

## The Effect of a Family Counseling Program in Reducing Stress in Mothers of Children with Autism Spectrum Disorder

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Received: 10-April-2023

Revised: 16-May-2023

Accepted:30-June-2023

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### Abstract

This study aimed to measure the effect of a family counselling program in reducing the level of psychological stress among mothers of children with autism spectrum disorder (ASD). To achieve the goals of the study, a counselling program based on the theory of behavioural and cognitive therapy was designed and the maternal stress scale, which was applied to the participants consisted of six domains. The indications of validity and reliability were verified. Thirty mothers made up the study sample, who were equally divided into two groups: an experimental group (n = 15) and a control group (n = 15). The findings revealed that there were statistically significant gender differences at the significance level ( $\alpha \leq 0.05$ ) for the level of psychological stress among mothers in the post-test. As the mean for females was (3.42) which is better than that of males (3.04). The calculated (T) value was (-3.340), which is a statistically significant value. There were also statistically significant differences ( $\alpha \leq 0.05$ ) in favour of the experimental group. These results are consistent with studies that adopted the theory of behavioural and cognitive therapy in reducing psychological stress among mothers, and this is due to the active and effective participation in the program sessions, because mothers did not previously receive similar programs because they were suffering from psychological pressures, and no one would provide them with any support. The study suggested that mothers should permanently perform the counselling program exercises to lessen the effects of psychological stress.

**Keywords:** counselling program, psychological stress, autism spectrum disorder,

### Introduction

One of the most challenging responsibilities that mothers must perform is raising their children, and it is made even more complicated if the child has a disability, particularly if he has autism spectrum disorder (ASD), because the caregiving process takes a lot of time and effort (Kwan, 2012). In addition, the birth of a child with ASD is a traumatic experience for the mother and the family, which puts her at risk of being held accountable and blamed for the child's condition in addition to stress, pressure, and suffering the stigma of having a disabled child (Kumar, 2008). According to Kumar (2008), the family of a child with autism spectrum disorder is going through significant changes to adjust to the existence of this child in it. Mothers are under a lot of psychological stress, which has an impact on the family structure in multiple ways. Due to the sense of collective failure, also lowers their drive. As a result, the family may reorganize its responsibilities, which results in numerous disputes, issues, and psychological stresses.

Kersh, Hedvat, Hauser-Cram & Field (2006) also confirmed that mothers of autistic children exhibit high levels of psychological stress and disorders namely anxiety, depression, withdrawal, social isolation, lack of self-esteem and high responses related to raising the autistic child. In fact, caring for a child with ASD may put the mother and family under a lot of psychological stress because the hardships multiply as the disorder's severity, its associated disabilities, and other medical conditions develop. Numerous research on the subject of psychological stress in families with autistic children (Johston, Hessler, Blasey, Eliez, Erba, Dyer-Friedman, Glaser & Reiss, 2003; Gupta & Singhal, 2005; Kersh & Other, 2006; Allik, Larsson & Smedje, 2006. Jones & passey) have found that, when compared to households without disabled children, parents of autistic

children experience higher levels of psychological stress. Based on the findings of the aforementioned studies, which indicated that mothers of children with ASD are under a lot of psychological, physical, emotional, and financial stress, this study sought to alleviate the psychological stresses experienced by these mothers by developing a fruitful counselling program that aids them overcoming their psychological stress and finding psychological comfort.

The definition of autism spectrum disorder, its causes, symptoms, therapy, and how to cope with children with it have piqued the interest of many medical professionals, psychologists, and special education specialists, therefore, numerous studies have been conducted on this subject. Among these studies are: “Developing Jordanian Version of the Childhood Autism Rating Scale (CARS)(2016)”, “The effect of an early intervention program in improving basic skills for children with autism(2011)”, and “Effectiveness of a therapy program based on neurofeedback (NF) in improving language for children with ASD(2014)”. and there are many studies that we have not mentioned that are still looking to find out more about this mysterious disorder (Al-Imam& Al-Jawaldah, 2010).

