of the aggressive behavior scale was verified by applying it to an exploratory sample of (12) children from the community of the study and from outside its sample. The Alpha Crobnach equation was used to estimate the scale stability factor and its value was (0.88). The stability coefficients for the two dimensions ranged between (0.81 - 0.83), which is acceptable for conducting the study, whereas, the correlation coefficient that exceeds (0.6) is enough to guarantee the stability

of the used instrument (Odeh, 2014). Table (3) shows persistence factors for the two dimensions, namely (aggressive behavior towards oneself, aggressive behavior towards others).

Table (3): Stability coefficients for the aggressive behavior scale

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1	Aggressive behavior towards oneself	12	0.83
2	Aggressive behavior towards others	11	0.81
A measure of aggressive behavior as a whole		23	0.88

Correcting the Aggressive Behavior Scale

Use this quadratic scale to give each of the positive paragraphs the following weights:

(4) Scores for each answer represent (always).

(3) Scores for each answer represent (often).

Two marks for each answer represent (sometimes).

One score for each answer represent (rarely).

Variables of the Study

Independent Variable: Hijaashi-based Training Program

Dependent variable: aggressive behavior.

Study limits: The study results were circulated to the following limits:

Time limits: The study was applied in the second semester of the academic year (2018/2019).

Human limits: This study was applied to a sample of children with autism spectrum disorder at Wasan Specialized Center for Autistic Children in Irbid Governorate.

Spatial limits: Wasan Specialized Center for Autistic Children of Irbid Governorate.

The used statistical methods

To achieve the objectives of the study, the Statistical Package for Social Sciences (SPSS) was used to analyze data and obtain results, as follows:

- Arithmetic averages and standard deviations.

The Alpha Cronbach Equation.

- MANCOVA accompanying multiple contrast analysis.
- ANCOVA test.
- Multiple contrast analysis (MANOVA) tests.

The Importance of the Study

The importance of the study of autism spectrum disorder is due to the increase in its prevalence rates, and its emergence in an important and sensitive stage in the child's life. This requires more research and study on the reasons for its occurrence, so as to try to reduce the prevalence rates and

access to the best treatment programs, which enables parents and workers with this group of children to effectively deal with them.

Terminology of Study

Effectiveness: A concept that indicates the level at which goals are successfully achieved. Effectiveness is procedurally defined in the current research: it is the effect of a training program based on the Hijaashi-style sporting play in alleviating aggressive behavior in children with autism spectrum disorder.

The training program: It is a program planned and organized in the light of scientific foundations to provide direct and indirect services to children with autism spectrum disorder (research sample) in order to help them alleviate their aggressive behaviors and learn desirable social and behavioral skills (Mahjoub, 2016). The researcher in this research defines the training program as: a set of planned and organized experiences that are based on the Higashi style of playing sports and some behavioral techniques, and includes a set of activities, sports games and motor skills practiced by children with a spectrum disorder in order to alleviate their aggressive behavior.

Hijaashi Method

It is a method that emerged from the philosophy of daily living therapy, which was developed in 1964 by Dr. Kiyukithara in Japan with the conviction that children with autism spectrum disorder can be helped to reach their highest potential near their families and societies. This method is based on teaching by tradition, building on sports, music, drawing, and caring for group playing with groups and reducing individual learning (Almakableh, 2016).

Aggressive Behavior

Behavior that the individual verbally, morally, physically, materially, explicitly or implicitly, directly or indirectly, active or passive, and this behavior entails physical or material harm that can be observed and measured and its intensity varies from person to another. It is known by the degree to which the child attains the aggressive behavior scale (Al-Zari, 2010).

The researcher procedurally defines aggressive behavior: that it is any negative behavior that children with autistic spectrum disorder do about themselves, others, or property, that will cause harm.

Autism Spectrum Disorder

It is a developmental disorder that is determined by behavioral disorders that include disorder of communication and social interaction, adherence to ritual patterns, and stereotypical activities. These symptoms appear in early childhood and limit daily performance (Farhati and al-Taliyyah, 2017).

