

A Sports Recreational Program for Decreasing Separation Anxiety Among Children

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Introduction and Research Problem:

Childhood is a significant stage in human life. During this stage, the early roots of the child's character are formed as the child acquires the experiences and behaviors that form his/her future attitudes and behaviors later in life. Also, during this stage the child is more vulnerable to several psychological, behavioral, social and school problems and disorders. Therefore, children in this stage require full support and good care to be able to adapt with themselves and their society.

Anxiety disorders among children are various and different in categorization, causes, diagnosis and treatment. They include general anxiety, separation anxiety social anxiety and school rejection. Children with separation anxiety usually avoid situations that may lead to separation from their care givers or safe places. They usually adopt some negative defensive behaviors like rage fits, yelling, begging or even threats to avoid such situations. Such behaviors may be reinforced by parents till they increase and turn into disorder (2: 1-2).

Different types and categories of anxiety disorders are considered as common disorders among children and teenagers. If they are not treated well, they may have negative consequences on the long run (8: 263).

Schneider (2011) indicated that anxiety disorder is one of the first disorders that may affect children and causes many problems later as it decreases the academic achievement level and weakens family relations in addition to the clear malfunction of social performance. Furthermore, it is one of the predictors for more disorders in adulthood like panic attacks, depression and addiction (15: 207).

Mostafa, H. (2003) indicated during early life, the child fears separation from his/her mother in addition to unfamiliar places. It is natural that these fears disappear by the third year of life. But if fear and anxiety increase in intensity and continue to later time, it becomes incompatible response and turns into disorder as the child panics in unfamiliar situations and from strangers. His/her attachment to the mother increases making it very difficult to separate him/her from the mother even for a short time (3: 266-267).

Silveman & Dick-Niderhauser (2004) indicated that separation anxiety is a common psychological disorder during childhood. It is manifested as chronic unrealistic fear of being separated from a person the child is attached to, mostly parents, and this adversely affects the child's daily activities and normal growth (17: 175).

As a common disorder, separation anxiety may continue to adulthood causing serious other disorders like panic attacks. It is a developmentally unsuitable permanent hyper anxiety towards separation from certain individuals the child is attached to. Its symptoms include severe sadness, avoid being alone and fear of sleeping alone inside or outside the house (11: 17-22).

Separation anxiety is a chronic unrealistic anxiety towards situations of separation from individuals the person is attached to. To may last for at least four weeks causing severe shyness in academic and social tasks (6: 192).

It is a state of chronic sadness and anxiety that affects the child when being separated from home or one family member, especially the mother. It is manifested in severe unsuitable fear of separation and expecting that parents may be harmed or never return after separation (7: 33).

Rabia, F. (2012) (13), SHoaakazemi et al (2012) (16), Khadar et al. (2013) (9) and Abd Al-Fattah, S. (2018) (2) indicated that separation anxiety is very common during childhood and may continue to later stages in life causing severe effects and undesired problems for the individuals' psychological formation and future.

Recreational games and activities fulfill the integrated human needs (physical – psychological and emotional – social). It provides individuals with the opportunity to improve their abilities and potentials in addition to strengthening their will and sense of responsibility. It is an educational tool for developing all health, physical, cultural, mental, psychological, emotional, social and ethical aspects of the human character (12: 20-26).

Recreational games and activities protect the individual from anxiety, stress, depression and distress. Through these activities, the individual can express himself, form friendships, cooperate and interact with others and feel happiness, satisfaction, comfort and confidence. It improves quality of life and enhances physical, mental, psychological and social well-being (18: 17-26) (20: 44-46) (14: 1-4, 51, 74, 82, 88, 155, 156).

The researcher noticed that separation anxiety disorder is very common among children with clear symptoms like being unable to stay at school without their parents, weeping fits, being unable to interact with peers, general dislike of school and preferring to return home quickly. This

may affect their characters, life, academic achievement and future negatively. Therefore, it is necessary to help those children decrease the separation anxiety among them. This led the researcher to try to design a sports recreational program for decreasing separation anxiety among children. According to the researcher's knowledge, no previous research tried to do so.

