Effect of Play Therapy Program on Self-esteem of Primary School Age Children with Attention Deficit Hyperactivity Disorder

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Abstract:

Background: Attention deficit hyperactivity disorder is the most common psychiatric disorder among school-aged children. **Aim of the study**: The study aimed to evaluate the effect of the play therapy program on self-esteem of primary school age children with Attention deficit hyperactivity disorder. **Research design**: This study used a quasi-experimental design. **Setting:** This study was conducted at the Out-patient Clinics of Psychiatric and Mental Health Hospital in Benha City, Qalubia Governorate. **Study subjects:** A convenience sample of 50 children with Attention deficit hyperactivity disorder and their parents. **Tools of data collection:** Four tools were used: **Tool (I):** Interview Questionnaire: First part: Children characteristics and their parents' socio-demographic data. Second part: Parents' knowledge about Attention deficit hyperactivity disorder, **Tool (II)** Screening rating scale for ADHD**, Tool (III)** Self-Esteem Inventory and **Tool (IV)** Abbreviated ADHD Symptoms Checklist. **Results:** There was improvement in the children level of total self-esteem with a statistically significant difference (P<0.05) between pre, post and follow-up Program phases. As evidence, more than one third of them (36.0%) had high level at pre Program, while nearly half of them (48.0%, 46.0%) had high level at post and follow-up Program respectively& there was highly statistically significant positive correlation between studied children total self-esteem and total attention disorder accompanied by hyperactivity thorough pre Program implementation phase (P= 0.000). **Conclusion:** Play therapy program succeeded in improving self-esteem of children, increasing their attention, decreasing hyperactivity and alleviating severity of attention deficit hyperactivity disorder symptoms. **Recommendations:** Continuous application of play therapy program for children with attention deficit hyperactivity disorder to improve their self-esteem.

Keywords: Attention Deficit Hyperactivity Disorder, Play Therapy Program, Self-Esteem, School age children.

Introduction:

School age children develop physically, mentally and emotionally, this stage is important for school age children to learn how to deal with failure or frustration without losing self-esteem. School age children may develop more self-confidence, overcome fears and self-doubts, test the limits of autonomy, find role models, and learn and internalize moral and spiritual values. Moreover, school age children are much more self-directed and peer-focused. Also, Children's behavior and communication style changed. Children changed from being concrete thinkers to being more reflective ones. So, children think more logically about the world events **(American Academy of Pediatrics, 2022).**

Attention Deficit Hyperactivity Disorder (ADHD) is a common neuropsychiatric disease that affects school-aged children which causes above-normal levels of hyperactive and impulsive behaviors.

Children with ADHD may have trouble concentrating attention on a single activity or sitting still for long periods of time. ADHD is also known as hyperkinetic disorder that occurs in children with onset before 7 years. About 1.5 to 2 % ADHD all over the world is found among the primary school children. Boys are affected more than girls and the ratio is almost 2:1. This may be because boys tend to exhibit hallmark symptoms of hyperactivity (**Sebastian, 2020).**

A critical point in development of self-esteem occurs with the beginning of the school age. Self-esteem of many children falls when children had to cope with adults and peers in a new situation with rules that may be new and strange. In the early school-age years, self-esteem is about how well children manage learning tasks in school and how children perform in sports. It also depends on physical appearance and characteristics and the ability to make friends with other children. Stresses at home, problems at school, being bullied, or not having friends, can have a negative impact on a child's self-esteem. Children with overly developed self-esteem may tend to be bullies, while children with lower self-esteem may become the victims of bullies. Parents can help children develop an inner sense of self-control, which comes from having experience in making decisions **(National Association for Self-Esteem, 2022).**

Play therapy is a way of helping children express feelings and deal with their emotional problems through using play as the main communication tool. The nurse's role in play therapy is recognizing the child's need for play therapy, and encouraging appropriate peer interaction, evaluating child's developmental level to ensure that there is no discrepancy between developmental skill level and child ability to manipulate play materials **(British Association of Play Therapists 2021).**

The Community Health Nurse (CHNs) may work with child with ADHD in a variety of settings. Understanding the disorder, its etiology, symptoms, and types of treatment enables the nurse to work with the child and family and identify the child's specific needs. The initial role of the CHNs is to identify problems and establish a plan of intervention to reduce the frequency and severity of symptoms. Interventions include establishing the nurse-child relationship, enhancing the coping skills of the child and family, identifying maladaptive responses, and decreasing the negative impact of the symptoms of hyperactivity, impulsivity, and inattention. The CHNs also plays an important role in assessing the efficacy of treatment interventions and can serve as a liaison between the child and family and the other members of the treatment team, including the child's teachers **(DeNisco et al., 2018 & Kyle, 2018).**