(Al-Sayed, 2015) defined it as a developmental disability or disorder that appears in the early years of a child's life and includes insufficient linguistic, cognitive, social, behavioral and emotional development that leads to severe deficiencies in the whole development process and has negative effects on the child's life.

The researcher procedurally defines autism spectrum disorder as a disorder that is the inability of the child to communicate in the early stages of his life, and his symptoms appear as deficiencies in social

interaction skills, aggressive behavioral reactions, withdrawal towards the self, and lack of attention to others.

Theoretical Framework and Previous Studies

The concept of autism spectrum disorder: autism is a word translated from Greek, whereas the word is divided into two parts: Autos with the meaning of self or oneself, and ism with the meaning of abnormal state or closure, and thus the term means that people with autism carry an abnormal breath and self-locking (Mostafa and El-Sherbiny, 2014). According to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) issued in 2013, the main symptoms of autism spectrum disorder are:

- 1- A persistent deficit in social communication and social interaction skills.
- 2- The emergence of repetitive behavior patterns, stereotypical behaviors, and unspecified interests and activities
- 3- Its intensity is from simple to severe according to the level of required support.

Causes of Autism Spectrum Disorder

Ancient hypotheses indicated that the main reason for the occurrence of autism spectrum disorder is due to the weak relationship between the mother and the child, or the nature of the negative view of the parents towards their child, as it described the feelings of the mother cold, and it does not provide tenderness, warmth, and complete care for her child. This hypothesis was rejected by researchers and those interested in it being the main cause of autism spectrum disorder (Zari, 2014). Recently, many theories have emerged that deal with the causes of autism spectrum disorder, the most important of which are:

First: Biochemical theory: The biochemical theory assumes that autism spectrum disorder occurs as a result of a disturbance in the transporting materials of nerve impulses such as amino acids, serotonin and dopamine, where research indicated the relationship of autism spectrum to neurochemical factors, which is represented by the presence of an increase or decrease in the secretions of the neurotransmitter.

Second: biological theory: This theory interprets the autism spectrum disorder as a result of a disorder in the central nervous system, the nerve centers in the brain and specifically in the cortex. This imbalance leads to sensory, linguistic, mental, and cognitive problems in children with a spectrum disorder autism is among the most important causes that lead to an imbalance in the central nervous system. Among the most important causes that lead to an imbalance in the central nervous system are the mother's taking of drugs and medicines, and the lack of oxygen at birth.

Third: The environmental theory: The occurrence of autism spectrum disorder is attributed to environmental factors such as: the mother's affliction with types of accompanying diets such as rubella, the mother's exposure to radiological doses, frequent bleeding associated with depression after the third month, the mother taking some drugs without the doctor's permission, and the age of the pregnant mother, environmental pollution, especially with heavy metal compounds (such as lead and mercury, as well as smoking), and a lack of oxygen to the brain of the fetus.

Fourth: Genetic theory: The genetic theory explains the occurrence of autism spectrum disorder as a genetic that occurs as a result of the transfer of genes from parents to children. Where a lot of studies and research results confirmed that genetics have a role in the occurrence of autism spectrum

disorder, there are indicators in its results that suggest the role of heredity, so that the autism spectrum disorder is spread at a rate of (2-4%) among autistic children and parents (Omayrah, 2018).

Hijaashi Style

As the Hijaashi method is one of the methods that seek to develop all the psychological, social, behavioral, and educational fields for children with autism spectrum disorder, depending on a group of sports daily distributed over intermittent periods. This is based on the assumption that when a person exercises extreme physical exercise, the body produces neurochemicals called (endorphins) that reduce stress, behavioral and motor patterns that appear in children with autism spectrum disorder, and this sport includes running, walking and a group of group games such as football and basketball. Whereas, the use of programs based on play therapy helps to alleviate some behavioral disorders and reduce the severity of their aggressive behavior, which facilitates the process of integration into society and the surrounding environment (Al-Kuwari, 2007).