In 1911, Bleuler is credited with the introduction of the concept of ASD, denoting the loss of contact with reality, frequently through indulgence in bizarre fantasy. Kanner was perhaps best known for his description of “early infantile autism” which is now known as an autism spectrum disorder in 1943 as a distinct clinical syndrome. Based on his observation of 11 children who were diagnosed with mental disability, Kanner described a common profile whereby the children did not relate “in the ordinary way” to people or situations from birth. Additionally, he noted that the children's repetitive activities, like their vocal utterances, as well as their lack of spontaneous activity, were caused by their anxious and obsessive desire for sameness. Autism denotes preoccupation with a direct imagining of thoughts and desires, with a lack of communication with reality (Salama, 2005).

Definitions of this disorder developed during the previous era until the statistical and diagnostic evidence (DSM-5, 2013) defined it as one of the neurodevelopmental disorders that affect children from birth to the age of eight years, which appear through developmental disorder, characterized by challenges with social skills, repetitive behaviours, speech and nonverbal communication ranged from minor to severe level. Some stereotyped behavioural patterns or repetitive motor movements may manifest (e.g. simple motor stereotypies, lining up toys or flipping objects, echolalia, idiosyncratic phrases). Insistence on sameness, inflexible adherence to routines (e.g., extreme distress at small changes, difficulties with transitions, rigid thinking patterns, greeting rituals etc.).

Due to the disorder's ambiguous nature and the fact that it is somewhat invisible in comparison to other disabilities like Down syndrome and behavioural and emotional disorders, mothers of children with this disorder are subject to a variety of psychological pressures that generally have an impact on the family. This is especially true given how challenging it is to adapt to this disorder (Al Qamsh, 2011).

According to Kersh, Hedvat, Hauser-Cram, and Field (2006), the birth of a child with autism spectrum disorder creates great pressing on the female parent because this disorder is characterized by ambiguity and inaccurately diagnosis. Therefore, it is frequently misread, ostracized, and misunderstood. The mother continues to suffer from constant effort externally or internally, as a result of her blame for her inability to control her child's behaviour and for giving birth to a disabled child. She feels animosity toward her autistic child and that he rejects her, which makes her feel like she can't fulfil her responsibility to him and provide him love and affection. The child is exposed to words that could have a negative impact on his psychological construction, such as naughty, impolite, and violent.

Given that these children live in their world and have needs that they are unable to communicate with, their mothers try to give them more emotional and physical support. Some of them don't consume the food that is provided for them and go longer than 20 hours without sleeping, making it impossible for the mother to understand what the child needs. Due to their inability to provide their children with the right and suitable care, parents often spend a significant amount of their energy trying to get them special assistance (Zureikat, 2010; Al-Makani, 2009).

Daily living with a child with autism spectrum disorder may constitute a physical burden for his parents compared to parents of ordinary children. Zureikat (2010) and Abu Halawa (2004) explain that mothers of these children spend the majority of their time trying to meet the personal needs of their children, like helping them eat and wear clothes. They devote a big part of their physical energy to their child, therefore, they may experience sleep difficulties, which prevent them from getting a good night's sleep. Due to the demands of caring for the child, she also has few opportunities for social interaction, especially because some of them find it stressful to go out with their autistic child (Kumar, 2008).

