إقرار

أنا الموقع أدناه مقدم الرسالة التي تحمل العنوان:

Psychological stress and resilience among parents of autistic children in Gaza Strip

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Student's name: Sally K. Abou-Dagga

اسم الطالب: سالى خالد أبو دقة

Signature:

التوقيع: س

Date: 22/6/2013:

التاريخ: 22/6/2013

The Islamic University of Gaza

Deanship of High Studies

Community Mental Health Nursing

College of Education



#### Thesis entitled/

# Psychological stress and resilience among parents of autistic children in Gaza Strip

#### Prepared by:

### Sally Khaled Abou-Dagga

#### Thesis committee

Dr. Sanaa Abou-Dagga Dr. Yousef Al Jeesh

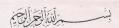
Professor of Education Associate professor in Public Health

Islamic University of Gaza Islamic University of Gaza

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## نتبجة الحكم على أطروحة ماحستبر

بناءً على موافقة عمادة الدراسات العليا بالجامعة الإسلامية بغزة على تشكيل لجنة الحكم على أطروحة الباحثة/ سالى خالد عبد الحميد أبو دقة لنيال درجة الماجستير في كلية التربية/ قسم صحة نفسية ومجتمعية - علوم التمريض وموضوعها:

## Psychological Stress and Resilience Among Parents of **Autistic Children in Gaza Strip**

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مشرفأ ورئيسا مش\_\_\_رفًا مناقشاً داخلياً مناقشاً خارجبًا

أ.د. سناء إبراهيم أبو دقة

د. يوسف إبراهيم الجيش

أ.د. سمير رمضان قوته

د. عطاف عبد الله عابد

وبعد المداولة أوصت اللجنة بمنح الباحثة درجة الماجستير في كلية التربية /قسم صحة نفسية ومجتمعية -علوم التمريض.

واللجنة إذ تمنحها هذه الدرجة فإنها توصيها بتقوى الله ولزوم طاعته وأن تسخر علمها في خدمة دينها ووطنها. والله ولى التوفيق،،،

عميد الدراسات العليا

أ.د. فؤاد على العاجز

ص.ب. 108 الرمال. غزة. فلسطين هاتف 286 070 (8) Tel: +970 (8) 286 0700 فاكس 108, Rimal, Gaza, Palestine fax: +970 (8) 286 0800 public@iugaza.edu.ps www.iugaza.edu.ps

كُمْ بِشَيْءٍ مِنَ الْخُوْفِ وَالْجُوعِ وَنَقْصِ مِنَ الأُمْوَال وَاللَّهُ وَالنَّمُواتِ وَبُشِّر الصَّابِرِينَ الذينَ إذا أصابَتْهُمْ مُصِيبَةً قَالُوا إِنَا لِلَّهِ وَإِنَّا ورَحْمَة وَأُولِنُكَ هُمُ الْمُهْدُونَ ) البقرة/ 155-157 صَدَق الله العَظِيه

#### **ABSTRACT**

## Psychological stress and resilience among parents of autistic children in Gaza Strip

Parents of children with autism spectrum disorders (ASD) experience significant psychological stress and resilience. To date, little research has examined the relationship between resilience and psychological stress in parents with a child diagnosed with ASD. This study explored the links between resilience and psychological stress in a sample of 160 parents of children between the ages of 3 and 13 diagnosed with ASD. The Psychological Stress Scale, Resilience Scale, and demographic Information Sheet were used in this descriptive study. Results indicate that most parents experienced psychological stress (weight mean 78.47) and resilience (weight mean 63.57). Greater parent resilience was associated with lower levels of stress and vice versa. There is a statistical differences of the psychological stress's level among mothers and fathers at significant level  $\alpha = 0.05$  in favor of mothers. In addition, there is a statistical differences of the psychological stress's level among working parents in favor of working parents at significant level. Also there is no statistical differences of the resilience level among parents due to age, gender, and occupation  $\alpha = 0.05$ .

Unexpectedly, higher levels of resilience present among parents with secondary school rather than university at significant level. This may suggest that educational level may act risk process for resilience, in sometimes rather than protective. While educational level has no significant difference of psychological stress's level in parents of children with ASD.

The findings of this study shed new light on the role of resilience on psychological stress in parents with a child diagnosed with ASD. Since the results of this study show that more resilient parents report less psychological stress clinicians need to focus on programming for parents that enhance key processes of resilience and reduce stress.



#### الملخص

هدفت هذه الدراسة إلى معرفة مستوى الضغوط النفسية لدى آباء وأمهات الأطفال المصابون باضطرابات طيف التوحد في قطاع غزة، ولتحقيق هذا الهدف استخدم الباحث المنهج الوصفي العلائقي، و تم اختيار عينة مكونة من 160 أب وأم لديهم أطفال مسجلين في مركز التأهيل النفسي المجتمعي و قد تم تشخيص هؤلاء الأطفال حسب الدليل التشخيصي الرابع باضطرابات طيف التوحد. حيث تم اختيارهم بطريقة عشوائية طبقية داخل كل محافظة في قطاع غزة. ولتحقيق هدف الدراسة قام الباحث باستخدام أداتين هما مقياس الضغوط النفسية من تقنين الباحثة وكذلك مقياس المرونة من إعداد الباحثة ، إضافة لقائمة بالمعلومات الأساسية لعينة البحث.

و حُلّات النتائج باستخدام الحزمة الإحصائية للعلوم الاجتماعية (SPSS) واستخدمت المتوسطات الحسابية والنسب المئوية ومعامل الارتباط بيرسون واختباري ت وتحليل التباين الأحادي وشيفيه. وأشارت النتائج إلى وجود مستوى من الضغوط النفسية والمرونة لدى الآباء والأمهات حيث بلغ الوزن النسبي لهما على التوالي 63.57، 78.47 . وكذلك تبين وجود علاقة عكسية ضعيفة بين مستوى الضغوط النفسية والمرونة حيث بلغ معامل الارتباط بيرسون --164 وهي علاقة دالة إحصائياً. وأشارت النتائج إلى عدم وجود علاقة ذات دلالة إحصائية بين مستوى الضغوط النفسية لدى الآباء والأمهات تعزو لمتغير العمر والمستوى التعليمي لهم، بينما يوجد اختلاف في مستوى الضغوط النفسية بين الآباء والأمهات عند مستوى دلالة ومتغير العمل لصالح الأمهات، بالإضافة إلى ذلك وُجِدت علاقة ذات دلالة إحصائية بين مستوى الضغوط النفسية ومتغير العمل لصالح العاملين.

كذلك أظهرت النتائج عدم وجود علاقة ذات دلالة إحصائية بين مستوى المرونة لدى الآباء والأمهات ومتغير العمر والجنس والعمل. بينما اتضح ارتفاع مستوى المرونة لدى الآباء والأمهات لصالح المستوى التعليمي الثانوي وليس الجامعي.

نتائج هذه الدراسة تسلط الضوء على المرونة و الضغوط النفسية لدى آباء وأمهات أطفال اضطرابات طيف التوحد حيث انه كلما ارتفع مستوى المرونة انخفض مستوى الضغوط النفسية لديهم و هذا يقود الاختصاصيين للتركيز على إعداد برامج لتحسين مستوى المرونة وتقليل الضغط النفسي.



## Dedication

This work is dedicated to my parents who planted the seed of inspirations, and for supporting me; my father who lived to see the fruits of his

, my mother who tirelessly fought against the hurdles of this world to see her daughter attain the greatest gift of all education

advice .

, my husband for his patience, unconditional love, support and encouragement

, my daughters Retal and Taleen who give meaning to my life

my brothers and sisters who indirectly paid for all this.

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The researcher Sally Khaled Abu Dagga



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### **Table of abbreviations**

Abbreviation	Definition
ABA	Applied behavior analysis
ABC	The Autism Behavioral Checklist
ACT	Acceptance and commitment therapy
ADD	Attention deficit disorders
ADHD	Attention deficit hyperactivity disorders
ADI-R	Autism Diagnostic Interview – revised
ADOS-G	The Autism Diagnostic Observation Schedule–Generic
APA	American Psychiatric Association
ASD	Autism spectrum disorders
BAP	Broader Autism Phenotype
CARS	The Childhood Autism Rating Scale
CHAT	The Checklist for Autism in Toddlers
DI	Dizygotic
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, Fourth
	Edition, Text Revision
EEG	Electroencephalogram
HFA	High Functioning Autism
IRT	Item Response Theory
M-CHAT	The modified CHAT
MZ	Monozygotic
ND	No date
PDD	Pervasive developmental disorder
PDD-NOS	pervasive developmental disorder-not otherwise specified
PL-ADOS	Pre-linguistic Autism Diagnostic Observation Schedule
PSI-SF	Parenting Stress Index-Short Form
PSS	Parental Stress Scale
QOL	Quality Of Life
SCQ	The Social Communication Questionnaire
SES	Socioeconomic status
SOC	Sense Of Coherence
SPSS	Statistical program for social sciences
SSRI	Selective serotonin reuptake inhibitors
STAT	Screening tool for autism in two-year-olds
TD	Typically developing



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## Chapter 1

## Introduction



#### Chapter one

#### 1.1 Introduction:

Family is the first natural context in which the child exposed for and it is the first social environment that surround him. The family defined as collective body of persons who live in one house ,and under one head or manager; household, including parents, children, and servants, and as the case may be, lodgers or borders (Accurate and Reliable Dictionary, 2010), and the parent are the cornerstone for the family.

In other hand, the parent may exposed to problems or sudden situations that can't be resolved at all, so they find themselves obligated to deal with it and sometimes to adapt with it over life; thereby this mean that there is a change in roles and expectations among parents, especially if a child diagnosed with one of autism spectrum disorders (ASD) exist within it, which is an emotionally challenging event for the parent.

The American Psychiatric Association's (APA), Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR), defines ASD as a group of disorders that include autistic disorder, pervasive developmental disorder-not otherwise specified (PDD-NOS), and Asperger's Disorder, Childhood Disintegrative Disorder and Rett's Disorder. The core deficits associated with an ASD are impairment in social interaction and communication, as well as the presence of unusual behaviors and/or interests (APA, 2000).

Undoubtedly, one of the most frequently studied conditions in the field of mental health today is ASD (Matson & Kozlowski, 2011) .Results showed that the reported prevalence of autistic cases significantly increased from 0.93 to 3.96 per 10,000 population in 2000- 2009 (Chien et al., 2011).

In Palestine, there has been little work on ASD ,while there is an increasing number of children who diagnosed with ASD according to Community Mental health Rehabilitation Center (Psychiatric Hospital) in Gaza Strip in which the prevalence of ASD is about 200 patients. Also Mr. Trman indicate that the minimum number of people living with autism in the Palestinian territories of 6 thousand patients, explaining his attempt three years ago, to do a census of the number of autistic people but he have not been able to collect more than 200 name only (Autistic Patients, 2009). The high prevalence of ASD lead me to research in this topic .

One of the important variables in this study is psychological stress which refers to the bad influence that it occur in the presence of a disabled child - and is characterized by negative properties — on the parent that raises undesirable mental, emotional or physical reactions that expose them for the tension, stress, anxiety, grief, and sorrow, and may



suffer from some psychosomatic symptoms which exhausted their energies and prevent their ability to focus on their work (Al-Shakhs & Al-Sartawi, 1998, p. 6).

Studies of parents rearing children with autism spectrum disorders clearly document elevated stress levels (Ingersoll and Hambrick, 2011; Davis and Carter, 2008; Abd Alqader, 1997).

In addition, resilience has been broadly defined as a process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (Masten, Best, & Gramezy, 1990, p. 254). There is no study about resilience in parents of children with ASD, instead there few studies about families as general such as the study of Lori Jo-Ann Mierau (2008) in which the findings support the existing understanding of factors that contribute to resilience in families affected by autism as they share many of the same feelings of frustration, guilt and stress as other families affected by autism but also attain strength and a sense of hope or optimism for the future. Another study presents evidence that a considerable number of families of children with autism display factors of resilience reporting having become stronger as a result of disability in the family (Bayat, 2007).

Consequently, it is difficult to assess the extent to which raising a child with ASD affects parents also from my work in mental health clinic notice that there are some parents complain from rearing a child with ASD and falter in their capacity to deal with this experience while others overcome this distressing experiences and deal with it in positive way; so this lead me to spot light on this area also continues study is needed in order to examine psychological stress and resilience level among parents which may guide other researchers in gaining a deeper understanding of the resilience, thereby helping the parents to practice it by designing special programs for improving resilience. Also this study may suggest one answer as to what keeps people resilient or have a high level of psychological stress.

This thesis attempts to inform the literature on parents of children diagnosed with an ASD by identifying the relationship between psychological stress and resilience among parent, emphasizing on the impact of selected socio-demographic characteristics on it.

Drawing upon the Lazarus theory of psychological stress, resilience model (Masten, 2001) and Family Resilience Theory (Walsh, 1996; Walsh, 2006) this study predicts a parent's resilience, and psychological stress level. The next chapter will provide background information and further context for this study by reviewing and critiquing the relevant literature on parents of children with ASD, which include a comprehensive information about ASD, its prevalence, diagnosis, comorbid disorders, management and finally providing some suggestions and recommendations for parents of children diagnosed with ASD also for future researches. Also it will discuss resilience definition, model, factors and theory beside psychological stress include definition of it, theories of stress, factor contributing to stress and interventions to relieve it. Also previous studies will be criticized to help in draw conclusion which will help in outline this thesis.