Aim:

The current research aims to decrease separation anxiety among children through a sports recreational program.

Hypothesis:

- There are statistically significant differences between the pre- and post-measurements of participants in decreasing separation anxiety in favor of post-measurements through a sports recreational program.

Methods:

Approach:

The researcher used the experimental approach (one-group design) with pre- and post-measurements.

Participants:

Research community (n=287) included all students of Ammar Ibn Yasser Official linguistic School – al-Santa – Gharbia, during 2018-2019 academic year (9-12 years). After applying Separation Anxiety Scale on them, the researcher purposefully chose (36) students who got the highest points on the scale to be the main sample (12.543% of research community). Socio-economic conditions of their families were stable. Table (1) shows data normality on all research variables for participants.

Table (1): Data Normality on Growth Factors and Separation Anxiety for Participants (n=36)

S	Variables	Measurement	Mean	Median	SD	Kurtosis	Squewness
1	Growth Factors	Age	9.9389	9.750	0.845	-0.376	0.783
2		Height	136.361	136.500	3.586	-0.139	0.223
3		Weight	37.916	38.00	3.508	-0.254	0.380
4	Separation Anxiety Scale	Personal	34.916	35.00	1.156	0.737	-0.576
5		Social	22.027	22.00	1.133	-0.609	-0.181
6		Physiological	24.194	24.00	1.237	-0.601	0.287
7		Academic	32.361	32.00	1.396	-0.875	0.103
8		Total	113.500	114.00	2.813	0.078	-0.685

Table (1) indicated that skewness values were between (± 3). This indicates data normality as it is free of radical distributions.

Data Collection Tools:

1- Separation Anxiety Scale for Children (by: Sara Gaber Abd Al-Fattah 2018) (2)

This scale includes (42) items distributed of (4) dimensions as follows:

- **Personal Dimension:** This dimension includes all manifestations and personal components of the child who suffers separation anxiety disorder. these are all related to discomfort, continuous anxiety, continuous fear, repeated nightmares, stimulation, fear of being alone, thoughts about separation. The dimension includes (13) items including (1-5-8-11-14-17-20-23-27-30-33-36-40).
- **Social Dimension:** This dimension measures the effects of separation anxiety on the child and his/her relations with others in addition to his/her social practices in case of separation from the attaché (mother/father). The dimension includes (8) items including (2-6-12-18-24-28-34-37).
- **Physiological Dimension:** This dimension measures physiological symptoms shown by the child during and after separation (headache – sweat – stomachache – increased heart rate). These symptoms are major indicators for separation anxiety. The dimension includes (9) items including (3-9-15-21-25-31-35-38-41).
- **Academic Dimension:** This dimension includes the child's fears of school, school rejection, the urge not to leave home, the academic effects not related to academic acquisition but resulting from separation and its negative effects. The dimension includes (12) items including (4-7-10-13-16-19-22-26-29-32-39-42).

Response is based on three-point Likert scale where: Yes = 3 – somehow = 2 – no = 1. For items (2-21-24-27-28-33-35), this scale is reversed. The total score of the scale is between (42) and (126). Higher scores indicate the separation anxiety disorder.

The researcher verified the scale's validity and reliability through the first pilot study initiated from 10-2-2019 to 17-2-2019 on a pilot sample (n=20) from the same research community and outside the main sample. The researcher verified validity using internal consistency calculated with correlations between the item and its dimension and the item and total score as seen in tables (2) and (3). The researcher also verified the scale reliability through calculating correlations between test and retest in addition to Cronbach's Alpha as seen in tables (4) and (5).