The mother of an autistic child goes through several stages in her reactions, beginning with denial, moving on to shock, then to a lack of will, followed by scars, sadness, and despair. In addition to her inability to regulate her emotions, she also lost faith in medical professionals and hope for the future. At this point, some parents frequently turn to introversion and avoid social interactions, anger, and then acceptance. It is not surprising that a disability alters the family's course of life and brings about a new reality that it could not have anticipated (Al-Qamsh, Al-Jawaldah, p. 127, 2014). The need for counselling programs for mothers of disabled children arises since most issues in life are caused by families and may be solved by involving and collaborating with households. For each person, family ties can be a source of fulfilment and support as well as pain and psychological pressure, and in many situations, they combine support and pressure. To change the perspective of the problem to one of a reciprocal character rather than perceiving it to be of a unilateral one, family therapy helps to enhance the family's environment so that it becomes a source of support rather than a source of psychological strain (Zureikat, 2010; Al-Khatib, 2001). According to (Al-Khatib, 2001, Imam, and Al-Jawaldah, 2011) the primary goal of providing mothers with guidance is to assist them in coping with the circumstances, pressures, issues, and emotions brought on by the autistic child's developmental stage as compared to other children to preserve their psychological stability and alleviate the psychological pressures on them through the family counselling program that is made available to them.

In this study, a family therapy program was utilized to help mothers of children with autism spectrum disorder cope with their psychological stress. The program was made up of nine counselling sessions, including an opening and a concluding session. The program's goals are to reduce the mother's psychological pressure, as well as her stress and anxiety, using a variety of techniques, including relaxation and teaching her how to deal with her autistic child. It is designed regarding the theories of cognitive behavioural family therapy and constructivist family therapy. Each session has a set of goals that are consistently followed until the program's desired goals are achieved.

The disability of the autistic child has an effect on the family's life cycle by slowing it down, which may cause disruptions in roles within it and force the family system to be reorganized to coexist with the disability of the child. Depending on the connection within the household and the status of the mother and father, tasks may need to be reallocated. Given that the father is more concerned with providing for his family's material needs than a mother is with her child's needs, the mother, who makes up the majority of the family system, plays the role of facilitator to meet the child's needs. She has a greater responsibility than the father in providing for and raising her child. Which makes her more realistic when evaluating her child and dealing with his/her disability (Al-Imam, Al-Jawaldah, 2011, Hanafi, 2007). The mother's primary role now is to help train and educate the child for acceptable responses as more people realize the value of the mother's participation in counselling and training programs and the importance of developing her skills in dealing with her autistic child. This will help the mother better understand the needs and challenges of her child as well as the targets that specialists seek to accomplish (Kumar, 2008).

Counselling services for mothers of children with ASD help them become more aware of the needs of their children. As a result, the mother must be given the chance to take part in the programs provided by early intervention clinics. This is crucial since it reassures the mother and keeps her informed about her son's program and its success (Kersh, Hedvat, Hauser-Cram & Field, 2006). The severity of the psychological stress experienced by mothers of children with autism spectrum disorder prompted the researcher to design a family

counselling program to guide mothers of children with autism spectrum disorder and help them reduce their psychological pressure so that the mother can better serve her and her children.

**Problem Statement:**

The purpose of this study is to identify the effect of a family counselling program for mothers of children with an autism spectrum disorder in the Kingdom of Saudi Arabia to reduce their psychological stress levels.

**Study Questions:**

- What is the level of psychological stress faced by mothers of children with autism spectrum disorder (ASD)?
- Does the level of psychological stress among mothers of children with ASD differ due to gender variables?

**Study hypotheses:**

- There are no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) between the means of both the experimental group members and the control group in reducing psychological stress due to the counselling program.

**Study Importance:**

The importance of the study is manifested in attempting to alleviate the level of psychological stress in mothers of children with ASD, as it dealt with psychological concepts that have a basic positive impact on mothers, which added a new cognitive aspect, which gave a greater interpretation of the psychological stressors they face. The findings of this study explore the connection between psychological stress and autistic spectrum disorder, which will aid specialists in family counselling and special education in creating a counselling program that can lessen mothers' psychological stress.

**Study Terminology:**

Family counselling: operationally, is defined as a process by which the specialist offers assistance and guidance to the mother of an autistic child, utilizing the best techniques to help them reach a stable state and improve their capacity to deal with challenges.