#### **1.2 Problem statement**

Research that portrays ASD as one of the disorders that excited and new for many individuals and parents; so many people become interested in this disorder in recent period to answer many questions around it, as its impact on parents and what the future of child with ASD. In other hand, the concept of resilience may be new and differ from ordinary concepts for some people, also many studies only examine the level of parental stress in general such as the study of Dabrowska and Pisula (2010), Mancil, Boyd and Bedesem (2009), Davis and Carter (2008), and Abd Alqader (1997).

Based on the above, the study's problem have emerged from the conditions that parents of children diagnosed with ASD have exposed to, which include psychological stress and resilience.

The purpose of the study is to investigate psychological stress and resilience among Palestinian parents who have children diagnosed with ASD in Gaza Strip. But it is important to also show the relationship between psychological stress and resilience among parents who have children diagnosed with ASD in Gaza Strip, which may be downplayed by the newest research open the door toward ASD, and it enhance our understanding of the level of psychological stress, and resilience on parents of children with ASD, which may help other researchers and decision makers in planning for better management tools and appropriate support for those parents.

#### 1.3 Goals

The aim of the study is to examine the level of psychological stress and resilience experienced by parents of children diagnosed with ASD.

#### 1.4 Objectives

To assess the level of psychological stress and resilience among parents rearing children with ASD in Gaza Strip.

To investigate the relationship between psychological stress and resilience among parents of children diagnosed with ASD in Gaza Strip.

To investigate the relationship between selected socio-demographic characteristics (age, gender, level of education, and occupation) of parents of children diagnosed with ASD and the level of psychological stress and resilience.

To provide recommendations and suggestions for parents of children with ASD to be resilient.



#### 1.5 Research questions

Once the subject relevance was determined, The primary research questions addressed in this study have been identified as the following. These questions will be assessed and reviewed for analysis in chapter four.

What is the level of psychological stress among parents of children with ASD in Gaza Strip?

What is the level of resilience among parents of children diagnosed with ASD in Gaza Strip?

What is the relationship between psychological stress and resilience among parents of children diagnosed with ASD in Gaza Strip?

What is the relationship between selected socio-demographic characteristics (age, gender, educational level, and occupation) of parents of children diagnosed with ASD and psychological stress?

What is the relationship between selected socio-demographic characteristics (age gender, educational level, and occupation) of parents of children diagnosed with ASD and resilience?

What are the recommendations and suggestions provided for parents of children with ASD to be resilient?

#### 1.6 Significance of the study

It is important to make explicit starting points (i.e. the continual need to respond to a child with ASD has particular kinds of impact on the parent and their capacity to engage with the wider world), initial assumptions and hypothesis to be tested. Parenting any child is usually a challenging as well as rewarding experience. Parenting a child with ASD is more stressful and may at times be experienced as 'too much', overwhelming the usual capacities to cope.

- (i) As a researcher is working in a community mental health field, and are designing and/or delivering mental health services for the autistic children and face their parents as they complains, she is also susceptible to the impacts of environmental stress. Exploring impacts is necessary to effective, ethical practice and policy.
- (ii) The specific features of the Gaza Strip context must be included:
- Lack of adequate investment throughout decades of political conflict as Gaza Strip under siege and occupation.



- Lack of awareness of ASD in Gaza Strip.
- The lag in service development compared to the other countries.

The Strip's population has continued to increase since that time, one of the main reasons being a total fertility rate of more than 4 children per woman at 2007-2008, and children represent 53.3% of total population in Gaza strip ,or more than half of the Palestinian society (Palestinian Central Bureau of Statistics, n.d.) and this reason motivate me to study this topic. Also this study will attract the attention of the decision makers in governmental and nongovernmental organizations (such as ministry of health and education) to the importance of giving special courses in this field for parents also to provide support for them to be more resilient, and to establish special centers for autistic children.

In the theoretical field as there is little if any research available in Gaza Strip about ASD and globally there is a few studies about psychological stress and no study about resilience among parents of children diagnosed with ASD, most studies deal with how to teach parents to deal with autistic children and other studies study family as a whole but not study the psychological stress or resilience level among parents in specific as the researcher know; so the researcher encouraged to study this topic and the researcher hope that such a study open the door for other researchers to study this topic from another perspective.

Also this study introduce a new scale for measuring resilience ,which may help other researchers in their studies. Also provide a comprehensive body of knowledge about ASD, psychological stress and resilience that may help others in their studies. This thesis may help parents in exploring their level of psychological stress and resilience; so guide them by providing some suggestions and recommendation on improving their level of resilience and thereby enhance their level of mental health.

From a practical standpoint the research should provide special care for parents of children diagnosed with ASD by helping them to be resilient in dealing with this experience. This research should provide an indication of the actual level of psychological stress and resilience can expect from parents.

In other words, the researcher hope that this study introduce a new visions and suggestions in institutions dealing with such issues in order to find out ways to help these parents and children to reach optimum level of mental health. This study is a journey from wonderment to awareness and recognition.

#### 1.7 Definition of terms

The following definitions have been provided to assist the reader with clarification, which divided into theoretical and operational definition.



#### 1.7.1 Autism Spectrum Disorders

#### Conceptual definition:

According to American Psychiatric Associations (1994), autism spectrum disorders considered as a group of disorders that include autistic disorder, PDD-NOS, and Asperger's Disorder, Childhood Disintegrative Disorder and Rett's Disorder. The core deficits associated with an ASD are impairment in social interaction and communication, as well as the presence of unusual behaviors and/ or interests .

Also ASD is commonly known as the ''pervasive developmental disorders (PDD) (Autism Spectrum Disorders, 2009), which identified in children around 3 years of age (WebMd, 2013), and with implications for education, social development, and community adjustment (Ruble & Gallagher, 2004).

#### Theoretical definition:

From the previous definition, the researcher derive theoretical definition of ASD as a group of conditions originating in childhood that involve serious impairment in several areas, including physical, behavioral, cognitive, social, and language development. Also known as PDD that include autistic disorder, PDD-NOS, and Asperger's Disorder, Childhood Disintegrative Disorder and Rett's Disorder. Although all children had been given a confirmed diagnosis of ASD by psychiatrist at Community Mental health Rehabilitation Center following diagnostic criteria for ASD according to DSM-IV. The researcher adopted this definition operationally in the study.

#### 1.7.2 Parents of children diagnosed with ASD

Parents of registered children with ASD in Community Mental health Rehabilitation Center, diagnosed by psychiatrist according to DSM-IV from both sexes and age range was between 3-12 years. And age range of parents was 17-76 from both sexes in home, this operational definition is adopted in this study.

#### 1.7.3 Psychological stress

Conceptually, psychological stress is refers to the bad influence that occur in the presence of a disabled child - and is characterized by negative properties - on the parent that raises undesirable mental, emotional or physical reactions that expose them for the tension , stress, anxiety, grief, and sorrow, and may suffer from some psychosomatic symptoms which exhausted their energies and prevent their ability to focus on their work (Shakhs & Sartawi, 1998, p. 6).

*Operationally*, it defined as the bad influence that occur in the presence of a child diagnosed with ASD- and is characterized by negative properties- on the parent that raises



undesirable mental, emotional or physical reactions that expose them for the tension, stress, anxiety, grief, and sorrow, and may suffer from some psychosomatic symptoms which exhausted their energies and prevent their ability to focus on their work And it will be measured operationally by the sum of grades that obtained from the parents on the psychological stress scale used in this study.

#### 1.7.4 Resilience

#### Conceptual definition:

While definitions of resilience will be explored in more details in the next chapter, a brief definition of the concept of resilience is necessary for an understanding of the focus of this research. The researchers varies in their definition for resilience, resilience has been broadly defined as a process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances". Also it described as a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development. According to Burrows (2007), resilience is a set of qualities or processes that enable a person to make use of internal and external resources, also it defined as "relative resistance to psychosocial risk experiences" (Rutter, 2000).

#### Operational definition:

Resilience defined operationally by the researcher as a qualities that parent possess which protect them against adversities at individual, family and community level, also it will be measured operationally by the sum of grades that obtained from the parents on the resilience scale used in this study.



## Chapter 2

Theoretical Framework



### **Chapter 2: Theoretical framework**

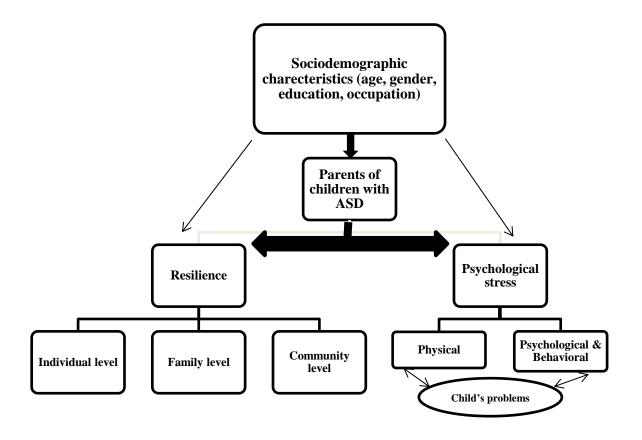
#### Overview

Based on the research questions and variables for the study, a discussion of theory is significant and crucial (Cooper & Schindler, 2005). In formulating a theoretical perspective for examining the extent of the relationship between the psychological stress and resilience among parents of children with ASD.

This section includes an exploration into the constructs of psychological stress and resilience. Definition of ASD will be investigated as well its diagnosis, assessment, the prevalence and theories will also be discussed, as well as co morbidity and management for their child.

In accordance to the psychological stress among parents the researcher will mention the definition of it, types of stress, theories of stress and interventions to relieve it. In this chapter the subject of resilience as it relates to parents of children with ASD will be discussed. Resilience will be defined in addition to contributions to it and factors associated with it. Models of resilience, family resilience theory, framework and key processes will be discussed. Although the view of emerging resilience in parents having a child with ASD is a theme not well researched, there is extensive literature on the topic of ASD, as well as the stress among parents having child diagnosed with ASD. This chapter will focus on understanding these concepts within the same structure as shown in the figure (2.1).





**Figure (2.1):** Conceptual model for the study variables (designed by the researcher)

#### 2.1 Autism Spectrum Disorder

#### 2.1.1 What is an Autism Spectrum Disorder?

Autism Spectrum Disorder is consider as one form of a disability that are spread among children. As the symptoms of ASD appear contradictory and interesting to the extent that makes the majority of the members of society are envisioned it without having any friction or direct contact with any autistic child.

There are many definitions for ASD which varies according to the place, time and specialization. The American Psychiatric Association's, DSM-IV-TR, defines ASD as a group of disorders that include autistic disorder, pervasive developmental disorder-not otherwise specified, and Asperger's Disorder, Childhood Disintegrative Disorder and Rett's Disorder. The core deficits associated with an ASD are impairment in social interaction and communication, as well as the presence of unusual behaviors and/or interests (APA, 2000).



According to Ruble and Gallagher (2004) autism—spectrum disorders—refer to a complex group of related disorders. Although sometimes not diagnosed until school age, it develop early in life and are life-long conditions with implications for education, social development, and community adjustment. The term "spectrum" is used because there is so much deviation in the types and level of severity of each symptom that it brings to mind a 'spectrum' of symptoms and level of function (Autism and PDD, n.d.). This group of disorders is also commonly known as the ''pervasive developmental disorders (Autism Spectrum Disorders, 2009).

ASD are identified in children around 3 years of age which a critical period in a child's development (WebMd, 2013). It is not a specific diagnosis, but an umbrella term under which specific diagnoses are defined. The disorders range from a severe form, called autism or autistic disorder, to a milder form, Asperger 's syndrome (Eagan, 2008).

In the line of the above definitions, the researcher define ASD as group of conditions originating in childhood that involve serious impairment in several areas, including physical, behavioral, cognitive, social, and language development. Also known as pervasive developmental disorders that include autistic disorder, PDD-NOS, and Asperger's Disorder, Childhood Disintegrative Disorder and Rett's Disorder.

#### 2.1.2 Diagnosis, assessment and recognition

In this section a discussion for diagnostic criteria for ASD will based on DSM-IV diagnostic criteria for ASD as a baseline for this thesis. Also the recognition and assessment of ASD will be discussed. Examination of both the diagnostic criteria and assessment instruments provides a concrete portrait of the complex characteristics that together make up ASD.

#### 2.1.2.1 Diagnostic criteria

DSM-IV classify ASD as a pervasive developmental disorder along with Rett's disorder, childhood disintegrative disorder, Asperger's disorder, and PDD-NOS. All of these five spectrum of disorders include a triad of restrictions in reciprocal social communication, reciprocal social interaction, and imagination/ behavior (APA, 1994). All diagnostic criteria for ASD will be shown in details in appendix (A).

#### 2.1.2.2 Recognition and assessment

Recognition in primary care by appropriate use of screening tests or instruments child health surveillance by two structured instruments. The Checklist for Autism in Toddlers (CHAT) was designed to identify 18 month old children at risk of ASD only then display the characteristics of ASD (Jordan, 1999), While the modified CHAT (M-CHAT) or



the Screening Tool for Autism in Two-Year-Olds (STAT) is designed to be used for 18-24 month old, and the Social Communication Questionnaire (SCQ) for children 4 years of age and older. But both not provide diagnosis for ASD (American Speech-Language-Hearing Association [asha], 2011). Also there is The Autism Behavioral Checklist (ABC) which is generally recognized as a sound tool for estimating the degree of autistic symptomatology in an individual (Gillberg, Nordin and Ehlers, 1996).