Aggressive Behavior

It is an offensive behavior that involves coercion and victimization, and as such, it is an offensive impulse with which the person's control of his internal impulses becomes weak, and it is a rush towards sabotage and obstruction. Its forms include physical aggression, verbal aggression, and symbolic aggression (huarrb and Hijazi, 2012). It is also known as an internal feeling of anger, resentment, and hostility, and it is expressed outwardly in the form of an act or behavior intended to cause harm to a person or thing, as it can also appear in the form of verbal or physical aggression towards oneself or others, or the destruction and destruction of things and property.

Previous Studies

The study of **Al-Kuwari (2007)** aimed to know the effect of a program based on the Hijaashi-based method on sports and art in developing communication and social skills among autistic children in Qatar. From the program, the Wexxon test was applied, and the results indicated that there were statistically significant differences between the pre and post measurements in the communication skills of autistic children in favor of the post measurement.

Al-Kaabily (2012) addressed a training program that includes a set of various activities and games that help in developing social interaction and play for an autistic child. The basic study sample consisted of (20) children with autism, and they were divided into two equal groups, one of them is the control and the other is experimental. The sample ages ranged between 5-9 years, and the researcher used the Childhood Autism Estimation Scale (CARS), the Social Interactions Scale for Children outside the House, Adel Abdullah (2012), and the Children's Play Scale, prepared by the researcher. The results of the study reached the effectiveness of the program in developing skills for playing and developing social interaction among autistic children. There are statistically significant differences before and after applying the program to the experimental group.

El-sheikh (2015) conducted a study on the effect of sports play on developing the basic skills of an autistic child on a sample of 4 children between the ages of 3 to 5 years and through the use of motor tests (TGMD-2). The results of the study reached the effectiveness of using sports play in developing basic motor skills, especially the skill of balance and jumping, developing sensory perception and reducing repeated motor behaviors in an autistic child.

Abdel-Hamid (2016) aimed to identify the effectiveness of a training program based on self-management skills in reducing self-harm and an impact in improving social behavior among children with autism spectrum disorder. The study was applied to a sample of 16 male autistic students enrolled in the autism program in Taif city. Their ages ranged between 8-18 years. They have high victimization behavior and an abnormal social behavior, and their intelligence level reached between 55-69 degrees and they were divided into two experimental groups consisting of 8 children and the second control group consisting of 8 children and the results of the study resulted in a decrease in self-harm behavior and improvement of positive social behavior among individuals having the experimental group after applying the program compared to the control group and the continued effect of the program on the experimental group during the follow-up period.

The Results of the Study and its Discussion

The first zero hypothesis: "There is no statistically significant difference at the level of significance ($\alpha = 0.05$) between the mean scores of the members of the experimental and controlling groups in the post measurement of aggressive behavior after applying the program".

To answer this hypothesis, arithmetic mean and standard deviations were extracted for the performance of the study sample individuals on the aggressive behavior scale for children with autism spectrum disorder in the experimental and control groups and to detect differences in post-application according to the group variable (experimental, control), as shown in table (1):

Table (1) arithmetic averages, standard deviations, adjusted averages and standard errors for the degrees of study personnel in the pre and post applications on the aggressive behavior scale

Dependent variable (aggressive behavior)	the group	erP		tsoP		Adjusted arithmetic averages	Standar d errors
		SMA	standard deviation	SMA	standard deviatio n		
Self-aggressive behavior (score 48)	Control	33.67	2.97	30.20	6.17	30.20	1.22
	Experime ntal	33.40	2.85	16.53	2.56	16.53	1.22
Aggressive behavior towards others (score of 44)	Control	32.80	2.27	29.20	5.43	29.20	1.07
	Experime ntal	32.27	2.34	15.53	2.13	15.53	1.07
The overall aggressive behavior scale (score of 92)	Control	66.33	4.67	59.40	11.34	59.40	2.24
	Experime ntal	65.67	4.72	32.07	4.64	32.07	2.24