Family Counseling: is a process performed by the psychological counsellor to provide parents and the rest of the family members with information, psychological support and guidance regarding the problems facing them, such as raising a son with a disability, compatibility, planning, and psychological disturbance in the family (Imam&Jawaldah, 2011, Hanafi, 2007).

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder that significantly affects verbal and nonverbal communication and social interaction. Its symptoms appear significantly before the child reaches the age of eight, and negatively affect his behavioural, social and linguistic performance. Its characteristics are manifested in the child's preoccupation with repetitive activities and stereotyped movements and his resistance to environmental change, in addition to unusual responses (DSM-5, 2013). Operationally, it is a type of neurodevelopmental disorder that prevents the child from communicating with his surroundings, so there is a defect in communication, social interaction and pronunciation as well.

Psychological stress: a group of uncommon factors and influences that an individual evaluates as outweighing his sources of adaptation and leading to an imbalance in the individual's psychological, physiological and physical functions (Zayada, 2009). Operationally, it is a state of feeling uneasy in front of an unpleasant situation or experience, measured by the degree obtained by the subject on the scale prepared for this study.

Counselling Program: It is a set of interconnected, successive, planned activities and sessions that are presented during a specific period and implemented through a behavioural and cognitive theory to achieve the overall goal of the program (Obeid, 2008). Operationally, it is a family counselling program based on the cognitive

behavioural theory consisting of a set of sessions containing several methods, suggestions, and exercises that contribute to alleviating psychological stress among mothers of children with an autism spectrum disorder.

### **Autism Spectrum Disorder -ASD**

Autism spectrum disorder is defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) as a type of complicated developmental disorder that manifests in the early childhood stages from birth to age eight. It is a result of neurological conditions that impede brain function in a variety of ways, including social interaction. ASD is defined by people not socially maturing in line with their age and having difficulty using skills like eye contact and facial expressions that are used in social and communicative interactions. In addition to difficulties making and keeping friends. Mental disorder diagnostic and statistical manual (DSM 5 TM).

Nobody disputes the important roles that mother plays, and no rehabilitation program can ever fully compensate for her. She is a child's earliest and most essential educational resource and is also the one who knows him best and all of his concerns and difficulties. She never forgets anything his mother teaches him, and as a result, he picks up the social norms and values that direct his behaviour. The child's upbringing is influenced by his immediate environment, his family's socioeconomic status, and other factors as well. Both the child's impairment and the family's behaviour might have a positive or negative reciprocal effect on each other. This is a reason why the behaviour of parents before the birth of the child differs from their behaviour after his birth, and thus the process of family upbringing becomes a mutual participatory process, that is, a process of influence and influence (Hanafi, 2007).

The necessity of offering counselling and assistance to parents of children with ASD and their families led the researcher to select this crucial topic. The family has a distinctive and significant place in human societies as it is the reason for the development and cohesiveness of society, thus paying attention to this group and assisting them in resolving their issues is an essential issue for the integration and synergy of society. One of the most crucial elements in creating a family and society is the child. Despite this, these children may not get the right kind of assistance for their needs in terms of education, counselling, and rehabilitation. No one denies that the family alone and the mother, in particular, bears the responsibility of caring for her child with ASD, and this constitutes a set of challenges for the family, as well as economical and social pressures, so it is necessary to support these families and the mother, in particular, to face these pressures ineffectively, to facilitate the process of adaptation with the child disability and increase cohesion among his household (Abdel Moneim, 2006).

### **Study Limitation and Delamination**

**Study sample:** The study sample was randomly selected from the study population, where the study sample consisted of (30) mothers of autistic children who visit special education centres and institutions in Riyadh Governorate in the Kingdom of Saudi Arabia.

**Time Limits:** The study was conducted in 2019.

**Generalizability:** It determined the extent to which the findings can be generalized to societies similar to the population of this study only.