Significance of the study:

The overall worldwide prevalence of ADHD is estimated to be about 2-7% in children and 2-5% in adults. Worldwide, ADHD is the third most common mental health disorder, after depression and anxiety. One of 10 children between ages 5 to 17 years receives an ADHD diagnosis, making this one of the most common childhood neurodevelopmental disorders in the United States more prevalent than in other developed countries. In Arab countries, this incidence is higher, reaching 9.4% in Egypt and 11.6% in Saudi Arabia**.** The latest researches show that the prevalence of ADHD in a sample of primary school children aged (6-12 years) in Al Qalyubia Governorate was 21.8% based on teacher rating scale and 16.2% based on parent rating scale **((El Ghamry et al., 2021 & Agwa, 2015)**.

Aim of the study:

The study aimed to evaluate the effect of the play therapy program on self-esteem of primary school age children with attention deficit hyperactivity disorder through:

1. Assessing attention deficit hyperactivity disorder of school age children.
2. Measuring self- esteem of children with attention deficit hyperactivity disorder
3. Designing and implementing play therapy program to improve self- esteem of children with attention deficit hyperactivity disorder.
4. Evaluating the play therapy program on self-esteem of school age children with deficit hyperactivity disorder

Research Hypotheses:

H.1: The play therapy program will improve self- esteem of children with attention deficit hyperactivity disorder.

H.2: Children who will receive play therapy program will increase attention and decrease hyperactivity and alleviate severity of attention deficit hyperactivity disorder symptoms.

Subjects and Method:

Research design:

A quasi-experimental research design was used for this study.

Setting:

The study was conducted at Pediatric Ou Patient Clinic affiliated to Psychiatric Ment Health Hospital at Benha City, Kaloub Governorate.

Research subjects:

A convenience sample of 50 children with Attention deficit hyperactivity disorder and their parents were selected from the Outpatient Clinics of Psychiatric and Mental Health Hospital in Benha City, Qaloubia Governorate.

Tools for Data Collection:

Four tools were used to collect the data which include the following:

Tool (I): Interviewing questionnaire: It was developed by the researcher based on scientific review of literature and consisted of two parts:

First part:

A- Characteristics of children as, child's age, gender, number of siblings, the arrangement of the child among his siblings, academic year, and type of school.

B- Parents' socio-demographic data as mother's age, education degree, the mother's work & father's age, education degree, father's work and family income**.**

Second part: Assessment of parents' knowledge about attention deficit hyperactivity disorder: It included six questions about meaning, risk factors, signs & symptoms, complications, preventive measures and treatment methods. This tool measured pre/post the program.

Scoring system:

The knowledge items score was calculated as the following: (2) score for complete correct answer, (1) score for incomplete correct answer and (0) score for don't know and incorrect answer. The total knowledge scores categorized on three categories as:

- Good: > 75%.
- Average: 50 to 75%
- Poor: <50%.

Tool (II): Screening rating scale for ADHD based on DSM-IV: It has two versions, a teacher's rating scale and parents rating scale **(EL Noby, 2005)**

Teacher Questionnaire: It included a rating scale comprising 24 items**:** (12 items were for the inattention subtype) and (12 items for the hyperactivity/impulsivity subtype). The combined subtype was considered when the child has scores for inattention and the hyperactivity/impulsivity **(EL Noby, 2005)**

Parent Questionnaire: This scale comprised 24 items**:** (12 items for the inattention subtype) and (12 items for the hyperactivity/impulsivity subtype). The combined subtype was considered when the child has scores for

inattention and the hyperactivity/impulsivity **(EL Noby, 2005).**

Scoring system:

Family and teacher views were calculated as the following: (2) scores for regular, (1) score for intermittently, and (0) score for rarely. The total scores were categorized on three categories as: Severe if score was > 70%, Moderate if score was 50 to 70% and Low if score <50%.

Tool (III): Self-Esteem Inventory (SEI):

It was developed by ***Cooper, (1967)*** to measure self-esteem o f children between the ages of 8-16 years. The SEI evaluates child's attitudes toward the self in social, academic, family and personal areas of experience.

The school form is appropriate for students between the ages of 8 to 16. It contains 58 items distributed across five subscales as follows: general self, social self-peers, home-parents, school academic, and lie scale.

Scoring system:

Like me was 1 score and unlike me was 0 score for positive item and vice versa for negative items. Total scores were categorized on three categories as: High if score > 70%, Moderate if score 50 to 70% and Low if score <50%.