Table (1) shows that there are differences between the mean performance of the individuals of the control and experimental groups in the pre and post applications on the aggressive behavior scale. To demonstrate the significance of the statistical differences between the averages, use the accompanying multiple variance analysis test (MANCOVA). Table (2) shows these results. Table (2) Results of MANCOVA accompanying analysis, for the performance of the study members on the aggressive behavior scale for children with autism spectrum disorder

Source of contrast	Dimensions of scale	Sum of squares	Degree of freedom	Average squares	eulav-P	Significance level	Scale of impact (Partial eta box)
Aggressive behavior toward oneself	Aggressive behavior toward post-self	11.661	1	11.661	0.517	0.479	0.019
	Aggressive behavior toward others after me	0.257	1	0.257	0.015	0.905	0.001
Aggressive behavior towards others before me	Aggressive behavior toward post-self	2.223	1	2.223	0.099	0.756	0.004
	Aggressive behavior toward others after me	6.743	1	6.743	0.381	0.542	0.014
the group =Hotelling 2.950 F=36.878 H=0.000	Aggressive behavior toward post-self	1344.795	1	1344.795	59.632	0.000*	0.696
	Aggressive behavior toward others after me	1345.366	1	1345.366	76.018	0.000*	0.745
The error	Aggressive behavior toward post-self	586.342	26	22.552			
	Aggressive behavior toward others after me	460.147	26	17.698			
Adjusted total	Aggressive behavior toward post-self	2024.967	29				
	Aggressive behavior toward others after me	1876.967	29				

Statistically significant at the level of significance ($\alpha = 0.05$) *

Table (2) shows the presence of statistically significant differences at the level of statistical significance ($\alpha = 0.05$) in the mathematical averages on the dimension of aggressive behavior towards oneself in the dimensional measurement in favor of the experimental group, where the value of (P) is (59,632), through the modified averages shown in Table (11). As the dimension of the aggressive behavior towards the self in the dimensional measurement of the experimental group (16.53) versus (30.20) of the control group, this indicates a decrease in the aggressive behavior towards the self of the experimental group, due to the effect of the integrative integrated program. It is clear from Table (2) that the value of the ETA's square of the aggressive behavior towards the self (0.696), which is the size of the effect of the integrative integrated program, explains (69.6%) of the explained variance in

the dimension of the aggressive behavior towards the self, and the rest (unexplained) is due to other variables.

Table (2) shows the presence of statistically significant differences at the level of statistical significance ($\alpha = 0.05$) in the arithmetic means on the distance of aggressive behavior towards others in the dimensional measurement in favor of the experimental group, where the value of (P) (76.018), through the modified averages shown in Table (1). The dimension of the aggressive behavior towards others in the dimensional measurement of the experimental group (15.53) compared to (29.20) of the control group. This indicates a decrease in the aggressive behavior towards others for individuals of the experimental group due to the effect of the integrative integrated program. It is clear from Table (5) that the value of the ETA sub-square of aggressive behavior towards others (0.745), which is the size of the effect of using the integrative integrated program, explains (74.5%) of the explained variance in the dimension of aggressive behavior towards others, and the rest (unexplained) is due to other variables.

ANCOVA was used for the differences between the scores of the sample individuals on the scale of the post-aggressive behavior as a whole, according to the difference in the variable group, where the results were, as shown in Table (3).

Table (3) Results of the ANCOVA test for the differences between the mean of the control and experimental groups in the pretest post-application on the scale of post-aggressive behavior by group

Dependent variable	Source of contrast	Sum of squares	Degrees of freedom	Average squares	P-value	Significance level	Impact size (partial eta box)
Dimensional aggressive behavior scale	Atribal	86.033	1	86.033	1.152	0.293	0.041
	the group	5472.126	1	5472.126	73.269	0.000*	0.731
	The mistake	2016.501	27	74.685			
	Adjusted total	7705.867	29				

Statistically significant at the level of significance ($\alpha = 0.05$) *

Table (3) shows that there are statistically significant differences at the level of statistical significance ($\alpha = 0.05$) in the arithmetic means on the scale of aggressive behavior in the dimensional measurement in favor of the experimental group, where the value of (P) (73.269), through the modified averages shown in Table (1). The scale of the aggressive behavior of the experimental group was (32.07) compared to (59.40) for the control group. This indicates a decrease in the aggressive behavior towards others among the members of the experimental group, due to the effect of the integrative integrated program. It is clear from Table (3) that the value of the partial ETA square for the scale of aggressive behavior for the dimensional measurement (0.731), which is the size of the effect of using the integrative program, explains (73.1%) of the explained variance in the scale of aggressive dimensional behavior, and the rest (unexplained) is due to other variables.