### **Method and Procedures**

The study sample, which was composed of thirty mothers of autistic children in special education centres in Riyadh Governorate of the Kingdom of Saudi Arabia, was randomly chosen from the study population. It was equally divided into two groups: the experimental group (n=15) subjects, and the control group (n=15) subjects. The subjects were chosen from Azzam Autism Center, National Autism Center, and West Autism Center. Table (1) indicates the distribution of the subjects.

**Table (1)**

**Study subjects by centre variable**

Centres	NO. of mothers	Control group	Experimental group
Azzam Autism Center	8	3	5
National Autism Center	10	5	5
West Autism Center	12	7	5
Total	30	15	15

Table (1) demonstrates the distribution of the control and experimental group according to the name of the centre variable and shows that the number of subjects in the experimental group and the control group is equal.

**Instruments:**

Two tools were used in the study: a counselling program for mothers of children with autism spectrum disorder, and the psychological stress scale.

**A. The Psychological Stress Scale**

The Psychological Stress Scale was prepared by the researcher after referring to previous theoretical literature such as the study (Abu Seif, 2018; Qamish, 2015; Asfour, 2012; Naseet, 2016; Shelio, 2015); Al-Makani, 2009; Zaarir, 2009; Hanafi, 20017); Obaid, 2008; Al-Imam & Al-Jawaldah, 2011). The scale consisted of (64) items distributed over six dimensions, which are arranged as follows: Psychological and organic symptoms; family and social problems; burdens of an autistic child; feelings of despair, and frustration; anxiety about the child's future; Cognitive and psychological problems of the child. The indicators of validity and reliability of the study tools were verified.

Scale validity: To check the validity of the scale, it was presented to a specialized committee in special education, counselling, measurement and evaluation, from Al-Ahliyya Amman University, the University of Jordan, Jadara University, and Yarmouk University, all their suggestion were considered.

Construct validity: To verify the construct validity, the Pearson correlation coefficient was computed between the total score of the scale and its dimensions and items as shown in Table (2).

**Table (2)**

**Results of the Pearson correlation coefficient**

Scale	Psychological and organic symptoms	Psychological and organic symptoms	Psychological and organic symptoms	Psychological and organic symptoms	Psychological and organic symptoms	Psychological and organic symptoms
Psychological & organic symptoms	1	0.50**	0.400**	0.407**	0.587**	0.888**
Family & social problems	0.502**	1	0.500**	0.443**	0.587**	0.687**
Burdens of an autistic child	0.402**	0.460**	1	0.352**	0.477**	0.663**

Feelings of despair&frustration	0.408**	0.444**	0.360**	1	0.368**	0.594**
Anxiety about the child's future	0.587**	0.477**	0.570**	0.368**	1	0.820**
Cognitive & psychological problems	0.878**	0.676**	0.687**	0.594**	0.820**	1

Table (2) shows that the value of the Pearson correlation coefficient between the pre and post-application of the scale (1), is acceptable to verify the goals of this study.

Scale reliability coefficient: The scale reliability coefficient was calculated using the internal consistency method (Cronbach's alpha) as shown in Table (3):

**Table (3)**

**The reliability coefficient of the psychological stress scale**

Scale	No. items	Cronbach's Alpha
Psychological & organic symptoms	10	0.703
Family & social problems	12	0.720
Burdens of an autistic child	10	0.794
Feelings of despair&frustration	11	0.733
Anxiety about the child's future	12	0.765
Cognitive & psychological problems	9	0.840
<b>Scale</b>	<b>64</b>	<b>0.841</b>

The reliability of the scale by Cronbach's alpha was (0.841), which is an acceptable and stable value that allows the researcher to use the scale to measure the level of psychological stress in mothers of children with ASD in Riyadh Governorate - Saudi Arabia, according to the circumstances of the study sample.