The first step for diagnosis of ASD is the screening of high risk groups by use of appropriate structured instrument. Initial assessment to explore the nature of the problem and the severity of the problem is helpful for diagnosis (Charman, et al., 2005).

The second step is specialist assessment by use of different professional groups which compose of ASD-specific history-taking instruments as the Autism Diagnostic Interview – revised R (ADI-R) (Lord, Rutter, and Couteur, 1994) and clinical observation by use The Childhood Autism Rating Scale (CARS) (Schopler, Reichler, Devellis and Daly, 1980) or The Autism Diagnostic Observation Schedule–Generic (ADOS-G), Third component of assessment is contextual and functional information (Scahill, 2005, pp. 19–25).

The third step in diagnosis is individual profiling by a comprehensive evaluation of children's speech, language and communication skills also to assess intellectual, neuropsychological and adaptive functioning. Example of this method is the Pre-linguistic Autism Diagnostic Observation Schedule (PL-ADOS) (DiLavore, Lord, and Rutter, 1995).

The last step is biomedical investigations by examination of physical status (with particular attention to neurological and dysmorphic features), karyotyping and Fragile X DNA analysis, examination of audio logical status and investigations to rule out recognized etiologies of ASD (Scottish Intercollegiate Guidelines Network [SIGN], 2007, pp. 5 - 14).

As explained above, assessment of ASD focus on the exploration of the nature and severity of the problem beside functional information and behavioral characteristics of ASD, beside physical status to rule out other confounding factors in the diagnosis. A number of assessment instruments were developed and administered to screen and diagnose ASD. Among these instruments the ADI-R and the ADOS-G are internationally considered as the 'gold standard' diagnostic protocol for ASD (McPartland & Klin, 2006). This section discussed recognition assessment and diagnosis for ASD. The following section concerns the prevalence of ASD.

#### 2.1.3 Prevalence:

It is one of the most controversial topics as the number of cases has risen dramatically, susceptible to bias due to various hypotheses and methods used and increasing awareness of the condition and changes in diagnostic practices (Matson and Kozlowski, 2011; Eastern Regional Health Authority, 2002).



One study showed that the reported prevalence of autistic cases significantly increased from 0.93 to 3.96 per 10,000 population in 2000-2009 (Chien et al., 2011). While, Adel Abd Allah ,2002 refer that there is no single study affirm prevalence of ASD in Arabic region or in Egypt , but Othman Fraj 1994 mention that the prevalence of ASD in Egypt 100000-200000 (Azab, 2011).

Another study of Al-Farsi (2010) investigated 798,913 child with age range 0-14 years in Oman at 2009 according to DSM-IV criteria by using case enumeration prevalence rate was 0.1 (0.1-0.2) (cited in Center for Disease Control and intervention [CDC], 2010).

Eapen, Mabrouk, Zoubeidi, and Yunis (2007) studied 694 three year olds in the United Arab Emirates. They reported 58 children per 10,000 with autistic features. The characteristics that make up ASD are found in approximately 60 per 10,000 individuals, predominantly in males rather than females (between 4 and 7 males per 1 female) (Hwang, 2008, p. 19).

New study done at city of King Abed Al Al-Aziz for Science and Techniques in Saudi Arabia indicate that the prevalence of autism approximately 1 of 180 child born by other mean that 120000 child with autism (cited in Salman, 2011).

In Palestine, there has been little work on ASD, while there is an increasing number of children who diagnosed with ASD according to the right to live society in Gaza Strip in which the prevalence of ASD is about 100 patient. And Mr. Trman indicate that the minimum number of people living with autism in the Palestinian territories of 6 thousand patients, explaining his attempt three years ago, to do a census of the number of autistic people but he have not been able to collect more than 200 name only .Also according to international percentage for ASD from American Association for Autism it approximately 8000-6000 child in Palestine (Autistic Patients, 2012). According to the psychiatric hospital the registered cases is approximately 200 cases as calculated by the researcher.

#### 2.1.4 Theories of ASD

Researchers have examined ASD from biological and psychological perspectives in their search for causes of the condition and their attempts to understand its nature. A number of biological factors have been associated with ASD, and three major psychological theories have attempted to explain its nature.

#### 2.1.4.1 Biological Factors

Overall, research has revealed that complexity of ASD and that there is no single, known cause for ASD (Wisconsin State Legislature, 2008), and most likely results from the interaction between environmental factors, such as infection, or exposure to teratogens at



during pregnancy, with a genetic predisposition and brain functioning (Bailey, Phillips and Rutter, 1996, pp. 89-126).

Recently ASD seemed to occur or to worsen shortly after vaccination particularly in relation to the Measles, Mumps, and Rubella vaccine possibly by induction of bowel abnormalities (Rutter, 2005, pp. 425–452). The risk of developing autism in subsequent siblings is 3-7%. For identical twins, the risk that the other twin will be affected is at least 60% and may be as high as 90%. While for non- identical twins the risk is similar to that of another sibling. Symptoms of ASD occur in children with other disorders that have known genetic etiologies including tuberous sclerosis (approximately 40% of cases, mostly those with moderate to severe mental retardation) and fragile X syndrome (2-5% of cases) (Eastern Regional Health Authority, 2002).

In addition, ASD are not the result of parenting style but, rather, are the results of changes in brain development that may occur before birth or shortly thereafter (Ruble & Gallagher, 2004).

Despite the ambiguity of the causes of ASD, the researchers the real causes that affect the brain and eventually lead to ASD. Causes include early developmental problems psychosocial and family factors. beside genetic, biological, clinical and behavioral factors.

#### 2.1.4.2 Psychological Theories

Psychological research has focused on the cognitive dysfunction associated with ASD. There are three major psychological theories that have attempted to explain these cognitive difficulties, Theory-of-Mind, executive function and central coherence theory (Jarrold, Butler, Cottington & Jimenez, 2000; National Research Council, 2003). Each theory will be discussed below in details.

#### **2.1.4.2.1 Theory of Mind:**

The most current literature is looking at the difficulties in social thinking, or Theory of Mind, as the core deficit in ASD. Theory of Mind refers to a human's ability to infer mental state in others and it is the ability to explain observable events based on desires or emotions, knowing that other people think differently from you, being able to take another person's perspective, being able to put other people's feelings before your own and thinking about the consequences of your actions before engaging in them. "Mindread" for other people, lead to more effective interactions with everyone we encounter (Stephens, 2003).

By comparing social thinking in neurotypical children with ASD children we can derive that at 10 months of age, infants show awareness and interest in other children who are crying also will orient toward the sounds and the baby itself (Wright et al., 1998). By 18 months of age, children will attempt to comfort a crying person by patting them or sharing



a toy with them. While children with ASD don't show that unless around 3 to 4 years. Around 2 years of age, children begin to use emotion words, such as "happy" and "sad," and desire words, such as "want" and "need." And by 3 years of age, children are able to attribute their own feelings and motives to others and they have a large vocabulary of emotion words. They begin to use words and understand concepts, such as "know, think and pretend." When they start preschool, most children have a good understanding of other's emotions, While in children with ASD it is significantly delayed. Often this skill must be taught to children with ASD, as it may not develop intuitively (Pitt, 2004).

At about the age of 4, children understand that the same world can be experienced in different ways by different people and they become interested in why people feel a certain way also they comment on other's motives and can infer some mental. Also they are able to explain events by attributing them to unobservable entities, such as beliefs or desires and can represent people's conflicting views. At this point, one of the most essential features of Theory of Mind develops; understanding false beliefs. Children are able to understand the absence of knowledge and the fact that people can think something that isn't true while this is generally delayed in ASD to elementary school age (Harris and Olson, 1992, pp. 244-267). By the age of 8, Theory of Mind becomes complex social thinking but in children with ASD social thinking cannot develop. As they have inability to take another person's feelings or their level of knowledge into account and cannot read a listener's level of interest well. This tends to lead to pedantic, preservative language, comments that seem insensitive and the inability to negotiate friendships by reading and responding to intentions. Also have difficulty understanding misunderstanding. Because they lack a representation for the various ways that statements and actions can be interpreted, they do not understand how their words or actions could have been misperceived. In addition, problems develop in determining other people's motivation, predicting other's behaviors and in explaining the motives for their own behaviors. (Stephens, 2003).

From the mentioned previously, the researcher conclude that the theory of mind is a group of tasks include discrimination between physical and mental events, recognizing things, recognizing false believes, preservation, recognizing others and determination of false. There is now a good understanding of the deficits in social thinking and Theory of Mind within individuals with ASD (Stephens, 2003).

#### 2.1.4.2.2 Theory of executive function

The second major cognitive theory that seeks to explain ASD is executive function. Executive dysfunction is a characteristic impairment of individuals with ASD. However whether such deficits are related to autism per se, or to associated intellectual disability is unclear. Significant impairments in the inhibition of prepotent responses (Stroop, Junior Hayling Test) and planning (Tower of London) were reported for children with ASD, with preserved performance for mental flexibility (Wisconsin Card Sorting Task) and



generativity (Verbal Fluency). Atypical age-related patterns of performance were reported on tasks tapping response inhibition and self-monitoring for children with ASD.

A multidimensional notion of executive functions is proposed, with difficulties in planning, the inhibition of prepotent responses and self-monitoring reflecting characteristic features of ASD that are independent of IQ and verbal ability, and relatively stable across the childhood years (Robinson, Goddard, & Dritschel, 2009, p. 362).

#### 2.1.4.2.3 Central coherence theory

Central coherence theory is the third major theory that attempts to account for the cognitive difficulties associated with ASD. Central coherence is a perceptual tendency to focus on the whole rather than the parts of visual or auditory stimuli (Shah and Frith, 1993). Central coherence theory (Frith, 1989) is addressed by exploring linguistic processing in normally intelligent adults with either autism or Asperger syndrome, to test whether local coherence is impaired.

According to Jolliffe and Baron-Cohen (1999) local coherence is the ability to make contextually meaningful connections between linguistic information in short-term or working memory. This theory suggest that individuals with an autism spectrum condition are impaired in achieving local coherence, and they have a preference not to strive for coherence unless instructed to do so, or unless they make a conscious decision to do so (p. 149). Weak central coherence, or a strong tendency to see parts rather than wholes, is a characteristic of information processing in the ASD population (Shah and Frith, 1983), who tend to process 'unconnected stimuli, outside a meaningful context, with remarkable efficiency' (Shah and Frith, 1993, p. 1352).

In a conclusions, Psychological theories were developed to account for the cognitive dysfunctions of ASD, either individually or together. While these theories have contributed to our understanding of ASD, because of the complexity of the disorder they have not produced answers that are universally applicable. Recently a number of researchers have suggested a mutual interdependency between these theories, and have attempted to find reciprocal relationships between them. A link between performance on Theory-of-Mind and central coherence tests was found from both groups (Hwang, 2008, p.19).

#### 2.1.5 Problems that May Accompany ASD

#### 2.1.5.1 Sensory problems

Many ASD children are painfully sensitive to certain sounds, textures, tastes, and smells. As, the brain seems unable to balance the senses appropriately. Some ASD children are oblivious to extreme cold or pain. An ASD child may fall and break an arm, yet never



cry. Another may bash his head against a wall and not wince, but a light touch may make the child scream with alarm (National Research Council, 2001).

#### 2.1.5.2 Mental retardation

Many children with ASD have some degree of mental impairment. When tested, some areas of ability may be normal, while others may be especially weak (National Institute of Mental Health [NIMH], 2008). There are about 70% of cases with autism have mental retardation and is more than four times more likely to occur in males than in females. The ratio is currently 4.3:1 (Bryson, Corrigan and Holmes, n.d., p. 379).

#### **2.1.5.3 Seizures**

One in four children with ASD develops seizures, often starting either in early childhood or adolescence. An EEG (electroencephalogram—recording of the electric currents developed in the brain by means of electrodes applied to the scalp) can help confirm the seizure's presence (Szatmari, Bryson, Boyle, Streiner and Duku, 2003, pp. 520–528).

#### 2.1.5.4 Fragile X syndrome

Fragile X syndrome is the most common inherited form of mental retardation and was so named because one part of the X chromosome has a defective piece that appears pinched and fragile when under a microscope. It affects about two to five percent of people with ASD and 10% to 15% of those with fragile X show autistic traits (NIMH, 2008).

#### 2.1.5.5 Tuberous Sclerosis

Tuberous Sclerosis is a rare genetic disorder that causes benign tumors to grow in the brain as well as in other vital organs. It has a consistently strong association with ASD. One to 4 percent of people with ASD also have tuberous sclerosis (Smalley, 1998, pp. 407–414).

No reliable statistics exist with regard to the prevalence of commonly co-occurring psychiatric disorders in the population of children with ASDs. Common disorders include: anxiety, depression, oppositional behavior, hyperactivity, poor attention, tic disorders, and compulsive behavior. Of these disorders, depression and anxiety are thought to be most common among persons with autism and other ASDs. Children with ASDs are commonly diagnosed with attention deficit/hyperactivity disorder (ADHD) (Bryson, et al., n.d., p. 13-14).



#### 2.1.6. Management

#### 2.1.6.1 Educational interventions

Educational interventions to develop child's independence and socialization through family help and support by use comprehensive programs and specific strategies, as applied behaviour analysis (ABA) which mean that applying interventions based on principles of learning to change behavior. Another strategy is a structured teaching which referred to organization of physical environment, structured work, visual schedule to accommodate patient's deficits and to improve their skills. Third strategy is speech and language therapy to help child develop useful speech by training him to enhance communication. Fourth, social skills instruction that help child in initiating social behavior, minimizing stereotyped behavior. Occupational and sensory integration therapy also therapy also provided to promote development of self-care skills (Lolo, Tahrawe, Sobeh, & Khodary, 2011).