Based on the results, the fourth null hypothesis was rejected, which states that: There is no statistically significant difference at the level of significance ($\alpha = 0.05$) between the mean scores of the members of the experimental and controlling groups in the post measurement of aggressive behavior after applying the integrative integrated program.

And the acceptance of the alternative hypothesis implied, "There is a statistically significant difference at the level of significance ($\alpha = 0.05$) between the mean scores of the members of the experimental and controlling groups in the dimensional measurement of the aggressive behavior after applying the integrative integrated program".

Second: The second zero hypothesis "There is no statistically significant difference at the level of significance ($\alpha = 0.05$) between the mean scores of the members of the experimental group in the pre and post measurement of aggressive behavior before and after applying the training program based on the Hijaashi method"

To answer this hypothesis, arithmetic averages and standard deviations for children's performance were extracted on the aggressive behavior scale for children with autism spectrum disorder in the experimental group and for detecting differences in pre and post application according to the applicable variable (pre and post), as shown in Table (4).

Table (4): Arithmetic averages, standard deviations, adjusted averages and standard errors for the degrees of study personnel in the experimental group for pre and post applications on the scale of aggressive behavior

Dependent variable (aggressive behavior)	Application	SMA	standard deviation	Adjusted arithmetic averages	Standard errors
Self-aggressive behavior (score 48)	Pre	33.40	2.85	33.40	0.70
	Post	16.53	2.56	16.53	0.70
Aggressive behavior towards others (score of 44)	Pre	32.27	2.34	32.27	0.58
	Post	15.53	2.13	15.53	0.58
A measure of aggressive behavior as a whole (Score from 92)	Pre	65.67	4.72	65.67	1.21
	Post	32.07	4.64	32.07	1.21

Table (4) shows the existence of differences in the performance of the members of the experimental group in the pre and post applications on the aggressive behavior scale. To demonstrate the

significance of the statistical differences between the means, it uses the MANOVA test. Table (5) shows these results.

Table (5) Results of Multiple Variation Analysis (MANOVA), for the performance of members of the experimental group in the pre and post measurements on the aggressive behavior scale for children with autism spectrum disorder

Source of contrast	elacs eht fo noisulcxE	Sum squares	Degree of freedom	Average squares	eulav-P	Significance level	Scale of impact (Partial eta box)
Application = Hotelling 15.029 202.90=F. H=0.000	Aggressive behavior towards oneself	2133.633	1	2133.633	290.950	0.000*	0.812
	Aggressive behavior towards others	2100.033	1	2100.033	418.016	0.000*	0.837
	A measure of aggressive behavior as a whole	8467.200	1	8467.200	387.220	0.000*	0.833
The error	Aggressive behavior towards oneself	205.333	28	7.333			
	Aggressive behavior towards others	140.667	28	5.024			
	A measure of aggressive behavior as a whole	673.067	28	24.038			
Overall rate	Aggressive behavior towards oneself	2338.967	29				
	Aggressive behavior towards others	2240.700	29				
	A measure of aggressive behavior as a whole	9411.200	29				

Statistically significant at the level of significance ($\alpha = 0.05$) *

Table (5) shows the presence of statistically significant differences at the level of statistical significance ($\alpha = 0.05$) in the arithmetic means on the distance of aggressive behavior towards oneself attributable to the application of the program, where the value of (P) (290.950), through the modified averages shown in Table (4). The dimension of the aggressive behavior towards oneself for the post-application (16.53) compared to (33.40) for the pre-implementation. This indicates a decrease in the aggressive behavior in the post-test. These differences are due to the integrative integrated program. It is clear from Table (5) that the value of the ETA's square of the aggressive behavior towards oneself (0.812), which is the magnitude of the effect of using the integrative integrated program, while

(81.2%) explained the explanation for the variance in the dimension of the aggressive behavior towards oneself, and the rest (unexplained) is due to other variables.