**B. The Counselling Program:**

It is a counselling program based on some theories of Patterson's behavioural and cognitive counselling therapy, and the constructivist family therapy theory to alleviate the level of psychological stress among mothers of autistic children. The researcher benefited from the previous studies such as in preparing the counselling program.

(Abu Seif, 2018; Al Qamish, 2015; Asfour, 2012; Wansett, 2016; Shliw, 2015; Makanin, 2009; Za'arir, 2009; Hanafi, 20017; Obeid, 2008; Imam, Jawaldah; Abu Zeid, 2010; Reed, V. 2005; Lockshin, Gillis & Romancyck, 2005). To verify its validity, it was presented to a specialized committee, and all their suggestions were considered. The program consists of 9 training sessions, the duration of each session is (45) minutes.

The program aimed to reduce maternal stress levels. It consists of a set of relaxation and meditation methods, stress relief exercises, positive thinking, facing the problem, and how to deal with psychological stress. In addition to ways to guide mothers to foresee their psychological, physical, emotional, economic and family problems, increase their self-confidence and self-awareness, and allow them to participate actively and effectively. It also focused on activities that accurately develop awareness so that it can meet the needs of the

child, directing mothers to the need for early intervention for the child. The mothers also had the chance to clarify any misconceptions they had regarding the condition by asking questions about the things they had been suspecting. The trainers directed the mothers to the best ways to deal with the child, educating them about accepting their child with its advantages and shortcomings, showing the effects of psychological stress, physically, psychologically and behaviorally, and how to confront it and reduce its severity. Showing the dangers of psychological pressure on mothers, restoring balance and stability in mothers.

The researcher verified the face validity of the counselling program by presenting it to a group of specialists in the field of special education, psychological and educational counselling, and measurement and evaluation from Amman Al-Ahliyya University, Jadara University, Yarmouk University, and the University of Jordan, for judging its appropriateness. The content validity of each session, its linguistic clarity, the suitability of the program for the study purposes, and its suitability for implementation were confirmed. All the suggestions were considered and the required modification was performed.

### Findings

The study aimed to determine the level of psychological stress among mothers of children with an autism spectrum disorder in the city of Riyadh in the Kingdom of Saudi Arabia. The results were as follows:

**To answer the first question:** What is the level of psychological stress faced by mothers of children with autism spectrum disorder (ASD)? Descriptive analysis was obtained using the statistical program package (SPSS. V. 24).

**Table (4)**

#### Descriptive analysis of the participants' responses

	Psychological stress	N	MUL	Means /item	Std.	Level
1	Psychological & organic symptoms	15	47.25	3.15	0.520	Medium
2	Family & social problems	7	24.72	3.53	0.466	Medium
3	Burdens of an autistic child	4	15.88	3.97	0.623	High
4	Feelings of despair & frustration	8	30.17	3.77	0.405	High
5	Anxiety about the child's future	14	42.62	3.04	.3520	Medium
6	Cognitive & psychological problems	48	160.63	3.35	.3480	Medium

\*MUL: arithmetic means upper limit.

The arithmetic means of the domains of the psychological stress scale ranged between (3.04 -3.97) with a standard deviation of (0.348 - 0.623). Table(4) shows that the highest arithmetic mean was for the domain of bearing the burdens of the autistic child (3.97), while the lowest arithmetic mean was for the domain of anxiety about the future of the child (3.04) and that the level of psychological stress among mothers of children with ASD was medium.

**The second question** and its text: Does the level of psychological stress among mothers of children with autism spectrum disorder differ due to gender variables?