Table (2): Internal Consistency of the Separation Anxiety Scale (n=20)

R											
First Dimension			Second Dimension			Third Dimension			Fourth Dimension		
S	Item with Dimension	Item with total Score	S	Item with Dimension	Item with total Score	S	Item with Dimension	Item with total Score	S	Item with Dimension	Item with total Score
1	0.840**	0.824**	1	0.825**	0.831**	1	0.890**	0.920**	1	0.866**	0.838**
2	0.902**	0.931**	2	0.874**	0.851**	2	0.844**	0.833**	2	0.938**	0.869**
3	0.850**	0.878**	3	0.946**	0.946**	3	0.954**	0.952**	3	0.955**	0.934**
4	0.904**	0.920**	4	0.828**	0.844**	4	0.858**	0.855**	4	0.912**	0.911**
5	0.831**	0.833**	5	0.960**	0.952**	5	0.843**	0.814**	5	0.980**	0.943**
6	0.956**	0.952**	6	0.883**	0.855**	6	0.894**	0.881**	6	0.844**	0.852**
7	0.879**	0.855**	7	0.835**	0.814**	7	0.828**	0.844**	7	0.854**	0.909**
8	0.873**	0.876**	8	0.863**	0.874**	8	0.864**	0.808**	8	0.875**	0.803**
9	0.847**	0.824**				9	0.917**	0.910**	9	0.891**	0.908**
10	0.946**	0.912**							10	0.934**	0.922**
11	0.914**	0.896**							11	0.824**	0.837**
12	0.955**	0.946**							12	0.938**	0.869**
13	0.862**	0.844**									

* R table value on $P \leq 0.05 = 0.433$

** R table value on $P \leq 0.01 = 0.549$

Table (2) indicated statistically significant correlations between each item and its dimension ranging from (0.825) to (0.980). in addition, there are statistically significant correlation between each item and total score ranging from (0.803) to (0.952). this indicates the scale's internal consistency.

Table (3): Internal Consistency between each dimension and total score of the Separation Anxiety Scale (n=20)

S	Dimensions	R
1	Personal	0.993**
2	Social	0.993**
3	Physiological	0.990**
4	Academic	0.979**

* R table value on $P \leq 0.05 = 0.433$

** R table value on $P \leq 0.01 = 0.549$

Table (3) indicated statistically significant correlations between each dimension and total score of the Separation Anxiety Scale.

Table (4): Correlations between test and retest for reliability of the Separation Anxiety Scale (n=20)

S	Dimensions	Test		Retest		R
		Mean	SD±	Mean	SD±	
1	Personal	25.300	9.454	26.150	9.120	0.988**
2	Social	15.550	5.605	16.350	5.640	0.971**
3	Physiological	18.100	6.273	18.750	6.536	0.985**
4	Academic	23.250	8.583	24.00	8.052	0.989**
5	Total	82.200	29.571	85.250	28.683	0.998**

* R table value on $P \leq 0.05 = 0.433$

** R table value on $P \leq 0.01 = 0.549$

Table (4) indicated statistically significant correlations between test and retest for Separation Anxiety Scale indicating Reliability of the scale.

Table (5): Cronbach's Alpha for reliability of Separation Anxiety Scale (n=20)

Alpha		
0.874		
S	Dimensions	Cronbach's Alpha if Item Deleted
1	Personal	0.852
2	Social	0.859
3	Physiological	0.858
4	Academic	0.854

Table (5) indicated that all values of Cronbach's Alpha for the scale dimensions are statistically significant, indicating the scale's reliability.

2- The Sports Recreational Program (by the researcher)

The researcher chose a group of recreational activities and games to increase happiness, joy and comfort, independence, and to decrease separation anxiety among children. Experts of recreation, psychology and mental health (n=7) indicated the importance of these activities as their agreement percentages ranged from 85.72% to 100%. The activities and games were distributed to the Program units.

Aim:

The Program aims to decrease separation anxiety children and help them achieve personal happiness.

Principles:

- Considering all psychological, mental, physical and socio-economic aspects of children (9-12 years).
- Considering progression, variation and individual differences.
- Considering rest intervals.
- Considering safety procedures.
- Considering excitement, joy and enjoyment when applying the activities and games using attractive and colorful tools.
- Encouraging participants continually
- Applying the Program with music and songs.