#### 2.1.6.2 Medical management

Children with ASD have the same basic health care needs as normal children but they may have unique health care needs that relate to underlying etiologic conditions also to treat coexisting diagnosis.

Pharmacological interventions may be considered – after treatable medical causes and modifiable environment – if behavioral symptoms cause significant impairment in functioning (See table 2.1).



**Table (2.1)** Selected Potential Medication Options for Common Target Symptoms or Coexisting Diagnoses in Children With ASDs (American Academy of Pediatrics, 2008)

Target symptom cluster	<b>Potential coexisting</b>	Selected medication	
	diagnoses	considerations	
Repetitive behavior, behavioral rigidity, obsessive-compulsive symptoms	Obsessive-compulsive disorder, stereotypic movement disorder	Selective serotonin reuptake inhibitors (SSRI) (fluoxetine, fluvoxamine, citalopram,	
		escitalopram, paroxetine, sertraline)	
		Atypical antipsychotic agents (risperidone, aripiprazole, olanzapine, quetiapine,	
		ziprasidone) Valproic acid	
Hyperactivity, impulsivity, inattention	Attention- deficit/hyperactivity disorder	Stimulants (methylphenidate, dextroamphetamine, mixed amphetamine salts)	
		α <sub>2</sub> -agonists (clonidine, guanfacine)	
		Atomoxetine  Atypical antipsychotic agents (risperidone, aripiprazole, olanzapine, quetiapine, ziprasidone)	
Aggression, explosive outbursts, self- injury	Intermittent explosive disorder	Atypical antipsychotic agents α <sub>2</sub> -agonists (clonidine, guanfacine) Anticonvulsant mood stabilizers	
		SSRIs β-blockers (propranolol, nadolol, metoprolol, pindolol)	
Sleep dysfunction	Circadian rhythm sleep	Melatonin	
	disorder, insomnia-not	Ramelteon	
	otherwise specified	Antihistamines (diphenhydramine, hydroxyzine) α <sub>2</sub> -agonists	
		Mirtazapine	
Anxiety	Generalized anxiety disorder, anxiety disorder–not otherwise specified	SSRIs (fluoxetine, fluvoxamine, citalopram, escitalopram, paroxetine, sertraline)  Buspirone	
		Mirtazapine	
Depressive phenotype (marked change from baseline including symptoms such as social withdrawal, irritability, sadness or crying spells, decreased energy, anorexia, weight loss, sleep dysfunction)	Major depressive disorder, depressive disorder–not otherwise specified	SSRIs (fluoxetine, fluvoxamine, citalopram, escitalopram, paroxetine, sertraline)  Mirtazapine	
Bipolar phenotype (behavioral cycling with rages and euphoria, decreased need for sleep, manic-like hyperactivity, irritability, aggression, self-injury, sexual behaviors)	Bipolar I disorder, bipolar disorder–not otherwise specified	Anticonvulsant mood stabilizers (carbamazepine, gabapentin, lamotrigine, oxcarbazepine, topiramate, valproic acid)	



## 1.2.6.3 Family support:

An important aspect of management of ASD are supporting the family and ensuring its emotional and physical health by educating parents about ASD; providing anticipatory guidance; training and involving them as cotherapists; assisting them in obtaining access to resources; providing emotional support through traditional strategies such as empathetic listening and talking through problems; and assisting them in advocating for their child's or sibling's needs (Myers, 2007, p. 1163-1175).

In some cases, referral of parents for counseling or other appropriate mental health services may be required. The need for support is longitudinal, although the specific needs may vary throughout the family life cycle (Myers, 2007, p. 1163-1175).

One of the chief strategies for helping families raise children with ASD is helping to provide them with access to needed ongoing supports and additional services during critical periods and/or crises. Natural supports include spouses, extended family members, neighbors, religious institutions, and friends who can help with caregiving and who can provide psychological and emotional support. Informal supports include social networks of other families of children with ASD and community agencies that provide training, respite, social events, and recreational activities. Formal supports include publicly funded, state-administrated programs such as early intervention, special education, vocational and residential/living services, respite services, Medicaid, in-home and community-based waiver services, Supplemental Security Income benefits, and other financial subsidies (Myers, 2007, p. 1163-1175).

The breadth and depth of services vary, even within the same state or region. Few services exist in many rural areas, and public programs may have long waiting lists. Sibling support groups offer the opportunity to learn important information and skills while sharing experiences and connecting with other siblings of children with ASDs. Although the research on support groups for siblings of children with disabilities is difficult to interpret because of study-design problems and inconsistent outcome effects on sibling adjustment, these groups generally have been evaluated positively by participating siblings and parents, and there is some evidence of beneficial effects for siblings of children with ASDs (Myers, 2007, p. 1163-1175).

In summary, comprehensive approach of management for ASD is needed as it must present overlapping and integration between educational, medical interventions beside administration of some medications and family support which is very important to complete the cycle of management.

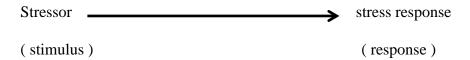


# 2.2 Psychological stress

#### 2.2.1 Definition of stress

Before discussing psychological stress, it is important to take a moment to define stress. Conceptualization of stress and stress response have varied in form and context throughout the centuries. Stress represented a deviation from some norm or steady state (Lazarus, 1993, p. 4).

Stress is a response, or reaction, to some stimulus (Everly & Lating, 2002, p. 9). According to Sapolsky (2004), what we typically refer to as "stress" actually consists of two components: stressors and the stress response. Stressor is an event, experience, agent, condition, or other stimulus that causes stress to an organism (stress, n.d.). It can be either physical or psychological aspects of the external environment, or internal factors such as infection and anticipatory thoughts, such as worry (Arthur, 2007, p. 59). Stressors events, fall in one of the two categories includes biogenic stressors and psychosocial stressors which either real or imagined environmental events that "set the stage" for the elicitation of the stress response (Everly & Lating, 2002, p. 25). The stress response represents a physiologic mechanism of mediation, that is, a medium to bring about a result or effect (Everly & Lating, 2002, p. 9), also it is the change that occurs in the body to put it back in balance and reestablish homeostasis (Arthur, 2007, p. 59). Sapolsky (2004) concurs, stating that "with sufficient activation...the stress response can become more damaging than the stressor itself, especially when the stress is purely psychological (p.13). Whatever the terms used, however, in stress analysis there is almost always a stimulus- that is, an external event or stressor – and a response or reaction (Lazarus, 1999, p.32), see figure (2. 2) for further clarification.



**Figure (2.2):** A basic stress response model (Everly & Lating, 2002, p. 9)

# 2.2.2 Types of stress:

According to Hans Selye (1974) he drew a health-centered distinction between two kinds of stress. Distress is the destructive type, illustrated by anger and aggression, and it is said to damage health. Eustress is the constructive type, illustrated by emotions associated with empathic concerns for others and positive striving that would benefit the community, and it is said to be compatible with or protective of good health (cited in Lazarus, 1999, p. 32).



Stress can be further explicated in terms of its severity and duration, reflected in the variety of ways in which stress is measured (Folkman, 2011, p. 17). Moreover, stress can be either acute (short term) or chronic (long term) (Arthur, 2007, p. 60).

Chronic stress is generally defined as "an ongoing problem located in the structure of the social environment", while trauma is refers to severe stressors that involve the threat of or witnessing deaths or severe bodily injury, occur with a relatively short period of time (Folkman, 2011, pp.17-18). A related construct is daily stressors, which may be minor and of relatively short duration, but may also reflect chronic problems, such as ongoing family problems (Conger, & Conger, 2002)

In other hand, the type of stressors varies by age and clearly reflects situational demands and life stage. However, the incidence of life events in general may not change very much across the life span, except perhaps for a decrease in very late life (Folkman, 2011, p. 18).

# **2.2.3 Definition of psychological stress:**

Psychological stress, refers to a particular relationship between the person and the environment that is appraised by the person as that demands (or conflict among them) taxing or exceeding his or her resources (internal and external) and endangering his or her well-being (Lazarus and Folkman 1984, p. 19; Lazarus, 1998, p. 198). While according to Stone, Mezzacappa, Donatone,& Gonder (1999), view psychological stress as the experience of negative events or the perceptions of distress and negative affect that are associated with the inability to cope with them (p. 18).

In other hand, Samaduny (1993) refer that psychological stress is the psychological state that reflected in the interior (physical) and behavioral reactions, and emerging from the threat, which realize by the individual when exposed to stressful situations or events in the surrounding environment (p.45).

While in the view of Gabriel (1995), psychological stress defined as the emotional state experienced by the individual, resulting from events, and matters include threat to his sense of good life, and makes him feel anxious about how to confront it (p. 1471).

There is no doubt that the presence of a disabled child - may including undesirable characteristics - is a constant source of stress, as his care requires a great effort from the parents that hard for them to afford, so they exposed to negative feelings, and family problems associated with the stress; so psychological stress refers to the bad influence that it occur in the presence of a disabled child - and is characterized by negative properties – on the parent that raises undesirable mental, emotional or physical reactions that expose them for the tension and stress, anxiety, grief, and sorrow, and may suffer from some psychosomatic symptoms which exhausted their energies and prevent their ability to focus on their work (Shakhs and Sartawi 1998, pp. 6-16).

psychological stress means the degree to which obtained by the parents of ASD children on a scale of Psychological stress of Abd Al-Aziz, Al-Shakhs, Zidane Al-Sartawi (1998) after some modification was done which described in details in chapter 3.



## 2.2.4 Stress Warning Signs and Symptoms

The following table lists some of the common warning signs and symptoms of stress. The signs and symptoms of stress can also be caused by other psychological and medical problems; so a full evaluation must be done to prevent misinterpretations for these symptoms, its indicated in the following table (2.2).

These signs and symptoms may be occur in parents of children with ASD as a result of stress emerged by autistic child problems, these problems described in details in appendix (A).



Table (2.2): Stress Warning Signs and Symptoms (HelpGuide, 2007).

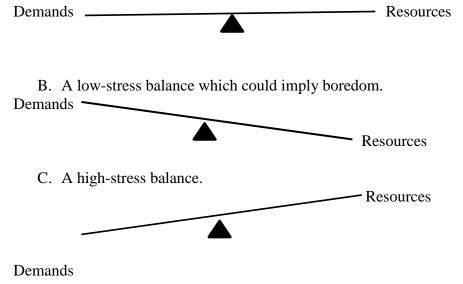
Cognitive Symptoms	<b>Emotional Symptoms</b>		
Memory problems	Moodiness		
• Indecisiveness	Agitation		
Inability to concentrate	• Restlessness		
• Trouble thinking clearly	Short temper		
• Poor judgment	Irritability, impatience		
• Seeing only the negative	• Inability to relax		
Anxious or racing thoughts	Feeling tense and "on edge"		
Constant worrying	Feeling overwhelmed		
• Loss of objectivity	Sense of loneliness and isolation		
• Fearful anticipation	Depression or general unhappiness		
Dl	Behavioral Symptoms		
Physical Symptoms	Behavioral Symptoms		
Headaches or backaches	• Eating more or less		
Headaches or backaches	Eating more or less		
<ul><li> Headaches or backaches</li><li> Muscle tension and stiff ness</li></ul>	<ul><li>Eating more or less</li><li>Sleeping too much or too little</li></ul>		
<ul><li> Headaches or backaches</li><li> Muscle tension and stiff ness</li><li> Diarrhea or constipation</li></ul>	<ul> <li>Eating more or less</li> <li>Sleeping too much or too little</li> <li>Isolating yourself from others</li> <li>Procrastination, neglecting responsibilities</li> <li>Using alcohol, cigarettes, or drugs to</li> </ul>		
<ul> <li>Headaches or backaches</li> <li>Muscle tension and stiff ness</li> <li>Diarrhea or constipation</li> <li>Nausea, dizziness</li> </ul>	<ul> <li>Eating more or less</li> <li>Sleeping too much or too little</li> <li>Isolating yourself from others</li> <li>Procrastination, neglecting responsibilities</li> <li>Using alcohol, cigarettes, or drugs to relax</li> </ul>		
<ul> <li>Headaches or backaches</li> <li>Muscle tension and stiff ness</li> <li>Diarrhea or constipation</li> <li>Nausea, dizziness</li> <li>Insomnia</li> </ul>	<ul> <li>Eating more or less</li> <li>Sleeping too much or too little</li> <li>Isolating yourself from others</li> <li>Procrastination, neglecting responsibilities</li> <li>Using alcohol, cigarettes, or drugs to relax</li> <li>Nervous habits (e.g., nail biting, pacing)</li> </ul>		
<ul> <li>Headaches or backaches</li> <li>Muscle tension and stiff ness</li> <li>Diarrhea or constipation</li> <li>Nausea, dizziness</li> <li>Insomnia</li> <li>Chest pain, rapid heartbeat</li> </ul>	<ul> <li>Eating more or less</li> <li>Sleeping too much or too little</li> <li>Isolating yourself from others</li> <li>Procrastination, neglecting responsibilities</li> <li>Using alcohol, cigarettes, or drugs to relax</li> <li>Nervous habits (e.g., nail biting, pacing)</li> <li>Teeth grinding or jaw clenching</li> </ul>		
<ul> <li>Headaches or backaches</li> <li>Muscle tension and stiff ness</li> <li>Diarrhea or constipation</li> <li>Nausea, dizziness</li> <li>Insomnia</li> <li>Chest pain, rapid heartbeat</li> <li>Weight gain or loss</li> </ul>	<ul> <li>Eating more or less</li> <li>Sleeping too much or too little</li> <li>Isolating yourself from others</li> <li>Procrastination, neglecting responsibilities</li> <li>Using alcohol, cigarettes, or drugs to relax</li> <li>Nervous habits (e.g., nail biting, pacing)</li> </ul>		



# 2.2.5 Relational approach to stress:

A good way of thinking about stressful person-environment relationship is to examine the relative balance of forces between the environmental demands and the person's psychological resources for dealing with them. If the environmental load substantially exceeds the person's resources, a stressful relationship exists, see figure (2.3).