**Table (5)**

**The difference in the level of psychological stress among mothers of children with ASD by gender in the pre-test.**

Psychological Stress	Category	N	Mean	Std.	T value	Df	Sig
Psychological & organic symptoms Family & social problems	Male	18	3.08	0.598	-2.655	28	0.213
	Female	12	3.58	0.312			
Burdens of an autistic child Feelings of despair&frustration	Male	18	3.60	0.374	-1.068	28	0.295
	Female	12	3.77	0.500			
Anxiety about the child's future	Male	18	4.09	0.515	-1.409	28	0.170
	Female	12	4.35	0.445			
Psychological & organic symptoms Family & social problems	Male	18	3.87	0.290	-1.707	28	0.099
	Female	12	4.05	0.258			
Burdens of an autistic child Feelings of despair&frustration	Male	18	3.00	0.278	-4.925	28	0.000
	Female	12	3.45	0.178			
Anxiety about the child's future	Male	18	3.35	0.238	-4.394	28	0.000
	Female	12	3.71	0.193			

There are statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) for the sources of psychological stress among mothers of children with ASD due to the gender of the child in the pre-test. The calculated T-value amounted (-4,394), which is a statistically significant value. The results demonstrate that female children outperformed male children, where the arithmetic mean for females was (3.71) with a standard deviation of (0.282), while the arithmetic means for males was (3.35) with a standard deviation (0.138). The findings also revealed statistically significant differences for the dimension of bearing the burdens of the autistic child, where the calculated (t) value was (-4.925), which is a statistically significant value at the significance level ( $\alpha \leq 0.05$ ), which is also in favour of females, where the arithmetic mean for females was (3.45) with a deviation Standard (0.178), while the arithmetic means for males was (3.00) with a standard deviation of (0.278).

**Table (6)**

**The difference in the level of psychological stress among mothers of children with ASD by gender on the post-test.**

Psychological Stress	Category	N	Mean	Std.	T value	Df	Sig
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Psychological & organic symptoms Family & social problems	male	18	2.80	0.407	-4.024	28	0.000
	female	12	3.35	0.303			
Burdens of an autistic child Feelings of despair&frustration	male	18	3.15	0.303	-4.424	28	0.000
	female	12	3.75	0.439			
Anxiety about the child's future	male	18	3.61	0.743	-1.349	28	0.188
	female	12	3.93	0.466			
Psychological & organic symptoms Family & social problems	male	18	3.57	0.509	-3.340	28	0.002
	female	12	3.62	0.306			
Burdens of an autistic child Feelings of despair&frustration	male	18	2.80	0.281	-2.282	28	0.030
	female	12	3.05	0.334			
Anxiety about the child's future	male	18	3.04	0.314	-3.340	28	0.002
	female	12	3.42	0.272			

Table (6) showed that there were statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) for the sources of psychological stress among mothers of children with ASD attributed to the child's gender in the post-test. Where the calculated value of (t) was (-3.340), which is a statistically significant value at the significance level ( $\alpha \leq 0.05$ ) in favour of females. Where the arithmetic mean for females was (3.42) with a standard deviation of (842.0) while the arithmetic means for males was (3.04) with a standard deviation of (904.0). The results also showed that there were statistically significant differences for the dimension of bearing the burdens of the autistic child, feelings of despair and frustration, where the calculated value of (t) was (-4.424), which is a statistically significant value at the level of significance ( $\alpha \leq 0.05$ ) and it is in favour of females, where the arithmetic mean for females was (7500.3) with a standard deviation of (439.0) while the arithmetic means for males was (3.15) with a standard deviation of (303.0).

**The third question:** Are there statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) between the means of both the experimental group members and the control group in reducing psychological stress due to the counselling program?

**Table (7)**

**The difference in the level of stress among mothers of children with ASD by the group in the pre-test**

Psychological Stress	Group	N	Mean	Std.	T value	Df	Sig
Psychological &	experimental	15	3.27	0.507	-0.065	28	0.949

organic symptoms Family & social problems	control	15	3.28	0.618			
Burdens of an autistic child Feelings of despair&frustration	experimental	15	3.69	0.538	0.179	28	0.859
	control	15	3.66	0.304			
Anxiety about the child's future	experimental	15	4.22	0.558	0.180	28	0.858
	control	15	4.18	0.448			
Psychological & organic symptoms Family & social problems	experimental	15	4.03	0.307	1.544	28	0.134
	control	15	3.87	0.252			
Burdens of an autistic child Feelings of despair&frustration	experimental	15	3.20	0.346	0.352	28	0.727
	control	15	3.16	0.311			
Anxiety about the child's future	experimental	15	3.52	0.282	0.397	28	0.694
	control	15	3.48	0.292			