Tool (IV): Abbreviated ADHD Symptoms Checklist. It is a behavior rating scale whose items are based on the 18 behavioral symptoms of attention- deficit hyperactivity disorder.

Scoring system:

The symptoms severity items score are as following: (0) score for Never, (1) score for sometimes, (2) score for often and (3) score for very often. Total scores were categorized on three categories as: Sever if score > 70%, Moderate if score 50 to 70% and Mild if score <50%.

Content validity and reliability:

Content validity of tools was done by Jury of 5 experts (3 in Community Health Nursing from Benha University and 2 in Community Health Nursing from Mansoura University), who checked the relevancy, comprehensiveness, clarity and applicability of the questions. According to their opinions, modifications were done and the final form was developed. Modifications were done in statement structure. The reliability was done by Cronbach's Alpha Coefficient test which revealed that tools consisted of relatively homogenous items as indicated by moderate to high reliability of each tool. The teacher view was 0.843, the family view was 0.877, and self-esteem was 0.913.

Ethical Considerations:

A written approval was obtained from the Scientific Research Ethical Committee at the Faculty of Nursing/ Benha University. All ethical issues were assured; oral consent had been obtained from children and their parents before conducting the interview and given them a brief orientation to the purpose of the study. Participants were also reassured that all information gathered would be kept confidentially and used only for the purpose of the study. They were also informed about the right to withdraw from the study at any time without giving any reasons.

Pilot study:

The pilot study was carried out on (5) children who represented 10% of the sample size. The pilot study aimed to assess the tool clarity, applicability and time needed to fill each tool. No modifications were done, so the pilot study sample was included in the total sample.

Fieldwork:

The data were collected over the period of 9 months, from the beginning of April 2021 to the end of December 2021. It was carried out by the researcher for the ADHD children and their parents who attended at the outpatient clinics of psychiatric and mental health hospital.

The total numbers of children were 50 children who were divided into 8 groups, each group composed of 6-7 children. The period of the program application was three months from the beginning of July to the end of September 2021. Also, the follow up was done after three months.

The play therapy program was implemented through four phases as the following:

Preparatory Phase: Preparation of the study design and data collection tools was based on extensive review of the current and past available national and international references related to the research title was done, using a Journal, textbooks and internet search was done. This was necessary for the researcher to be acquainted with and oriented about aspects of the research problem as well as to assist in the development of data collection tools. Also after reviewing related literature, the researcher developed the play therapy program.

Assessment phase: In this phase of the play therapy program, the researcher assessed self-esteem of children and ADHD symptoms severity through collection and analysis of baseline data from the filled tools. In this phase the researcher did the pre- test.

Implementation phase: In this phase the researcher implemented the play therapy program sessions for the children with the clearance of general and specific objectives through 13 sessions (2 hours theoretical and 11 hours practical), each session took one hour. It included introduction about play therapy and its effect on children with ADHD, objectives of the program, and total equipment as clay colored pencils, papers for application, and program sessions in details (name of game, objectives, equipment, and procedures for each one). Also, prepared booklets were distributed to all parents that included all items about ADHD disorder.

Evaluation phase: After implementing the play therapy program, the researcher applied the post-test immediately and after 3 months to evaluate the self-esteem and attention and hyperactivity. Evaluation was done by using the post-test questionnaire which was the same format of pre-test in order to compare the change in the studied children self-esteem and attention and hyperactivity immediately after the implementation of the program.

Statistical Analysis:

Data collected from the studied sample was revised, coded and entered using personal computer. Computerized data entry and statistical analysis were fulfilled using the Statistical Package for Social Sciences (SPSS) version 22. Data were presented using descriptive statistics in the form of frequencies, percentages and Mean ±SD. A correlation coefficient "Pearson correlation" is a numerical measure of some type of correlation, meaning a statistical relation between two variables. Chi-square was used to assess the relations between variables and their characteristics. Cochran's Q Test is a non-parametric way to find differences in matched sets of three or more frequencies or proportions.

Significance of the results:

- Highly significant at p-value < 0.01.
- Statistically significant was considered at p-value < 0.05
- Non-significant at p-value ≥ 0.05

Results:

Table (1) shows that, 38.0% of the studied children aged 9 years old; with Mean ±SD 9.10±1.02 years old, 52.0% of them had 1 sibling. In addition, 40.0% of children were the first child among their siblings. Also, 38.0% of them were at grade 4 and 84.0% of children were at the governmental school.