Table (5) shows the presence of statistically significant differences at the level of statistical significance ($\alpha = 0.05$) in the arithmetic means on the distance of aggressive behavior towards others attributable to the application, where the value of (P) (418.016), through the modified averages shown in Table (4). The dimension of the aggressive behavior towards others for the post-application (15.53) versus (32.27) for the pre-application indicates a decrease in the aggressive behavior in the post-test. These differences are due to the integrative integrated program. From Table (5), it is clear that the value of the ETA sub-square for aggressive behavior towards others (0.837) is the magnitude of the effect of using the integrated program. (83.7%) explained the explanation for the variance in the dimension of the aggressive behavior towards others, and the rest (unexplained) is due to other variables.

Table (5) also shows the presence of statistically significant differences at the level of statistical significance ($\alpha = 0.05$) in the arithmetic mean on the scale of aggressive behavior as a whole attributable to the application, where the value of (P) (387.220), through the modified averages shown in Table (4). The scale of aggressive behavior as a whole was for post-implementation (32.07) compared to (65.67) for pre-implementation. This indicates a decrease in aggressive behavior in post-test, due to the effect of the integrative program. It is clear from Table (15) that the value of the ETA sub-square of the aggressive behavior scale (0.833) is the size of the effect of using the integrative integrated program. (83.3%) explained the varied explanation in the scale of aggressive behavior, and the rest (unexplained) is due to other variables.

Based on the results, the fifth null hypothesis was rejected, which states that: "There is no statistically significant difference at the level of significance ($\alpha = 0.05$) between the mean scores of the members of the experimental group in the pre and post measurement of aggressive behavior before and after the application of the integrative program, and the acceptance of the alternative hypothesis included, "There is a statistically significant difference at the level of significance ($\alpha = 0.05$) between the mean scores of the members of the experimental group in the pre and post measurement of aggressive behavior before and after applying the program."

Discussion of Research Questions

Discussion of the results related to the study question: "How effective is the Hijaashi-based training in mitigating aggressive behavior in children with autism spectrum disorder?"

The results indicated that there were differences between the mean performance of the members of the control and experimental groups in the pre and post applications on the scale of aggressive behavior towards the self in the post measurement in favor of the experimental group. The results also indicated the presence of statistically significant differences at the level of statistical significance ($\alpha = 0.05$) in the arithmetic averages on the distance of aggressive behavior towards others in telemetry in favor of the experimental group.

The presence of statistically significant differences at the level of statistical significance ($\alpha = 0.05$) in the arithmetic means on the scale of aggressive behavior in the dimensional measurement in favor of the experimental group, and the presence of statistically significant differences at the level of statistical significance ($\alpha = 0.05$) in the arithmetic means after the aggressive behavior towards oneself and towards others is attributed to the application of the program.

These results confirm the effectiveness of the training program based on the Hijaashi method in alleviating aggressive behavior in children with autism spectrum disorder in telemetry. The researcher attributes that result to the training program included a set of exercises and integrated activities that are based on encouraging desirable behavior and hiding unwanted behavior, and the development of social skills where the techniques used in the Hijaashi method in sports play are based on team play and the use of drawing and music, as this method takes into account the inclinations and desires of these children through the use of modeling, reinforcement, imitation and role playing and other behavioral methods, where play works on increase periods of attention and control inappropriate behaviors, such as aggressive behavior.