Table (7) reveals that there are no statistically significant differences at the significance level ( $\alpha \leq 0.05$ ) for the sources of psychological stress and its sub-dimensions among mothers of children with ASD by the group variable in the pre-test, where the calculated T-value for the sources of stress and its sub-dimensions were 065.0 - 179.0 - 180.0 - 1.544 - 352.0 - 397.0 respectively which are not statistically significant values at the significance level ( $\alpha \leq 0.05$ ).

**Table (8)**  
**The difference in the level of stress among mothers of children with ASD by the group in the post-test**

Psychological Stress	Group	N	Mean	Std.	F value	Df	Sig
Psychological & organic symptoms Family & social problems	experimental	15	2.74	0.428	-4.322	28	0.000
	control	15	3.30	0.276			
Burdens of an autistic child Feelings of despair&frustration	experimental	15	3.16	0.264	-3.051	28	0.005
	control	15	3.62	0.517			
Anxiety about the child's future	experimental	15	3.37	0.633	-3.763	28	0.001
	control	15	4.12	0.442			
Psychological & organic	experimental	15	3.35	0.478	-3.731	28	0.001

symptoms Family & social problems	control	15	3.84	0.179			
Burdens of an autistic child Feelings of despair&frustration	experimental	15	2.67	0.231	-5.93	28	0.000
	control	15	3.14	0.207			
Anxiety about the child's future	experimental	15	2.93	0.244	-6.467	28	0.000
	control	15	3.46	0.201			

Table (8) demonstrates that there are statistically significant differences in the level of significance of the sources of psychological stress among mothers of children with ASD due to the type of group in the post-test. Where the calculated value of (t) was (6.467), which is a statistically significant value at the level of significance, in favour of the experimental group, where the arithmetic means of the control group was (3.46) with a standard deviation of (0.200), while the arithmetic means of the experimental group was (2.933), with a deviation normative (0.244).

The findings also revealed statistically significant differences for the dimension of bearing the burdens of feelings of despair and frustration for the autistic child, where the calculated (T) value reached (5.931 -), which is a statistically significant value at the level of significance, and it is in favour of the experimental group, where the arithmetic mean of the experimental group reached (14.3) with a deviation standard (0.207), while the arithmetic means of the control group was (67.2), with a standard deviation of (0.23).

**Table (9)**  
**Results of the One-way ANOVA analysis**

Source of variance	SS	Df	MS	F value	Sig
Group	2.089	1	2.09	139.39	.0000
Gender	0.994	1	0.99	66.31	.0000
Error	0.405	27	0.015		
Total	3.488	29			

The results of one-way ANOVA analysis show that the differences were in favour of the experimental group. This denotes the effectiveness of the counselling program in reducing the level of psychological stress for mothers of children with ASD. This result may be due to the fact that the mothers may have actively participated in the program sessions because they had not previously received similar programs and were under psychological stress from not being able to find someone who could relate to what they were going through or feeling and offer support. This result is consistent with the results of previous studies, such as the study (Al-Imam and Al-Jawaddah, 2011; Ghadi, 2012).

### **Recommendations:**

Based on the results of this study, the researcher suggests applying the program to a wider and larger sample in different geographical areas to assist mothers to reduce their psychological stress levels. The Saudi Arabian Ministry of Social and Family Development also invited to pay special attention to mothers of children with disabilities in general and mothers of children with ASD in particular, and that these mothers be involved in family programs that help to lessen the financial, material, and educational burdens that come with having a child with disabilities.

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