Table (2) reveals that, 74.0% of the studied mothers ranged in age between 30 to less than 35 years old, with mean 33.56±0.27 years old, 42.0% of them had

secondary education and 80.0% of them didn't work. Concerning fathers, 42.0% and 44.0% ranged in age between 35 to less than 40 years old with mean 36.08±0.64 and had secondary education respectively, and 94.0% of fathers were working. Moreover, 76.0% of fathers had not enough family income.

Figure (1): This figure shows that, only 4% of the parents had good knowledge pre-program, but post-program increased to 90%. Meanwhile, 72% of them had average knowledge pre-program, but post-program reached to 10% and 24% of them had poor knowledge pre-program, but post program no one of them had poor knowledge.

Table (3) portrays that, there is improvement in the children level of attention disorder accompanied by hyperactivity with a statistically significant difference (P<0.05) between pre, post and follow-up program phases. According to teacher questionnaire, 68.0% of them had sever level at preprogram, while 52.0% and 54.0% of them had sever level at post and follow-up program respectively. As regards parent questionnaire, 58.0% of them had sever level at preprogram, but 44.0% and 46.0% had sever level at post and follow-up program respectively.

Figure (2) indicates that, 36.0% of the studied children had high level of total self-esteem at preprogram, while improved to 48.0% and 46.0% post and follow up program phases respectively.

Table (4) represents that, there is improvement in the children level of total attention deficit hyperactivity disorder with a statistically significant difference (P<0.05) between pre, post and follow-up program phases. As evidence, 64.0% of them had sever level at preprogram, whilst it improved to be 50.0% and 52.0% of them had sever level at post and follow-up program respectively.

Table (1): Frequency distribution of the studied children according to their characteristics (n=50).

Children characteristics	No.	%
Age/ years		
8	13	26.0
9	**19**	**38.0**
10	18	36.0
Mean± SD 9.10±1.02		
Number of siblings		
1	**26**	**52.0**
2	16	32.0
3	8	16.0
The arrangement of the child among his siblings		
First	**20**	**40.0**
Second	13	26.0
Third	12	24.0
Forth	5	10.0
Academic year		
Grade 3	13	26.0
Grade 4	**19**	**38.0**
Grade 5	18	36.0
Type of school		
Governmental	**42**	**84.0**
Private	8	16.0

Table (2): Frequency distribution of the studied parents according to their socio-demographic characteristics (n=50).

socio-demographic characteristics of parents	No.	%
Mother's age/ years		
25<30	2	4.0
30<35	37	**74.0**
≥35	11	22.0
Mean± SD 33.56±0.27		
Mother's educational degree		
Read and write	3	6.0
Primary	5	10.0
Preparatory	8	16.0
Secondary	**21**	**42.0**
University Education	13	26.0
Mother's work		
Work	10	20.0
Not work	40	**80.0**
Father's age/ years		
30<35	20	40.0
35<40	21	**42.0**
≥40	9	18.0
Mean± SD 36.08±0.64		
Father's educational level		
Neither read nor write	0	0
Read and write	0	0
Primary	9	18.0
Preparatory	9	18.0
Secondary	22	**44.0**
University Education	10	20.0
Father's work		
Work	47	**94.0**
Not work	3	6.0
Family Income		
Enough	12	24.0
Not enough	38	**76.0**

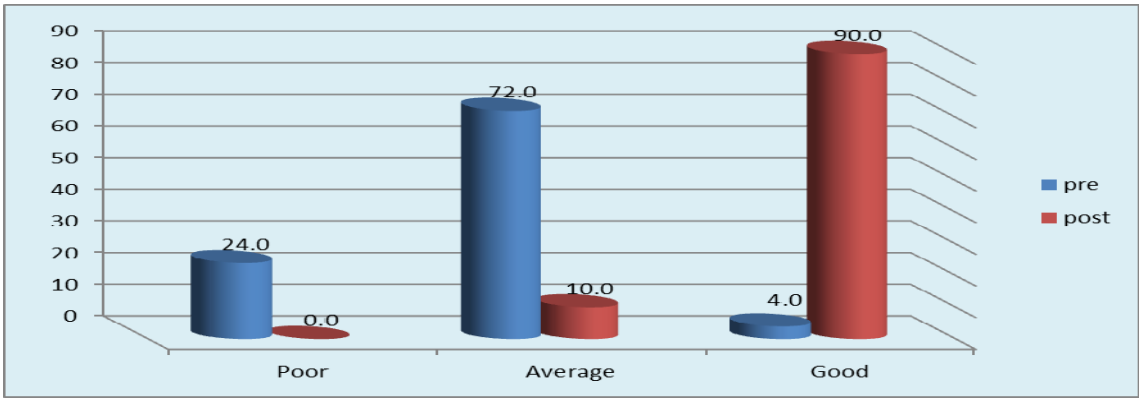

Figure (1): Percentage distribution of the parents according to their total knowledge score regarding ADHA pre and post program implementation (n=50).