A. A good balance between demands and resources implies modest amounts of stress or no stress.



Figure(2.3) Seesaw analogy (Lazarus, 1999, p.59)

In the psychological stress, the comparison is between the power of the environmental demands to harm, threaten, or challenge, and the psychological resources of the person to manage these demands- in effect, depending on personal vulnerability or resistance to their stressful consequences (Lazarus, 1999, pp. 57-58).

# 2.2.6 Psychological Theories of Stress

Because stress is one of the most interesting and mysterious subjects we have since the beginning of time, its study is not only limited to what happens to the body during a stressful situation, but also to what occurs in the psyche of an individual. In this thesis, the different psychological theories of stress, which include Selye's and Lazarus Theory, will be discussed below.



#### 2.2.6.1 Systemic Stress: Selye's Theory

The popularity of the stress concept in science and mass media stems largely from the work of the endocrinologist Hans Selye. Selye (1976, p. 64) defines this stress as `a state manifested by a syndrome which consists of all the nonspecifically induced changes in a biologic system.'

This stereotypical response pattern, called the `General Adaptation Syndrome', proceeds in three stages (a) The *alarm reaction* comprises an initial shock phase and a subsequent countershock phase. The shock phase exhibits autonomic excitability, an increased adrenaline discharge, and gastro-intestinal ulcerations. The countershock phase marks the initial operation of defensive processes and is characterized by increased adrenocortical activity. (b) If noxious stimulation continues, the organism enters the *stage of resistance*. In this stage, the symptoms of the alarm reaction disappear, which seemingly indicates the organism's adaptation to the stressor. However, while resistance to the noxious stimulation increases, resistance to other kinds of stressors decreases at the same time. (c)If the aversive stimulation persists, resistance gives way to the *stage of exhaustion*. The organism's capability of adapting to the stressor is exhausted, the symptoms of stage (a) reappear, but resistance is no longer possible. Irreversible tissue damages appear, and, if the stimulation persists, the organism dies Selye, however, fails to specify those mechanisms that may explain the cognitive transformation of `objective' noxious events into the subjective experience of being distressed (cited in Krohne, 2002).

In addition, Selye does not take into account coping mechanisms as important mediators of the stress—outcome relationship. Both topics are central to psychological stress theories elaborated by Lazarus as described in the following section.

#### 2.2.6.2 The Lazarus Theory

Two critical concepts are central to any psychological stress theory: *Cognitive appraisal*, which refers to an evaluative process that determines why and to what extent a particular transactions between the person and environment is stressful (Lazarus and Folkman,1984, p. 19), and *coping*, i.e., constantly changing cognitive and behavioral efforts to manage specific external and internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus & Folkman, 1984, p. 141).

Psychological stress refers to a relationship with the environment that the person appraises as significant for his or her well-being and in which the demands tax or exceed available coping resources' (Lazarus & Folkman 1986, p. 63). This relationship mediated through cognitive appraisal and coping.

Before we proceed further, let us examine the four substantive environmental variables that influence stress and emotion- namely, demands, constraints, opportunities,



and culture- and the person values that interact with them, which influence our reactions via the process of appraisal (Lazarus, 1999, p. 61). These demands, are among the most obvious sources of psychological stress. One of demands to take care of our children, to be concerned with the well-being of our families. (Lazarus, 1999, p. 62). While ,constraints is now based on personal values or beliefs, and may stem from incorrect inferences about the way things are. Opportunity arises from fortunate timing but could also depend on the wisdom to recognize the opportunity (Lazarus, 1999, p. 63).

The concept of cognitive appraisal, can be seen as the process of categorizing an encounter and its significance to one's well-being (Mitchell, 2004, p. 18). Cognitive appraisal refers to the process of cognitive interpretation, that is, the meanings that we assign to the world as it unfolds before us (Everly & Lating, 2002, p. 26). theory distinguishes three forms of appraisal, primary, secondary appraisal and reappraisal. These forms rely on different sources of information. According to Lazarus and Folkman 1984, they have identified three kinds of cognitive appraisal: primary, secondary, and reappraisal. Primary appraisal consists of the judgment that an encounter is irrelevant, benign-positive, or stressful (p. 53). Benign-positive appraisal results in a positive toned emotional reactions such as joy, love, relief, and so on. While a stressful appraisal produces negatively toned emotions such as anxiety, fear, anger, guilt, etc. (Lazarus 1998, p. 198). Stressful appraisal can take three forms :harm /loss, threat, and challenge (Lazarus & Folkman 1984, p. 53), which considered as types of psychological stress. Harm/ loss deals with damage or loss that has already taken place. Threat has to do with harm or loss that has not yet occurred, but is possible or likely in near feature. Challenge consists of the possibility that, although difficulties stand in the way of gain, they can be overcome with verve, persistence, and self-confidence. Each is coped with differently, and has different psychophysiological and performance outcomes (Lazarus 1999, pp. 32-33). Threat and challenge are not poles of a single continuum; they can occur simultaneously and must be considered as separate, often related, constructs (Lazarus and Folkman 1984, p. 53).

Primary appraisal involves the possibility of feedback from changes in the person – environment relationship and from reflection as the transaction proceeds, thus potentially allowing for changes in the quality and intensity of emotion (Lazarus 1998, p. 198). Secondary appraisal is a judgment concerning what might and can be done. It includes an evaluation about whether a given coping option will accomplish what is supposed to, that one can apply a particular strategy or set of strategies effectively, and evaluation of the consequences of using a particular strategy in the context of other internal and/ or external demands and constraints.

Finally, the reappraisal refers to a changed appraisal based on new information from the environment and/ or the person. A reappraisal differs from appraisal only in that it follow an earlier appraisal. Sometimes reappraisal are the result of cognitive coping efforts; these are called defensive reappraisals and are difficult to distinguish from reappraisals based on new information.

The concept of vulnerability is closely related to cognitive appraisal, vulnerability is frequently conceptualized in terms of coping resources; a vulnerable person is one whose coping resources are deficient. Psychological vulnerability, however, is determined also by



the significance of the commitments that are engaged or endangered in any encounter. As in our definition of stress, this view of vulnerability to stress is relational.

Cognitive appraisal processes are not necessarily conscious, nor are the agendas that shape appraisal always easily accessible. Cognitive appraisal may also be shaped by agendas that are below person's awareness (Lazarus & Folkman 1984, pp. 53-54). Two person characteristics that are important determinants of appraisal: commitment and beliefs. Commitment express what is important to the person, what has meaning for him or her. They determine what is at stake in specific stressful encounter. Yet commitments are clearly important determinants of psychological stress (Lazarus & Folkman 1984, p. 55). Moreover, only be knowing a person's pattern of commitments can areas of vulnerability be identified. This last point has particular significance for predicting the circumstances under which a person will feel harm, threatened, or challenged. Beliefs are personally formed or culturally shared cognitive configurations (Wrubel et al., 1981 cited in Lazarus & Folkman 1984, p. 63).

Coping is considered as a set of strategies that are available to be implemented to match specific situations. Coping may take one of two general forms: *problem-focused* or *emotion-focused* (Mitchell, 2004, p. 18).

Lazarus (1998) can attempt to change the person—environment realities behind negative emotions or stress (*problem-focused coping*). Also may attempts to change either what is attended to or how it is appraised (*emotion-focused coping*) (p. 361). These strategies focused on internal emotional states, also it is most likely to occur when an appraisal has made that nothing can be done to modify the harmful, threatening ,or challenging environmental conditions. Contrarily, *problem-focused coping* functions to alter the stressor by direct action. An individual's cognitive appraisal of stressful circumstance plays an influential role in coping selection (Mitchell, 2004, pp. 18-19).

## 2.2.5 Psychological stress's management:

This section is a guidance to help parents manage their own stress related to having child diagnosed of an autism spectrum disorder. There are a few studies about stress management for parents of children with ASD, but there studies deal with stress management for all people in general. There is a pilot study to evaluate the effectiveness and usability of Acceptance and Commitment Therapy (ACT), in which results suggest the possible effectiveness of a brief ACT intervention for parents of children with ASD but caution must be used due to the small sample size and lack of a control condition. Future research should implement an ACT workshop in conjunction with an effective child-focused intervention (Melissa, 2010).

Every parent has to find a way to manage stress ,one strategy is active avoidance, in which parents avoid stressful situations, blame themselves, and express negative feelings. Other parents are able to choose problem-focused, positive coping, allowing them to strategize, seek advice and support, and come to terms with their current situation.



Because active avoidance coping, such as self-blame, is associated with more negative emotions and does not relieve stress, finding ways to empower yourself and learn more about the disorder may be one of the most effective solutions to managing stress (Roginsky, 2008, pp. 6-13).

According to psychological research, most parents try to cope by anticipating the difficulties likely to arise, and plan a response to use if such a situation occurred. Other common strategies many parents tend to use are keeping their children busy and actively participating in the services their children received. Though planning is generally helpful, parents often reported that they could not make long-term plans and think too far into the future (Roginsky, 2008, pp. 6-13).

Studies show that mothers are more likely than fathers to utilize social supports, including speaking with friends and family and seeking out parents in similar situations. In general, three strategies for managing parenting stress were described as effective.

The first one is using a positive personal reframing of thoughts about the circumstances, such as accepting the child, finding a way to succeed, and discovering a sense of purpose in the event. Then, finding ways to maintain a balance with personal roles and responsibilities, such as nurturing relationships with spouse, family members, and friends, as well as taken on the roles of teachers and advocates in addition to parents to teach others about their child and the disability. The third strategy includes meeting the needs of the child and the family by locating and utilizing resources, which includes gathering information, collaborating with professionals, and connecting with other parents (Roginsky, 2008, pp. 6-13).

For some, an effective way to cope is to disconnect from their reality, in a way. One method of stress reduction that has been supported by research for various people and problems is meditation. Officially, meditation refers to "techniques that focus the mind and promote a state of calmness so that the mind and body can be brought into greater harmony to facilitate health and healing."

Often, psychologists and other professionals utilize progressive muscle relaxation and guided imagery to help patients cope with their stress, fears, and anxieties. Guided imagery relaxation is a mind-body intervention meant to relieve stress and promote a sense of tranquility and peace. By involving all of the senses, the mind relaxes the body through a process of inner communication. During guided imagery, people can only relax and are also given an opportunity to process stressful situations and practice effective responses. This allows you to gain experience with future situations prior to a real event, and will allow the person to behave in a way that will be most adaptive to the situation. In addition to seeking out professionals, parents can also turn to each other to cope with the challenges of raising an autistic child. Parent support groups are a means of providing social support within the framework of the educational or community setting that the parents are already familiar. Support groups help parents by giving them a place to discuss their difficulties, to share coping strategies and accomplishments, and to meet other parents in a similar



situation. Overall, parenting groups have contributed to psychological sense of community, providing emotional support and information, and giving the opportunity to help others (Roginsky, 2008, pp. 6-13).

In other hand, psychologists have implemented some interventions for children by focusing specifically and solely on the parents. Theses interventions help the parent in stress reduction through feeling that they have an effective role and knowledgeable in treating their child. One of interventions is behavioral parent training interventions had several positive effects, such as improving the children's problem behaviors, increasing parenting skills, and promoting a secure parent-child attachment. By feeling more effective and in control, parents have been able to strengthen the bond with their child and decrease the appearance of unwanted behaviors. Also, cognitive behavioral training was also used to teach parents coping skills directly related to psychological distress. Cognitive behavioral treatment teaches about the connections between thoughts and emotions, and how changing thinking patterns can lead to changes in mood and feelings.

Also, parents become quite knowledgeable as part of caring for their child, and often can contribute to their professional's knowledge by sharing their information about the disorder and newest developments with professionals (Roginsky, 2008, pp. 6-13).

Parents often feel lost in controlling their children's behaviors in the home and outside. one of the best courses of treatment at this time is Applied Behavior Analysis which is a scientific approach to understanding behavior, the goal of which is to change socially important behaviors in meaningful ways. For each child, the parent helps to identify which skills need to be increased, and problem behaviors need to be decreased, and they are defined in observable terms and measured carefully by direct observation.

With autism awareness increasingly in the media and in popular culture may be helpful for parents in manage their own stress, cope with their child's diagnosis, and plan for the best possible future (Roginsky, 2008, pp. 6-13).

# 2.2.7 Stress and Ways Of Coping In Qurran

The civilization and advancement in modern technology enhancing the stress among the individuals. Psychology plays till now a modest role in minimizing such stressors, Although there are various researchers, approaches and theories, all of it neglected the Moral-Spiritual aspect in the human being, It focuses on superficial issues in the individual's life (Tahrawi, 2008).