These results are consistent with the findings of the Bakhsh study (2002), which showed the presence of statistically significant differences in the dimensional measurement in favor of the experimental group in the dimensions of aggressive behavior and the overall degree. The program has achieved high results in reducing the aggressive behavior of people with autism spectrum disorder, as it agreed with the study of Mutawalli (2012) that reached the effectiveness of the play therapy program in reducing the degree of behavioral disorders represented by violence in the study sample and the continued impact of the program after stopping for a limited time. The results also coincided with the study of Al-Hulli (2012) that indicated a statistically significant difference between the pre and posttest aggressive behavior in children with autism spectrum (medium intensity) according to a sport program. It also coincided with the study of the Al-Zura (2012) that found the effectiveness of communication training in reducing aggressive behavior among a sample of children with autism in Jeddah, Saudi Arabia.

Conclusion

The current study considers that the various activities used in the Hijaashi style, especially sports, are not limited to a group of movements with a heavy physical load, but are closely related to the sensory functions of the brain and feelings, through running, skating, swinging, biking, and standing in the form of a locomotive. In response to issues to raise the arms high, and other technical and musical games used in the program, the child was able to learn many skills that facilitate them to interact and integrate with others such as modifying unwanted behaviors, commitment to the role, controlling their emotions and feelings and expressing them, and obeying orders issued by the specialist, as these movements mentally and psychologically affect the child with autism spectrum disorder.

Play is a means of venting the pent-up emotions and thus helps these children to vent and empty their aggression through the atmosphere of fun and pleasure that these games broadcast and positively reflect on their behaviors. It also helped increase their interaction with their peers and the environment around them, mitigate their emotions resulting from frustration, and direct their random behaviors to purposeful behaviors by giving them the ability to transfer anger and tension to the playing tool instead of directing it to oneself or others, which was indicated by the study of Hussain (2015) that sports play reduces aggressive behavior in children with autism spectrum disorder by converting their negative energies into positive energies. It allows the child to act freely and frees them from the limitations and frustrations that they live, and directs the child to try to understand, accept and deal with others in dialogue without resorting to imposing what they see through violence, and thereby increasing their social interaction and integration into society.

Recommendations of the Study

No matter how advanced a community is, no community is free of children with autism spectrum disorder. Similarly, the progress and urbanization of societies is measured through their care and concern for children with special needs, including those with autism spectrum disorder. Therefore, the current study recommends the following:

- Conduct awareness-raising programs to introduce this group, its most important characteristics and behaviors, and the importance and necessity of integrating it into society, by holding lectures and seminars that include displaying special observations for this category.
- An autistic child is a child with characteristics and behaviors that are different from ordinary children in some respects and who has feelings and desires expressed in their own way and which society must accept.
- That the community understands that there is an autistic child in the family and that they avoid the concept of stigma attached to the family due to the existence of this child.
- Community members have an important role in helping, supporting and encouraging families of children with autism spectrum disorder to integrate and involve their children in society.
- Carrying out training workshops for specialists working with these children, which contribute to increasing their knowledge of the psychological, social, behavioral and linguistic characteristics of this group.
- Training specialists and workers on how to prepare training and counseling programs that help these children develop the necessary life skills to integrate into society and stay away from isolation.

Contributions of the Study

Through the training program based on the Hijaashi method, the current study contributes to alleviating aggressive behavior in children with autism spectrum disorder by developing their basic life skills, creating appropriate conditions for their subsequent inclusion in the classroom with their regular peers, and also contributes to providing and enabling educational institutions and private centers. This category includes a set of methods, strategies and plans that are appropriate to capabilities of children in this category.

The current study also contributes to strengthening the partnership between the families of these children and the specialists working with them by providing them with full support. It also contributes to drawing the attention of colleges of physical and sports education in Jordanian universities to motivate students to specialize in the fields of sport for people with special needs and the inclusion of a number of special courses in this category. It also contributes to providing educational training outputs that are appropriate to the reality of the environment in which children live with autism spectrum disorder, and one of the most important contributions is to educate community members about the necessity of accepting a group with autism spectrum disorder and provide the necessary and sufficient support to ensure that they obtain all their rights as the rest of society.

References

- AbdulHamid, S. (2016). The effectiveness of training in self-management skills in reducing self-harm behavior and its impact on improving social behavior in children with autism spectrum disorder. Sohag University, Faculty of Education.