Table (3): Comparison between the studied children at pre, post and follow up program regarding to their total attention disorder test accompanied by hyperactivity (n=50).

Total	Pre (n=50)		Post (n=50)		Follow up (n=50)		Cochran`s Q Test P-Value
	No.	%	No.	%	No.	%	
Teacher questionnaire							
Sever	34	68.0	26	52.0	27	54.0	13.215
Moderate	13	26.0	18	36.0	18	36.0	<0.05
Low	3	6.0	6	12.0	5	10.0	
Parent questionnaire							
Sever	29	58.0	22	44.0	23	46.0	12.842
Moderate	14	28.0	15	30.0	19	38.0	<0.05
Low	7	14.0	13	26.0	8	16.0	

***Significant at p ‹0.05. **Highly significant at p ‹0.01. Not significant at p>0.05**

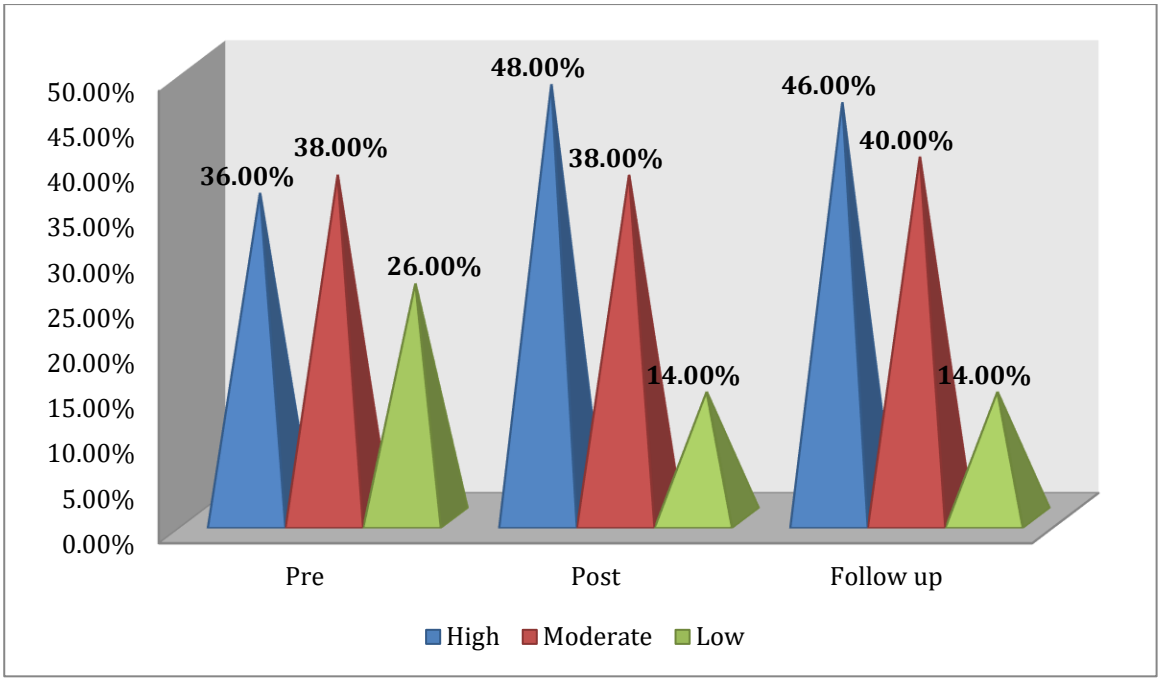

Figure (2): Comparison between the studied children at pre, post and follow up program regarding to their total self-esteem inventory (n=50).

Table (4): Comparison between the studied children at program phases regarding to their total attention deficit hyperactivity disorder symptoms (n=50).