According to Qurran, " the quotation of Qurran includer everything" - Annam38. } { عَا فَرَطْنَا فِي الكِتَابِ مِن شَيْءٍ .This study focused on some life stressors, Which were mentioned in Qurran like alienation, fear, from testing, death phobia, anxiety, concerning income, and having children. The research found that Qurran focuses on life's stressors, and the issue of



previous prevention which "El Emaan" is the main resource of it, in muslem life which enhance his ability to adapt, also Islam urge us to go to specialist asking helps (Tahrawi, 2008).

#### 2.3 Resilience

## 2.3.1 History of research on resilience:

To understand how resilience is conceptualized today, it is important to see how it has developed over time in the researches. Also by address major trends in conceptual thoughts in the resilience authors over time.

History of resilience vary according to many perspectives of the authors which include biological model, developmental psychology and ecological model.

In a review of literature, Mildred Scoville 1942 in her study about the children who have violence, studied the needs of children in war –torn Great Britain. She observed the "amazing resiliency of children to situation dangerous to life" (pp. 361).

Come from the developmental model, the study of Rutter (1966), about how parental schizophrenia affected their children, he found a small number of children who evaded the expected negative effects.

According to the medical model, Gramezy1971 though his observations in the 1950s with schizophrenia, began writing about "invulnerable children" who do not succumb to the high –risk environment to which they have been exposed.

In 1974 a, Anthony introduced the syndrome of psychologically vulnerable children who as infants were "perturbed by the unfamiliar and tended to have tempestuous" reactions to strangers (p.3). Anthony 1974 b used the term invulnerable "for thriving children who were as risk due to parental psychiatric disorders.

Valliant (1977) found a marked positive association between mature adaptive mechanisms and success as indicated by adjustment in overall, career, social and psychological categories. Nonetheless, this study helped to shift the focus from pathology to positive adaptation. Rutter 1985 describes three problem with invulnerability notion. He states, "the resistance to stress is relative, not absolute; the bases of resistance are both environmental and constitutional; the degree of resistance is not a fixed quality" (p. 599). Anthony and Cohler (1987), pulled together emerging thinkers in the book The Invulnerable Child. It was the "invulnerable "that were resilient as they appeared to defy the odds (Anthony, 1987).



According to the study of Felsman and Vaillant (1987), they found that that factors such as childhood coping and education strongly predicted health and mental health in old age. Also they show concept of invulnerability as a static trait that leaves no room for change.

Therefore, theory of attachment is one of the earliest writings have discussed resilience. Attachment theory and resilience theory have developed as two separate bodies of knowledge with their own genealogy (Skehill, 2001).

In other hand, concept of coping used alternatively with concept of resilience. Resilience results from encountering stress at a time and in a way with which the individual can cope, leading to the fostering of appropriate coping mechanisms that are effective in future situations (Rutter, 1996). Jew, Green and Kroger (1999) have suggested that perhaps it is the successful coping with stressful situations that fosters a sense of mastery and appropriate responsibility, leading to increased mental health and the belief in the individual's ability to cope with future stressors. Exposure to, and successfully coping with, a challenging and potentially stressful experience is hypothesized to increase the individual's level of resilience and subsequent mental health due to the mobilization of productive coping styles (Skehill, 2001, p. 4-5).

### 2.3.2 Defining resilience

According to many developmental psychopathologists, who constitute the major group conducting resilience research: "Resilience in an individual refers to successful adaptation despite risk and adversity" (Masten, 1994, p. 3). More specifically, resilience has been broadly defined as a process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (Masten, Best, & Gramezy, 1990, p. 254). They delineated three different types of resilience: "(1) good outcomes despite high risk status, (2) sustained competence under threat, and (3) recovery from trauma" (Keller, 2003, p. 426).

Resilience has been defined as "the ability to recover quickly from illness, change, or misfortune; buoyancy", and "the property of a material that enables it to resume its original shape or position after being bent, stretched, or compressed; elasticity" (Resilience, 2011).

According to Rosie Burrows (2007), resilience is a set of qualities or processes that enable a person to make use of internal and external resources, also it defined as "relative resistance to psychosocial risk experiences" (Rutter ,2000). While Barbara Collins (2010) reviewed the literature on resilience, and described it as a construct, not a personality trait or an attribute (p. 6), it "surfaces in the face of hardship" (Hawley, 2000).

Hence, the importance of previous stressful experiences is reflected in the notion that resilience does not usually result from positive health characteristics, generally good



experiences, or the avoidance of risk experiences. Consequently, resilience can be seen as resulting from exposure to stress and not through its avoidance. Resilience results from encountering stress at a time and in a way with which the individual can cope, leading to the fostering of appropriate coping mechanisms that are effective in future situations (Rutter, 1996).

In other hand, adult resilience defined as the ability of adults in otherwise normal circumstances who are exposed to an isolated and potentially highly disruptive event such as the death of a close relation or a violent or life-threatening situation to maintain relatively stable, healthy levels of psychological and physical functioning . . . as well as the capacity for generative experiences and positive emotions (Galea, Bucciarelli and Vlahov, 2007, pp. 20-21).

The present research proposes defining resilience as incorporation of pervious definitions and derived that the resilience is a process of, capacity for successful adaptation in face of internal and external resources and positive outcome in despite adversity.

#### 2.3.3 Model of resilience

The indirect model of resilience, described by Masten (2001) will be used as a framework for the present investigation. There are three important components of this model: risk, protective factors, and outcomes, see figure (2.4). It is important to distinguish between the pervious component in order to understand resilience.

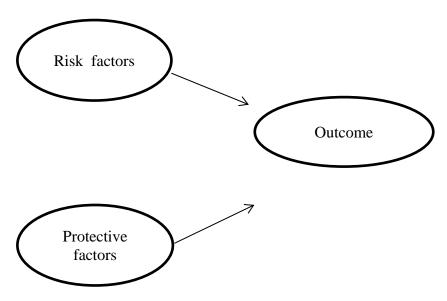


Figure (2.4): Generic model of resilience (Masten, 2001)



In the resilience research there is the movement from labeling risk and protective factors to risk and protective processes .This change has occurred because the created lists of factors only provide a name for the feature (e.g., social support ) whereas processes provide more descriptive explanation of how the factor functions (Luthar, 1999).

The first component of resilience's model is risk, which defined by Masten (2001) as events or factors that are large enough to have the potential to derail normal development' (p. 228). Also he referred to risk factors as threats that have the potential to psychologically or developmentally harm an individual. If, in the presence of this threat, an individual achieves desired outcomes or avoids negative outcomes the person is considered resilient (Masten, 2001).

One definition of risk factors was furnished by Masten and Coatsworth (1995): "predictors of problems in adaptation judged either in term of symptoms or competence" (p.737). It is any kind of adversity that is like to increase the likelihood of a negative outcome (Salahuddin, 2008). One way to think about risk factors is in terms of potential external and internal barriers to development and learning. Research indicates that the primary causes for most youngsters' learning, behavior, and emotional problems are external factors (related to neighborhood, family, school, and/ or peers). For a few, problems stem from individual disorders and differences. One facet of any emphasis on addressing barriers is guided by the research on risk factors (Center for Mental Health in Schools at UCLA, 2008, p. 1)

In short, the risk factors can be defined as any factor that increases the chance of an undesirable outcome affecting a person or it a condition that carries high odds for maladjustment which include job loss, poverty, divorce, death, chronic illness and infertility.

The second component of resilience's model is protective factors, which defined as assets that buffer against the impact of adversity by mediating or moderating the relationship between the adversity and outcome (Salahuddin, 2008), or "assets that individual actively use to cope with, adapt to, or overcome vulnerability or risks... (that) reside within individuals, families, other social groups and communities" (Gilgun,1996,p.3).

Protective factors described as factors that reduce the risk of the onset of physical and mental disorders associated with adverse conditions and stress. Such factors as a secure childhood, absence of neglect and abuse etc. seem to underlie peoples resilience to life events (Psychology wiki, n.d.). Also Rutter (1985) refer to protective factors as "influences that modify, ameliorate, or alter a person's response to some environmental hazards that predisposes to a maladaptive outcome... (and) simply adding together risk factors and subtracting protective factors is "inadequate to account for the phenomenon of resilience" (p. 600).



All the above-mentioned definitions about protective factors can be summarized as the circumstances that moderate or interact with the effects of risk or negative outcome (buffering fashion) or reduce it (compensatory fashion).

The third component of resilience's model is outcome, successful outcome has been equated with "behavioral adaptation ,usually defined in terms of internal states of well-being or effective functioning in the environment or both" (Masten, Best, & Gramezy,1990, p. 426).

In other hand, vulnerability factors can be defined as a feature that renders a person more susceptible to a threat or negative outcomes. It described as "enhancing" or intensifying ones reaction to risk, such that a person becomes more "susceptible" to negative outcomes and it help to identify causal mechanisms which include economic, social, environmental and psychological kinds of vulnerabilities (NCH, 2007; Kalil, 2003; Fleming & Ledogar, 2008).

# 2.3.4 Factors contributing to resilience

Despite their suggested significance, only few studies have investigated a number of factors contributing to resilience in families as general, and no studies had explored contributing factors to resilience in parents of ASD's children.

Risk and protective processes can operate at the individual, family and community level (Alvord & Grados, 2005; Mandleco & Peery, 2000; Ungar, 2004). More specifically, Werner (1995, pp. 4, 81, 85) distinguished three contexts protective factors existed in: (1) personal attributes, including outgoing, bright, and positive self-concepts; (2) the family, such as having close bonds with at least one family members or an emotionally stable parents; and (3) the community, like receiving support or counsel from peers.

#### **2.3.4.1** Personal attributes (Individual Level Processes):

Which defined as a group of psychological and physical processes on the individual level that include resistance of the person to the stressors or risks exposed to by increasing risk or protection level.

#### Gender

Moreover, protective factors may differ across gender. For instance, resilience may yield gender differences comes from the research of Werner and Smith (1992). In terms of examining people's adaptation after 911 attacks (Galea Bucciarelli, & Vlahov, 2007), women were associated with less likelihood of resilience than men.



Some researchers as Rutter (1982) suggest that boys react emotionally and behaviorally in more negative ways than girls to negative family Situations. Consequently, while it is evident that there are gender differences in some risk conditions, it is unclear if gender is a consistent risk or protective process across all conditions (Shean, 2010, p. 30); so the gender was considered one of the important protective or risk factors that may affect on the result of this research which may lead to differences in resilience level among male or female parents of children with ASD.

#### **Temperament factors**

Temperament describes "an infant's style, how he or she responds. It refers to how a child acts, not what a child does" (Sanson & Smart, 2001, p. 10). Easy going disposition, not easily upset; good self-regulation of emotional arousal and impulses, and attentional controls. These critically important temperament features may have genetic roots which explained 71% of variance in resilience (Meichenbaum, n.d., p. 13) . Kim-Cohen and colleagues (2004) studied resilience among identical (monozygotic (MZ)) and fraternal (dizygotic(DZ)) twins who experienced socioeconomic deprivation. They found that MZ twins were more alike showing evidence of resilience (fewer conduct disorder problems than expected given socioeconomic stressors) than in DZ twins (cited in Meichenbaum, n.d., p. 13).

Rutter (1979a) has discussed positive temperament or positive personality disposition as one of the three major precursors of resilience; the other two factors are supportive family milieu (family cohesion and warmth) and the availability and use of external support systems by parent and child. A child's temperament is significant as it can affect their interaction with their parents, their school experience, behaviour, and relationships with peers. These early childhood interaction patterns can have long-term effects on adult functioning and well-being just as a difficult temperament is viewed as risk, an easy temperament is viewed as protective and is linked to more adaptive outcomes (Olsson et al., 2003; Sanson & Smart, 2001; Vassallo et al., 2004). While the relationship between temperament and resilience appears straightforward, there is evidence that the interaction between the child and their environment also plays a large role. Consequently, the amount of risk or protection temperament provides may be dependent on the type of risk children are exposed to and how their temperament fits with their parents and their environment (Thomas & Chess, 1977).

#### **Personality**

Therefore, while the personality traits of extroversion, agreeableness, and openness are linked to resilience, it is possible that these traits emerge through the individual's experiences within their context. Consequently, it is one's experiences that may lead to the emergence of personality traits related to resilience. Therefore, it is necessary to determine if context can alter personality, before concluding that personality is the process that



contributes to resilience in young people (Shean, 2010, p. 33). personality has a strong impact on the level of resilience among parents as it may be unique for each person which may considered protective for one person or risk for another.

# **Coping skills**

Coping is constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person (Lazarus & Folkman, 1984, p. 141). The choices adolescents make after risk are forms of coping and can influence their resilience by protecting or buffering them from negative outcomes associated with risk (Compas, 1987; Pedro-Carroll, 2001). Thus, it is likely that multiple processes, including the type of risk, available resources, and time after the risk experience, will influence what is the most productive coping response for the young person to achieve positive outcomes (Shean, 2010, p. 37). These coping skills may be incorporated in the definition of resilience; so it consider very important protective factor in this research.

#### **Optimism**

Optimism is defined as perceived energy towards positive expectations about life and future outcomes (Thompason , 2011, p. 55). Which include hope for better future ,goal directed nonnegative explanation of events (Vitto, 2003, p. 6), maintain a hopeful outlook and employ active problem focused coping strategies (They avoid seeing crises as insurmountable problems) (Meichenbaum, n.d., p. 13). In Herny,s grounded theory work about resilience following maltreatment ,a positive future view and hopefulness emerged as a major theme 2001 (cited in Thompason, 2011).