- Al-Balawi, S. (2011). "The effectiveness of a training program based on artistic activities in developing social interaction skills and reducing stereotypical behavior among autistic children", PhD thesis, Amman Arab University.
- Al-Farhati and Al-Talia. (2017). Diagnosing the Memory of Children with Autism Spectrum Disorder in the Light of the Diagnostic Factors for the Fifth Edition of the Fifth Guide. *Journal of Special Education*, Volume 1, Issue 18, pp. 230-382.
- Al-Hilli, H. (2012). The effect of exercise activity in reducing aggressive classroom behavior for children with moderate-severity autism spectrum disorder. *Journal of Physical Education Sciences, Iraq*. Vol. 5, Issue 2, pp. 379-399.
- Al-Kuwari, S. (2007). "The effect of a training program based on the Higashi-based approach to sports and art in developing communication and social skills among autistic children in Qatar," MA thesis, Amman Arab University.
- Al-Qala, F., Yunus, N. (2007). *Psychology of People with Disabilities*. Amman: Al Masirah Publishing House. First edition.
- Al-Qamish, N. (2013). *Behavioral and emotional disorders*, Amman: Dar Al Masirah for Printing and Publishing.
- Al-Ruusaan, F. (2013). *Treating autism*. Amman: Al Masirah House for Printing and Publishing, Jordan.
- Al-Zareer, A. (2014). Attitudes of families of Saudi children with disabilities residing in Jordan towards integrating their children into regular schools. *Specialized Educational Journal*. Vol. 3. Pg. 12.
- Al-Zari, N. (2010). *An introduction to autism disorder: basic concepts and methods of intervention*. Amman, Dar Al-Fikr for publication and distribution.
- Amira, M. (2018). "Effectiveness (educational support model for mothers) in developing communication and social interaction skills and reducing forms of stereotypical behavior for children with autism spectrum disorder not enrolled in special education centers," PhD thesis of the University of Jordan.
- Bakhsh, A. (2002). The effectiveness of a training program to develop social interaction skills in reducing aggressive behavior among autistic children. *Journal of Educational Sciences*. College of Education, Qatar University.
- El-Sayed, M. (2015). *Behavioral disorders*. Amman: Safa House for Publishing and Distribution.
- Elshikh, M., & Forouzan, R., Shahin, J., Mohammad, P. (2015). Physical exercise on development of displacement movement skills in highly exercises and motor skills in autistic children. *Iran Journal Public*
- Huraab, H., Hegazy, A. (2012). The effectiveness of the Summer Games program in reducing the manifestations of aggressive behavior in the children of the Gaza Strip. *Journal of the University of Sharjah for Humanities and Social Sciences*. United Arab Emirates, Sharjah. 9 (1).
- Hussain, S. (2015). The effect of physical exercise, diet and oxygen system in reducing the severity of some behavioral disorders for autistic children. *Journal of the College of Physical Education*, Vol. 27, Issue 1, pp. 157-173.
- almakableh, J. (2016). *Autism spectrum disorder Diagnosis and therapeutic interventions*, Amman: Jaffa House for Publishing and Distribution.
- Mahjoub, M. (2016). The Effectiveness of Play-oriented Therapy in Reducing the Withdrawal of Autistic Children. *Journal of Educational Sciences*, Issue 1, Part 1, pp. 556-588.

- Mustafa, O., and El-Sherbiny, K. (2014). Autism Reasons, Diagnosis and Treatment. Amman, Dar Al-Masirah for Publishing, Distribution and Printing.
- Mutawalli, F. (2015). Teaching strategies for people with autism (autism disorder). Al-Rushd Publishers Library.
- Odeh, A. (2014). Measurement and evaluation in the teaching process. Dar Al-Amal for publication and distribution.
- Sawsan, A. (2010). The effectiveness of a training program for developing play skills and social interaction among some autistic children. PhD thesis, Faculty of Arts, Mansoura University.
- Ziadat, A. (2013). The effectiveness of a behavioral cognitive training program for a pivotal response in improving social interaction skills among autistic children in Jordan, PhD thesis, Islamic Sciences University.