Total	Pre (n=50)		Post (n=50)		Follow up (n=50)		Cochran`s Q Test P-Value
	No	%	No	%	No	%	
Sever	32	**64.0**	25	50.0	26	52.0	7.318
Moderate	15	30.0	23	46.0	22	44.0	<0.05
Mild	3	6.0	2	4.0	2	4.0	

***Significant at p ‹0.05. **Highly significant at p ‹0.01. Not significant at p>0.05**

Discussion:

Attention deficit hyperactivity disorder is a highly reported condition, influencing preschool children. It is distinguished by inattention, impulsivity, and hyperactivity. The pervasiveness of ADHD varies among various countries. Boys are three times more prone to be diagnosed with ADHD than girls. The recorded prevalence of ADHD among primary school children ranged between 6.5% and 7.9%. All over the world some factors induce ADHD, such as being born prematurely, having a low birth weight and smoking, alcohol or drug abuse throughout pregnancy (**Mohammed, 2019).**

Regarding characteristics of the studied children, the result of present study showed that, more than one third of them aged 9 years old; with Mean ±SD of 9.10±1.02 years old, more than half of them had 1 sibling. In addition, two fifths of them were the first

child among their siblings. As regards the academic year, more than one third of them were at Grade 4 and most of them were at governmental school. These outcomes matched findings of the study by **Ahmed, (2018)** who conducted study about "Attention deficit hyperactivity disorder in a rural area of Sohag governorate" and found that, more than one third of them aged 9 years old; with Mean ±SD 9.1 ± 3.2 years old, and most of them were at governmental school.

Also, these findings were in the same line with a study by **Liang et al., (2021)** about "Health-related quality of life in mothers of children with attention deficit hyperactivity disorder in Taiwan: The roles of child, parent, and family characteristics" and illustrated that more than one third of them were at grade 4.

On the other hand, this finding contrasted to study by **El-Nagger et al., (2017)** who conducted study about "Effect of applying play therapy on children with attention deficit hyperactivity disorder" and revealed that the mean age of children was 6.28 ± 1.52 years. As regards to the arrangement of the child among his siblings, less than one fifth of studied children were the first child and less than half of them as the fourth child.

Regarding to the parents socio-demographic data, almost three quarters of the studied mothers aged between 30 to less than 35 years old, with mean 33.56±0.27 years old, more than two fifths of them had secondary education and most of them didn't work. Concerning fathers, less than half of them range in age between 35 to less than 40 years old, with mean 36.08±0.64 and had secondary education and the majority of them were working. Moreover, slightly more than three quarters of them had no enough family income. These findings were in same line with study by **Si and Zhang, (2020)** who conducted study entitled "Factors influencing parenting stress among Chinese families of children with attention-deficit/hyperactivity disorder" and illustrated that about two fifths of the studied parents aged less 40 years with mean 37.08±2.64 and the majority of them were working had not enough family income. Conversely, these results disagree with study by **Liang et al., (2021)** who reported most of the studied parents worked and had high level of education.

Concerning total knowledge score of parents about ADHD, the present study revealed that most o f the parents had good total knowledge after the program implementation. This result agreed with **Shahrokh et al., (2016),** who reported that the total knowledge of mothers post the intervention implementation was increased. Also this finding was in agreement with **Al-Mohsin et al., (2020),** who conducted study about "Saudi mothers' perception of their children with attention-deficit hyperactivity disorder in Dammam, Al-Qatif, and Al-Khobar cities, Saudi Arabia" who reported that most of mothers had good knowledge. This might be due to that all of the parents were interested about the information explained to them which help them to understand the attention deficit hyperactivity disorder and how to deal with their children.

The present study portrayed that there was improvement in the children level of attention disorder accompanied by hyperactivity with a statistically significant difference between pre, post and follow-up program phases. This result might be due to children with ADHD had 3 basic features contain of hyperactivity, attention deficit, impulsiveness, through watch play, children

reinforce gradually, and thus they increase their attention and control their hyperactivity. This outcome matched with study by **El-Nagger et al., (2017)** who reported that there is improvement in the children level of attention disorder accompanied by hyperactivity with a statistically significant difference between pre, post and follow-up program phases.

Regarding to total attention disorder test accompanied by hyperactivity (Teacher questionnaire), the result of present study showed that more than two thirds of the studied children had sever level of total attention disorder accompanied by hyperactivity (Teacher questionnaire) at preprogram, while improved to more than half post and follow up program phases. From researchers point view, this result might be due to play therapy led to the children expending some of their energy in the activity sessions, which reduced their hyperactivity. This finding was in same line with study by **Abdollahian et al., (2013)** who conducted study entitled "The effectiveness of cognitive-behavioral play therapy on the symptoms of attention deficit hyperactivity disorder in children aged 7–9 years" and reported that most of the studied children had sever level of total attention disorder at preprogram, while improved about two fifths of them at follow up program phases.