Thus, optimism may be a protective process in that it provides parents with the possibility that they can experience life without the current adversity from rearing a child with ASD.

#### **Locus of control**

Locus of control was defined as assertiveness, independence, goal orientation, determination to be different from abusive adults, persistence, and the ability to accept help and have an adaptable self-image (Hines, Merdinger, & Wyatt, 2005).

Self-control include delayed gratification, mood regulation, thought of consequences before action (Vitto, 2003, p. 6). Hence, the ability to give up attempts to control that which is not controllable is also characteristic of resilient individuals (Kumpfer, 1999, p. 200).

An internal locus of control has also been found to serve as a resiliency factor for youths (Doll & Lyon, 1998). Specifically, youths who have faith in their ability to control



their environment are better able to cope with stressful life events (Werner & Smith, 1982). Conversely, youths with an external locus of control - which is associated with helplessness, or the feeling that you have no control over your life (Shean, 2010, p. 38) - have been found to display increased levels of psychological symptomatology following negative life events (Silverman & Worden, 1992).

The protective effect of an internal locus of control was evident in the study by Wyatt (2005) (cited in Shean, 2010). Despite the large body of research supporting an internal locus of control as a protective process, there is some evidence that an external locus of control is more protective following certain types of adversity (Bolger and Patterson, 2003). It is possible that the actual protective process underlying locus of control is self-efficacy, which is the belief that you can control events (Bandura, 1994).

From the pervious ,the ability to exert control over the external environment may be a protective for the most parents while converse may be risk and for few protective.

#### **Self-identity**

According to learners dictionary self-identity can be defined as the quality that makes person or thing different from others (individuality) (Merriam-Webster, 2012). Furthermore, high self-identity consider protective (Meichenbaum, n.d., p.13), while low self-identity is a risk for others.

#### **Independence**

Success against the odds was also found to be related to an autonomous, self-directedness in resilient subjects in Gordon and Song's (1994) retrospective, qualitative study. They describe them as autonomous/maverick types who would avoid negative peer pressure so as to participate in goal-directed activities, such as going to a museum or library and saving illegal earnings to buy real estate rather than go partying. According to Barbara Collins (2010) independence is important attribute to resilience (p. 8).

#### **Self-efficacy:**

Self-efficacy is a self-perception about competence to perform specific behavioral tasks, belief that they can have influence on own life and can accomplish goals (Vitto, 2003, p. 6) and influences choice of tasks or challenges attempted, the degree of effort employed, and emotional reactions to threat of failure (Lawrence & McLeroy, 1986). Bandura (1989) believes that overcoming stressors or taking on challenges is necessary for the development of self-efficacy. According to John Vitto (2003) self-efficacy is internal protective factor (p. 6).



#### Self- esteem

Susan Harter, defines self-esteem as "the extent to which the adolescent likes oneself as a person, is happy the way one is leading one's life, and is generally happy with the way one is"(1986, p. 3). High self-esteem is frequently cited as a protective process, While research indicates that high self-esteem is protective for adolescents and children as in Carbonell, et al., 2002; Dumont and Provost ,1999, it may be the result of other protective processes rather than the fundamental protective process because the relationship between self-esteem and resilience is correlational, not causative. That is, high self-esteem may result in positive outcomes, or the positive outcomes may produce high self-esteem (Shean, 2010, p. 34). Resilient youth have higher self-esteem associated with an accurate appraisal of their increased strengths and capabilities. They have the ability to restore self-esteem after failure or disruption in homeostasis. Youth who avoid opportunities to master challenges because of low self-esteem will have a more difficult time developing resilience.

### Intelligence, cognitive ability and academic performance

This cluster of individual resiliency characteristics include cognitive abilities that help a person to achieve their dreams or goals, namely:

intelligence, academic achievement and homework skills, ability to delay gratification, reading skills, moral reasoning, insight, interpersonal awareness, self-esteem and the ability to restore self-esteem, planning ability and creativity.

Intelligence is a major protective factor (Garmezy & Masten, 1991) that is influenced by both genetics, postnatal biological variables, such as nutrition, physical trauma, drug abuse, and learning experiences. Intel1ectual capacity has been widely studied in predicting resilience. In general, most studies have found a protective effect of higher cognitive levels (Kandelet al., 1988; Long & Vaillant, 1984; Werner & Smith, 1982) or a risk effect for low cognitive levels. High intelligence is frequently linked to positive outcomes, whereas low intelligence is identified as a risk (Reis, Colbert & Hébert, 2005) .

Another cognitive skill probably related to intelligence is planning ability, which has been found related to resilience in high-risk youth (Anthony, 1987; Rutter & Quinton, 1994). Ability to foresee consequences of choices and to plan a bright future are characteristics of individuals who successfully overcome negative environments. mates. Resilient, institutionally reared women had been found in earlier studies (Rutter & Quinton, 1994) to demonstrate planning in their choice of supportive partners and careers.

Consequently, the effect of intelligence appears more complex than acting as a universal protective process or risk, and the degree of protection gained from intelligence is dependent on the type of risk the young person has experienced and other processes that are



also present in the individual's life (Shean, 2010, p.42). Persons with academic and social successes less risky for developing behavioral disorders (Meichenbaum, n.d., p. 13).

School or achievement motivation serves as a protective factor and major pathway to later job and life success (Masten, 1994; Werner & Smith, 1989, 1992; Stouthhamer-Loeber, et al., 1993).

# **Insight**

Wolin (2003) describes a number of individual characteristics associated with resilience. These include insight, or an individual's ability to ask tough questions about themselves and others and the situations they find themselves in. Insight helps dispel denial and confusion. It generates clarity and provides a springboard for solving problems.

#### **Morality**

Morality also contributes to resilience by providing a sense of being a good person, and because it indicates an ability to think of other people as well as oneself (Collins, 2010, p. 8).

# **Problem solving skills**

Other important attributes include the initiative to find solutions to problems (Collins,2010, p. 8), it's a generation of alternative solutions and abstract and flexible thought (Vitto, 2003, p. 6). A higher IQ, abstract thinking, reflectivity, flexibility, and the ability to try alternatives indicate adaptability to stress (Meichenbaum, n.d., p. 13).

#### Social competence and social skills

Social Skills which include self-awareness, empathy, communication skills, conflict resolution skills (Vitto, 2003, p. 6), emotional responsiveness, flexibility, caring, a sense of humor (including being able to laugh at themselves) and behaviors that increase their ability to get along with others. It show a general appealingness and attentiveness toward others and an ability to elicit positive reciprocal responses from others. Also be able to monitor their own and others' emotions. Bicultural competence – able to negotiate the cultural divide (Meichenbaum, n.d, p. 13). According to John M. Vitto (2003) social skills consider one of the internal protective factors (p6).

### Level of adult support

According to Keller (2003) supportive parents, grandparents ,elders and peers played significant protective roles from infancy through adulthood.



#### Religion and spirituality

Based on a review of longitudinal and cross-sectional studies, Masten (1994) concluded that an important individual resilience factor is religious faith or affiliation. Qualitative, retrospective studies of successful adults from very high risk environments frequently mention the importance of a strong religious belief system in positive life adaptation. Being adopted or having foster parents with strong religious beliefs, when lacking in the bio-logical family, were mentioned by some resilient subjects as helpful. More than half of the Gordon and Song (1994) sample mentioned following strong religious beliefs that significantly impacted their lives positively. According to them, "A belief system seems to provide anchorage and stability in the face of faith-challenging experiences. When questioned about religion, most of the subjects expressed the sense of community, direction, and fellowship typically associated with African Americans, and a traditional affiliation with religiosity" (p. 38).

Spirituality is the awareness of one's inner self, others, a sense of connection to a higher being, an awareness of purpose greater than oneself (Reed, 1987), help individuals deal with their ailments and providing human happiness and health (Elkins, 1999).

A sense of purpose in life and healthy expectations, goal directedness, future-orientation planning, goal-attaining skills, success orientation, achievement motivation, educational aspirations and persistence; hold religious beliefs that are supported by significant others and that convey a sense of meaning in life (spirituality) (Meichenbaum ,n.d., p. 13).

Duun (1994) confirmed that "spirituality" (including life purpose) was a major predictor of resilience and later positive life adaptation in a large national sample of working and non-working mothers.

#### Positive life events

Positive life events, while requiring adaptation ,can nonetheless serve a protective role (Dixon and Reid, 2000). Conversely, negative life events are inherently stressful and can contribute to psychiatric problems (Sarason, Johnson, & Siegel, 1978).

While having a child with ASD consider for some parents a negative life event this may defined as a risk factor for those parents which may affect their resilience level negatively.

### **Emotional Stability and Emotional Management**

Characteristics of resilient individuals that could be considered primarily within the domain of emotional characteristics and skills would be: happiness (versus depression),



recognition of feelings ,emotional management skills and ability to control anger and depression ,ability to restore self-esteem, humor and hopefulness (Kumpfer ,1999, p. 208).

#### **Supportive belief structure:**

Supportive belief structure is defined as deeply personal and /or sacred beliefs and practices that give support and meaning to life beyond the material or world (Thompason, 2011, p.56).

#### **2.3.4.2 family level**

Protective factors within the family can be summarized as close affective relationship with at least one parent or caregiver, perception of availability and responsiveness of caregivers; strong support systems, authoritative parents who are high on warmth and support, but who also provide structure (set firm limits and state clear rules), monitor their child's behavior and peer contacts, and convey high expectations in multiple domains, positive family climate with low family discord between parents and between parents and children, also organized home environment (role of rituals, ceremonies, shared dinner times and mutual responsibilities, cohesive and supportive), and a secure emotional base whereby the child feels a sense of belonging and security; access to consistent, warm caregiving.

Parents are involved in their child's education. Both parents and teachers should convey high, but realistic expectations to their children (Meichenbaum, n.d, p.14). Parenting is an important role as it provides adolescents with support, modeling, and boundaries to assist them to develop into well-functioning adults (Amato & Booth, 1997).

## **Supportive families**

Family support is defined as perceptions of stable care including meeting survival and emotional needs by at least one core long term caregiver (Shean, 2010, p. 57). Reinforcing the importance of both family and peer support, Runtz and Schallow (1998) found these two factors measured together as social support accounted for 55% of the variance between child maltreatment and later psychological adjustment.

Protective processes in the home environment can be important even when this is the source of the risk. The family can also be protective for adolescents at risk of externalizing and internalizing disorders (Shean, 2010, p. 52).

Furthermore, while the family may offer protective processes through the support for the individual, Palestinian families considered the root of these support and thereby, we can consider that parents has a good level of resilience.



#### **Cohesive family and parental support**

Parental support helps many young people develop knowledge and skills for healthy adulthood but, when parents are not available, other adults including teachers, nurses, youth leaders, other family members and neighbors, can provide this. Resilient young people have "a close relationship with at least one caring, competent and reliable adult who recognizes, values and rewards pro-social behaviour" (Resnick, 2000, p 158).

While supportive families, parental support and cohesive family consider protective at family level parent psychopathology, substance abuse, maltreatment and divorce can be a significant risk processes due to their negative outcomes which may have persistent effect.

For parents only, time since the divorce was a protective process and for adolescents only, relative and friend support was important. This finding indicates that while some protective processes will help both parents and children (e.g., family hardiness), others will be unique to the parent and the child (Shean, 2010, p.44-51). Among the most important factors for conferring resilience in young people are warm cohesive families (Collins, 2010, p.9).

#### 2.3.4.3 Community level

### Social support, supportive relationships and supportive colleagues

Social support is protective: it can help young people develop a healthier appraisal of events or help them cope successfully with risky environments (Wolkow & Ferguson, 2001). Support from health professionals, social support agencies and other adults can also help young mothers develop their strengths, resources and assets (Collins, 2010, p.10).

Social support can foster new skills, emotional growth and hope for the future (SmithBattle & Leonard, 1998). Green & Rodgers (2001), suggest that social support interventions should focus their efforts on promoting feelings of emotional connectedness to others as an important first step in reducing stress, and on helping the formation of attachments that help establish more tangible aspects of support networks.

Supportive peer relationships are characterized by the perceived presence and maintenance of constructive mutual friendships (Shean, 2010, p. 59). Rutter (1979b) found a close confiding relationship to be a protective among women from stressful circumstances.

Support from adults within the community has also been identified as a protective process for children and adolescents (Carbonell et al., 2002; Greeff & Van der Merwe, 2004; Grossman et al., 1992; Kelly & Emery, 2003; Mandleco & Peery, 2000). Social support may be a



product of other processes rather than the key protective process that leads to positive outcomes (Shean, 2010 ,p. 60).

#### **Community safety and support**

Banyard and Williams(2007) in their longitudinal study found a positive sense of community to be important in relation to resilience indicators. One of the main ways the community can act as a protective process is by offering events and organisations that provide the opportunity for adolescents to be involved (Dumont & Provost, 1999; Laursen & Birmingham, 2003). Research indicates that adolescents who participate in the community are more likely to be resilient, have an increased sense of belonging, develop better boundaries and have more adaptive skills (Laursen & Birmingham, 2003; McMillan & Chavis, 1986).

Community organization include church, school, prisons can also provide support when adolescents live in risky environments. the "community" of prison provided protective processes of structure, better health, freedom from drugs, an ability to increase their education and make positive connections with other adults, time to reflect and a chance to mature.