Content:

The Program includes three parts:

- **Start-up:** This part aims to prepare children physically and mentally through joy and enthusiasm to actively participate in the unit to decrease separation anxiety among children. This part includes some recreational games for (10) minutes.
- **Main part:** This part includes the main games and activities that work on reducing separation anxiety among children according to the unit and Program objectives. It lasts for (40) minutes.
- **Conclusion:** This part aims to cool-down the body and return it to normal conditions. It includes some recreational games for (10) minutes.

The researcher prepared the preliminary version of the Program and presented it to (7) experts of recreation, psychology and mental health who eliminated a minor number of games.

Activities:

- Soccer
- Volleyball
- Handball
- Basketball
- Recreational games.

Most games depend on team relay format and the team wins when finishing the game first. All games and activities are applied with music and songs. Children are encouraged verbally to participate and are given gifts and prizes.

The researcher performed the second pilot study from 18-2-2019 to 20-2-2019 to test the suitability of the Program.

The Program includes (32) units and lasts for almost (2) months (4 units per week for 8 weeks) as seen in tables (6) and (7). The researcher applied the Program directly with instructions for participants according to their abilities.

Table (6): Timeframe of the Recreational Games Program

Total Duration	2 months
Units per week	4 units
Total units	32 units – 8 weeks
Unit duration	60 min
Startup duration	10 min
Main part duration	40 min
Conclusion duration	10 min
Total duration per week	60 x 4 = 240 min
Total duration per month	240 x 4 = 960 min
Total duration in (3) months	960 x 2 = 1920 min

Table (7): Relative Distribution of the Recreational Games Program Units

Unit parts	Per day (min)	Per week (min)	Per month (min)	In 2 months (min)	Percentage
Start up	10	40	160	320	16.66%
Main part	40	160	640	1280	66.66%
Conclusion	10	40	160	320	16.66%
Total	60	240	960	1920	100%

Main Study:

After verifying the validity and reliability of the scale and the recommended Program, and fulfilling all administrative requirements, the researcher initiated the following:

- **Pre-measurement:** The researcher applied the Separation Anxiety Scale to the main sample (n=36) on 21-2-2019 as a pre-measurement.
- **Main application of the Program:** The researcher applied the recreational games Program to the main sample from 24-2-2019 to 18-4-2019. The Program lasted for (2) months (8 weeks with 4 units per week). Total number of units was (32).
- **Post-measurement:** The researcher applied the Separation Anxiety Scale to the main sample (n=36) on 21-4-2019 as a post-measurement.

Table (8): Timeframe of the Program and measurements

Week		Days			
First pilot study		Sunday 10-2-2019 Sunday 17-2-2019			
Second pilot study	Monday 18-2-2019	Tuesday 19-2-2019	Wednesday 20-2-2019		
Pre-measurement		Thursday 21-2-2019			
Main application					
1	Sunday 24-2-2019	Monday 25-2-2019	Wednesday 27-2-2019	Thursday 28-2-2019	
2	3-3-2019	4-3-2019	6-3-2019	7-3-2019	
3	10-3-2019	11-3-2019	13-3-2019	14-3-2019	
4	17-3-2019	18-3-2019	20-3-2019	21-3-2019	
5	24-3-2019	25-3-2019	27-3-2019	28-3-2019	
6	31-3-2019	1-4-2019	3-4-2019	4-4-2019	
7	7-4-2019	8-4-2019	10-4-2019	11-4-2019	
8	14-4-2019	15-4-2019	17-4-2019	18-4-2019	
Post-measurement		Sunday 21-4-2019			

Statistical Treatment:

The researcher used SPSS Software to calculate: Mean – SD – Median – Kurtosis – Sqewness – Correlation Coefficient (R)– Cronbach's Alpha – (t) test – improvement percentage.