Concerning total self-esteem inventory, the result of current study revealed that there is improvement in the children level of total self-esteem with a statistically significant difference between pre, post and follow-up program phases. From researchers point view, this result might be due to play provides unlimited opportunities for the child to gain a sense of competence and self-efficacy that boosts their self-esteem. By engaging in activities such as construction play and gameplay, children learn self-control skills as to stop and think, plan ahead, and anticipate the consequences of different moves. This result matched with study by **Schuck et al., (2018)** who conducted study entitled "The role of animal assisted intervention on improving self-esteem in children with attention" and illustrated that improvement in the children level of total self-esteem with a statistically significant difference between pre and post program. Furthermore, this finding supported with study by **Ali, (2018)** who conducted study about "Effect of social skills training program on self-esteem and aggression among children in residential institutions in Port Said City" and reported that there was a highly statistical significant difference found among the three phases of program throughout pre, post and follow up in relation to self-esteem levels.

Concerning to the total attention deficit hyperactivity disorder, the result of current study represented that there was improvement in the children level of total attention deficit hyperactivity disorder with a statistically significant difference between pre, post and follow-up program phases. As evidenced by less than two thirds of them had sever level at preprogram, while it decreased to be half and more than half of them had sever level at post and follow-up program respectively. This finding was in same line with study by **Penuelas-Calvo et al., (2020)** who conducted study entitled " Video games for the assessment and treatment of attention-deficit/hyperactivity disorder" and reported that about three quarters of the studied children had sever level at preprogram, whilst it improved to be half and more than half of them had moderate level follow-up intervention. Also, this result supported by study performed by **Nagy et al., (2018)** who

showed that more than three quarters of the studied children had high level of attention deficit hyperactivity disorder and recommended the intervention program to control symptoms associated with attention deficit hyperactivity disorder.

Conclusion:

The play therapy program succeeded in improving self-esteem of children as there was statistically significant difference between pre, post and follow up program phases regarding to their total self-esteem inventory. Also, there was improvement in children level of total attention deficit hyperactivity disorder symptoms with statistically significant difference between pre, post and follow-up program phases.

Recommendations:

1- Continuous application of play therapy program to improve self-esteem and alleviate severity of attention deficit hyperactivity disorder symptoms severity among children.

2- Performing health education program for parents / caregivers & teachers about how to deal with ADHD children.

3- Further studies with a large probability sample to generalized the results.

References:

Abdollahian, E., Mokhber, N., Balaghi, A., & Moharrari, F. (2013). The effectiveness of cognitive-behavioral play therapy on the symptoms of attention-deficit/hyperactivity disorder in children aged 7–9 years. ADHD Attention Deficit and Hyperactivity Disorders, 5(1), 41-46.

Agwa, E. (2015): Prevalence of ADHD among a sample of primary school children aged (6-12 years) in Al Qalyubia Governorate. Unpublished Master Thesis, Faculty of medicine, Benha University. Pp: 142-160.

Ahmed, S. (2018). Attention deficit hyperactivity disorder in a rural area of Sohag governorate. Egyptian Journal of Community Medicine, 36(4).

Ali, S., (2018). Effect of social skills training program on self-esteem and aggression among children in residential institutions in Port Said City. Port Said Scientific Journal of Nursing, 5(2), 105-123.

Al-Mohsin, J., Al-Saffar, A., Al-Shehri, Z., and Marwa, M. (2020). Saudi mothers' perception of their children with attention-deficit hyperactivity disorder in Dammam, Al-Qatif, and Al-Khobar cities, Saudi Arabia Journal of Family and Community Medicine: Jan–Apr 2020 - Volume 27 - Issue 1 - p 46-52 doi: 10.4103/jfcm.JFCM_149_19

American Academy of Pediatrics, (2022): Recommendations for preventive pediatric health care. Available at: www.aap.org/en.us/. Accessed at: 18/8/2022, 7:00 P.M.

British Association of Play Therapists (2021). Information for Parents and Caregivers. Email: info@bapt.uk.com. BAPT **.** Available at**:** https://playtherapy.org.uk/

DeNisco, S., Tiago C., and Kravitz, C., (2018). Evaluation and Treatment of Pediatric ADHD. Nurse Practetionner, 30(8), 14-23.

El Ghamry, R., El-Sheikh, M., Meguid, M., Nagib, S., and El Gabry, D. (2021). Plasma brain-derived neurotrophic factor (BDNF) in Egyptian children with attention deficit hyperactivity disorder. Middle East Current Psychiatry, 28(1), Pp. 1-9.

El-Nagger, N., Abo-Elmagd, M., and Ahmed, H. (2017). Effect of applying play therapy on children with attention deficit hyperactivity disorder. Journal of Nursing Education and Practice; 7(5): 104-118.

El-Noby, M. (2005). Attention-Deficit/Hyperactivity Disorder Scale, 1st edition. Anglo Library, Cairo

Cooper, S. (1967). Self –esteem inventory.