Results:

Table (9): Difference Significance Between Pre- and Post-Measurements of Participants on the Separation Anxiety Scale (n=36)

S	Measurement	Pre-		Post-		Means differences	Standard error	(T)	Improvement percentage (%)	
		Mean	SD±	Mean	SD±					
1	Separation	Personal	34.916	1.556	14.583	0.500	20.333	0.251	80.695	58.234
2		Social	22.027	1.133	9.555	0.652	12.472	0.285	43.628	56.621
3		Physiological	24.194	1.237	10.805	0.467	13.388	0.268	49.943	55.336
4		Academic	32.361	1.396	14.00	0.585	18.361	0.261	70.156	56.738
5		Total	113.500	2.813	48.944	0.984	64.555	0.548	117.723	56.876

(t) table value on $P \leq 0.05 = 2.021$

Table (9) showed statistically significant differences between the pre- and post-measurements of participants on decreasing separation anxiety in favor of post-measurements.

Discussion:

Table (9) indicated statistic significant differences between the pre- and post-measurements of participants on decreasing separation anxiety in favor of post-measurements as (t) calculated values were (80.695), (43.628), (49.943), (70.156) and (117.723) for personal, social, physiological and academic dimensions and the total score of the separation anxiety scale respectively. These values are all higher than (t) table value).

Table (9) also indicated that improvement percentages were (58.234%), (56.621%), (55.336), (56.738%) and (56.876%) for personal, social, physiological and academic dimensions and the total score of the separation anxiety scale respectively.

The researcher thinks that this decrease in separation anxiety among children is due to the sports recreational program that included activities and games that work on improving interaction with others, forming relations, cooperation, sharing, courage, self-confidence and comfort in addition to decreasing fears and sense of danger and overcoming difficulties. This decreases separation anxiety and improves the children's abilities to face the separation situations, overcome them and live normally. The program had positive effects either when applied at school or at home as negative responses like continuous crying and inability to interact with peers during school activities decreased significantly.

These results are consistent with several previous studies. Allam, M. (2011) (5) indicated that the recreational programs had positive effects on improving the sense of security and comfort and decreasing fears, anxiety and sadness among children. Rabia, F. (2012) (13) indicated that the artistic activities program had positive effects on decreasing separation anxiety manifestations among children. SHoakazemi et al. (2012) (16) indicated that the group=play intervention had significant effects on decreasing separation anxiety among children. Khadar et al. (2013) (9) indicated that the artistic intervention based on drawing therapy had positive effects on decreasing the intensity of separation anxiety symptoms in children. Al-Ganaee, M. (2014) (4) indicated that the family guidance intervention had positive effects on decreasing separation anxiety in children. Bilwani & Gupta (2015) (7) indicated that the behavioral modification intervention had positive effects on decreasing separation anxiety among children. Abbasi et al. (2016) (1) indicated that the behavioral cognitive intervention had positive effects on decreasing separation anxiety among children. Zebdi & Lignier (2017) (21) indicated that the behavioral cognitive intervention had positive effects on improving children's behaviors including social participation, school participation and separation anxiety. Abd Al-Fattah, S. (2018) (2) indicated that behavioral cognitive intervention had positive effects on decreasing separation anxiety among children.

Recreational games and activities improve quality of life through improving happiness and comfort among participants. It improves physical, mental, social and psychological well-being in addition to the achievement motivation, forming friendships, cooperation, interaction with others, self-assertiveness, comfort and self-confidence. It protects individuals from fear, anxiety, depression stress and psychological distress (18: 17-26) (10: 205-261) (20: 44-46) (19: 485-490) (14: 1-156).

The researcher thinks that the recreational games' Program decreased separation anxiety among children as recreational games and activities are of major importance for integrated child growth in all aspects including physical, mental, social and physiological aspects. They are required for daily life activities to enhance and improve individuals and societies. This proves the research hypothesis.

Conclusion:

According to this research aim, hypothesis, methods and results, the researcher concluded that the sports recreational program had positive effects on decreasing separation anxiety among children.

Recommendations:

According to this conclusion, the researcher recommends the following:

- Generalizing the application of the recommended recreational games' Program for all children in all schools and institutes.
- Helping children to identify themselves and form friendships in addition to improving their social skills and expressing their feelings freely and confidently and to use recreational games and activities in raising, educating and training them.
- Performing more studies to design specialized recreational Programs in physical, health, mental, social and psychological aspects of children to decrease and solve problems and achieve advance.

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