Kyle, T., (2018). Essential of pediatric Nursing. Woltrs. Lippincott Willimas & Wilinks, London, Sydny. 1056-1060.

Liang, S., Lee, Y., Kelsen, B., and Chen, V. (2021). Health-related quality of life in mothers of children with attention deficit hyperactivity disorder in Taiwan: The roles of child, parent, and family characteristics. Research in Developmental Disabilities, 113, 103944.

Mohammed, A. (2019). Correlation between Balance and Attention in Children with Attention Deficit Hyperactivity Disorder. International Journal of Pharmaceutical Research & Allied Sciences, 8(3), 126-130.

National Association for Self-Esteem (2022). PO Box 597, Fulton, MD 20759. Web site: http://www.self-esteem-nase.org. Accessed on: March 10, 2022

Nagy, S., Sayied, N., Kotb, F., and Zaki, S. (2018). Relation between Attention Deficit Hyperactivity Disorder among School Age Children and Parent's Stress and Sense of Competence. Minia Scientific Nursing Journal, 4(1), 115-123.

Penuelas-Calvo, I., Jiang-Lin, L. K., Girela-Serrano, B., Delgado-Gomez, D., Navarro-Jimenez, R., Baca-Garcia, E., and Porras-Segovia, A. (2020). Video games for the assessment and treatment of attention-deficit/hyperactivity disorder: a systematic review. European child & adolescent psychiatry, 1-16.

Schuck, S., Johnson, H., Abdullah, M., Stehli, A., Fine, A., and Lakes, K. (2018). The role of animal assisted intervention on improving self-esteem in children with attention deficit/hyperactivity disorder. Frontiers in Pediatrics, 6, 300.

Sebastian, J. (2020). Mental Health & Psychiatric Nursing, 3rd ed, India, AITBS Publishers, Pp: 275-277.

Shahrokh, A., Ali, R., Shafiee, K., Seyed, G., Noorazar, S., Rahmani, I., and Salman, A., (2016). Knowledge and Attitude of Parents of Children With Attention Deficit Hyperactivity Disorder Towards the Illness, Iran J Psychiatry Behav Sci. 2016 Jun; 10(2): e122. Published online 2016 May 15. doi: 10.17795/ijpbs-122

Si, Y., Ma, J., and Zhang, J. (2020). Factors influencing parenting stress among Chinese families of children with attention-deficit/hyperactivity disorder. Children and Youth Services Review, 116, 105148.

تأثير برنامج العلاج باللعب على تقدير الذات لدى الأطفال في سن المدرسة الذين يعانون من اضطراب نقص الانتباه وفرط الحركة

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اضطراب فرط الحركة ونقص الانتباه هو مرض عصبي نفسي شائع يصيب الأطفال في سن المدرسة والبالغين أيضًا ويسبب مستويات أعلى من الطبيعي من السلوكيات المفرطة كالنشاط والاندفاعية و يواجه الأشخاص المصابون باضطراب فرط الحركة ونقص الانتباه أيضًا صعوبة في تركيز انتباههم على نشاط واحد أو الجلوس لفترات طويلة من الزمن. لذا هدفت الدراسة إلى تقييم تأثير برنامج العلاج باللعب على تقدير الذات لدى الأطفال في سن المدرسة الذين يعانون من اضطراب نقص الانتباه وفرط الحركة. تم استخدام تصميم البحث التجريبي لتنفيذ هذه الدراسة. وقد أجريت هذه الدراسة في العيادات الخارجية بمستشفى الصحة النفسية والعقلية بمدينة بنها بمحافظة القليوبية وأشتملت العينة على ٥٠ طفلاً بعانى من اضطراب نقص الانتباه و فرط الحركة و أمهاتهم الموجودين في الإعدادات المذكورة سابقًا. وقد نجح برنامج العلاج باللعب في تحسين تقدير الذات لدى الأطفال حيث وجدت فروق ذات دلالة إحصائية بين مراحل ما قبل البرنامج وبعده والمتابعة فيما يتعلق بتقدير الذات الكلى ، كما أظهرت الدراسة الحالية أن هناك تحسنًا في مستوى أعراض نقص الانتباه و أعراض اضطراب فرط النشاط الكلي لدى الأطفال مع وجود فروق ذات دلالة إحصائية بين مراحل ما قبل البرنامج وبعده والمتابعة. واوصت الدراسة باستمرار تطبيق برنامج العلاج باللعب للأطفال المصابين باضطراب نقص الانتباه وفرط الحركة للتخفيف من حدة الأعراض و تحسين تقدير الذات.