Community involvement is not universally protective, as some communities are violent and have frequent drug use. Therefore, community involvement in itself is not an adequate protective process unless the community offers positive protective processes that assist adolescents in becoming successful by both their own standards and the standards set by society.

Each community will be unique, therefore it would be necessary to evaluate the extent of risk and protective processes separately for each community before labeling it risky or protective (Shean, 2010, pp. 59-60).

#### Socioeconomic status

A well-established risk factor that can be present in an entire community is low socioeconomic status (SES) (Shean, 2010, p. 55). While low SES suggests high risk for adolescents, high SES is usually regarded as a protective process (Luthar & D'Avanzo, 1999). These findings suggest that high SES does not always protect adolescents from risk, nor does it guarantee positive outcomes, as they can be as much at risk as adolescents from a low SES background. As with low SES, there can be associated issues with high SES that are problematic rather than the level of SES alone. In particular, some high SES adolescents may not experience the challenge necessary to develop resilience (Shean, 2010, pp. 58-59).



#### **Employment**

There is a general recognition that work enhances health and wellbeing (Freud, 2007) Some authors note, however, that the benefits of work for lone mothers are more complex as they need to balance children's needs with pressures of work (Millar & Ridge, 2007).

However, Bancroft (2004) also notes that work can be a source of resilience by supporting the development of new skills, and by providing a sense of competence and strength; so the inclusion of questions about income and employment in demographic sheet for parents in this thesis is important as it help to identify the resilience level depend on these factors.

Other contributing factors to resilience according to DeArmas-Valdes, (2004) include access to health services ,severity of illness, duration of illness ,illness status and medical support (p.31-32). In terms of serious illnesses and disability, the literature has provided evidence on resilience in the face of adversity. Druss and Douglas (1988) found that individuals not only remained optimistic in the midst of difficulties, but also considered their illness an opportunity for growth. Other studies have corroborated these findings, for example, individuals who suffered from a terminal illness or disability (e.g., AIDS, cerebral palsy, burn injury, major losses) have also shown resilience.

These studies all referred to resilience, but instead assessed adaptive outcomes. For example, Druss and Duglas (1988) studied resilience in terms of cognitive style of hardiness and ego strength among individuals with an illness or disability. While, Resnick and Hutton (1987) assessed positive self-image among adolescents with a physical disability as an evidence of resilience.

Physical well-being and physical competencies variables that have been included in resilience sturlies that correlate with resilience include the following:

Good health, health maintenance skills (exercise, good diet, sleep), physical talent development and physical attractiveness (Kumpfer, 1999, p. 209).

For other resources of resilience at individual, family and environmental levels see appendix (B).

# **2.3.5 Family Resilience Theory**

Family resilience theory has been used to explain the processes of many different subsystems of a family and interrelated systems to the family that aid in their overcoming family problem or stressor. One widely cited theory is Froma Walsh's family resilience model. Walsh defines family resilience as those key processes that enable families to cope more effectively and emerge hardier from crises or persistent stresses, whether from within



or from outside the family (Walsh, 1996, p. 263), also the term family resilience refers to coping and adaptational processes in the family as a functional unit (Walsh, 2006, p. 15).

This family process of an evolving system that encounters transformation and growth is explained by the use of an ecological and developmental perspective (Walsh, 2006). The ecological perspective is used to describe how the family is adapting and coping at different levels, ranging from individual family members to how the family as a whole may help the individual family member (Walsh, 2006). In addition to the ecological and developmental perspective, family systems theory includes family functioning impacted by life cycle stages and unresolved generational issues related to particular stages that may create the context for stressors (Walsh, 1996). For example, Walsh (1996) describes a woman who carries the fears of losing her husband due to her past experiences of losing her father may contribute to a ripple effect of stressors that result in stopping the family from functioning smoothly and progressing through its life stages.

# 2.3.6 Factors and interventions that promote resilience :

Resilience can be enhanced by positive experiences that help individuals or families to develop and refine new coping skills; on the other hand, it can be eroded by cumulative negative experiences or failures (Cowan et al., 1996). One clear way to promote well-being in parents is to limit their exposure to chronic adversities This section briefly reviews the evidence on the degree to which it is possible to help parents to become resilient which discussed from two sides :individual and family resilience.

# **Promoting individual resilience**

Developing resilience is a unique personal journey. A systematic review of the scientific literature on resilience conducted and found that it focus on strengthening protective process important to promote individual resilience. Here some ways to promote individual resilience are mentioned in details which include:

- Accepting that change is a part of living (Substance abuse and mental health services administration [SAMHSA], n.d.), and may be slow.
- Taking decisive actions.
- Acknowledge past engagements with adults may have been negative; so develop insights to and learning from the past, and to move into the future purposefully, and actively plan for their own and their children's futures (Collins, 2010; SAMHSA, n.d.).
- A committed mentor or other person from outside the family. Mentoring programs (either with peers or adults has a modest impact on reducing high-risk behaviors and improving educational and career outcomes (NCH, 2007, pp. 7-11).
- Help young mothers develop knowledge, skills and attitudes to cope now and in the future with stressful situations and complex relationships.



- Support the development of their identity as mothers, as well as supporting the development of other identities (Collins, 2010, pp. 47-50).
- A sense of mastery and a belief and one's own efforts can make a difference.
- Looking for opportunities for self-discovery and nurturing a positive view of self.
- Participation in a range of extra-curricular activities.
- Support : Recognise and address the damaging effects of stigma and isolation and making connections with others.
- Providing strong non-judgmental social, emotional, informational and practical support through many activities and networks also provide mutual support.
- Getting help when it is needed through trying to obtain information on resilience from self-help or support groups, online resources, and books or other publications like the ones found in this study.
- Employment: Recognise the role of work in enhancing health , wellbeing and competence also to help mothers to balance work and the care of their children.
- The ability or opportunity to 'make a difference' by helping others or through parttime work.
- Provide support to access income support entitlements.
- Use opportunities through young mothers' engagement with government and non-government agencies to promote educational participation, work, and access to health and social services for mothers and children.
- The capacity to be flexible and re-frame adversities so that the beneficial as well as the damaging effects are recognised.
- Not to be excessively sheltered from challenging situations that provide opportunities to develop coping skills (Collins, 2010; NCH, 2007; SAMHSA, n.d.).

To promote resilience, it is important to promote protective processes at individual-level which discussed before in section 2.3.4 and in addition to it other processes that include: positive coping, positive affect, positive thinking, realism, behavioral control, physical fitness, altruism (Meredith, et al., 2011). Following is information regarding applicable ways to implement resilience practices, as well as situations that could inhibit resilience, situations that enhance resilience, and people who help facilitate the growth of resilience, see table (2.3).

# **Promoting family resilience**

It is important to highlight promoting family resilience because the parents considered the cornerstone for the family. Developing family resilience, like individual resilience, is different for every family. The important idea to keep in mind is that an underlying stronghold of family resilience is cohesion, a sense of belonging, and communication. This sense of bonding and trust is what fuels a family's ability to be resilient. Families that learn how to cope with challenges and meet individual needs are more resilient to stress and crisis. Healthy families solve problems with cooperation, creative brainstorming, openness to others, and emphasis on the role of social support and connectedness (versus isolation) in family resiliency. Resilience is exercised when family



members demonstrate behaviors such as confidence, hard work, cooperation, forgiveness ()., support, closeness, nurturing, adaptability and emotional ties. These are factors that help families withstand stressors throughout the family life cycle. At the community level processes, collective efficacy -in other mean working together- is necessary to promote resilience (Meredith, et al., 2011; SAMHSA, n.d.).

In the view of Walsh (1998), family resilience can be promoted by: (1) decreasing risk factors (i.e. reducing exposure to risk and increasing capacity to cope with stress); 2) reducing negative chain reactions that heighten the risk of stress and further crisis (i.e. altering maladaptive coping strategies and developing the capacity to rebound from setbacks); (3) strengthening protective family processes and reducing vulnerabilities (i.e. mobilising resources and reorganising in the aftermath of a crisis); and (4) bolstering family and individual self-esteem and efficacy through successful problem mastery (i.e. gaining confidence through collaborative efforts).

A core principle for strengthening family resilience is recognising not only that serious crises have an impact on the whole family, but also that family coping processes influence the recovery and resilience of the family as a unit and all its individual members, see table (2.3).



**Table (2.3):** Individual and community resilience: factors inhibit or enhance resilience &people facilitate it (Kelly, 2007)

	Demonstrating resilience	Vulnerability factors inhibiting resilience	Protective factors enhancing resilience	Facilitators of Resilience
Individual Resilience The ability for an individual to cope with adversity and change	-Optimism -Flexibility -Self-confidence -Competence -Insightfulness -Perseverance -Perspective -Self-control -Sociability	-Poor social skills -Poor problem solving -Lack of empathy -Family violence -Abuse or neglect -Divorce or partner breakup -Death or loss -Lack of social support	-Social competence -Problem-solving skills -Good coping skills -Empathy -Secure or stable family -Supportive relationships -Intellectual abilities -Self-efficacy -Communication skills	-Individuals -Parents -Grandparents -Caregivers -Children -Adolescents -Friends -Partners -Spouses -Teachers -Faith community
Community Resilience The ability for an individual and the collective community to respond to adversity and change.	-Connectedness -Commitment to community -Shared values -Structure, roles, & responsibilities exist throughout community -Supportive and good communication -Resource sharing -Volunteerism -Responsive organizations -Strong schools	-Lack of support services -Social discrimination -Cultural discrimination -Norms tolerating violence -Deviant peer group -Low socioeconomic status -Crime rate -Community disorganization -Civil rivalry	-Access to Support services -Community networking -Strong cultural identity Strong social support systems Norms against violence Identification as a community Cohesive community leadership	-Community leaders -Faith-based organizations -Volunteers Nonprofit organizations -Churches/houses of worship -Support services staff -Teachers -Youth groups -Boy/Girl Scouts -Planned social networking



#### 2.4 Studies review

The researcher categorize studies according to variables first about ASD and psychological stress secondly about ASD and resilience and all studies was ordered historically from new to old . There are few Arabic study related to this title which will be listed the first, before listing the foreign studies .

### 2.4.1 Studies about psychological stress

#### 2.4.1.1 Arabic Studies

The study of Madi (2006) aimed to study the feasibility and effectiveness of applying the training program to change the negative attitudes for parents of autistic children, as well as disclosure of the nature of the relationship between negative parental attitudes and the progress of the autistic children in training programs. The study sample consisted of two experimental and a control group each consisted of 5 fathers and 5 mothers of autistic children, and their autistic children. Study scales include Scale of parental attitudes toward their autistic children (designed by the researcher), a training program to prepare the fathers and mothers of autistic children to develop the capacities of their children and dealing with behavioral problems (preparation of the researcher), a measure of Conduct harmonic adaptive behaviour (Safwat al-Faraj, Nahed Ramzy 1995, cited in Madi, 2006), the scale of the autistic child (preparation / Adel Abdullah Mohammed, 2001, cited in Madi, 2006), a test panel shapes to Goddard to measure intelligence, the scale of socio-economic level of the family (Abdul Aziz Al-Shakhs 1995 ,2<sup>nd</sup> edition, cited in Madi, 2006), criteria for diagnosis of autism in the Guide to DSM IV. The results of the study showed the effectiveness of the used training program, where it helped in improving parental attitude towards the children with autism among the parents of the experimental group, as an improvement occur to the children of the experimental group, according to the measure of adaptive behavior Part I "aspects of developmental" and Part II "behavioral abnormalities" ;And for the control group did not have any change occurs, using pre testing and post, as was proven the continuing impact of the program after the end of the application.

While the study of Ghazaleh (2004) with a title effectiveness of a pilot program in the management of life in the reduction of stress in mothers of children with autism, aimed to provide mothers of children with autism strategies in the management of life in order to reduce the stress among them. The study sample consisted of 60 mothers: 30 normal children and 30 autistic children, were divided into two groups (a control and experimental). The study's scale include Form of data collection and Psychological stress scale. The results of the study showed that there is an improvement for the experimental group after the application of the program.



In other hand, the study about autistic disorder and its relationship with parental stress, aimed to study the parenting system of families of children with autism to identify the relationship between autistic disorder and parental stress. The research seeks to study the differences and significance between the parental stress of the families of autistic children, and families of normal children, using a measure of parental stress. The study sample consisted of two groups one experimental groups of 40 autistic children from both sexes and their mothers and control group of the normal children's 40 boys and girls, were obtained from primary schools, and their mothers. Age range for children in two groups from 6-12 years, were taken into account similarity of the two groups in age, sex, level of social / economic (Abd Alqader, 1997).

Measures used are Statement of the social / economic, draw a man test Godanv Harris, a measure of parental stress, a special measure of life stressors. The results of the study indicate that there is a positive correlation between autistic disorder and parental stress. Also the result investigate that the sum of parental stress in the families of autistic children 95 more than Z-score that specified by the scale for normal range of the total degree of stressors 15-75 rank minah.

Also a positive correlation between three dimensions of the characteristics of autistic children with three dimensions of the characteristics of his parents which include the degrees of support of the child to the parents with the emotional bond of the child , degrees of the mood of the child with the emotional bond of the child and the degree of urgency and frequent claim with the degree of parental charity to role restrictions. The research dedicate that there is a positive correlation between of the characteristics of parents of autistic children and life stressors. Also ,that there is a significant differences between the average degrees of children with autism and average degrees of normal children on measures of the characteristics of the child.

There is a significant differences between the average degrees of mothers of children with autism, and the average degrees for mothers of normal children on measures of the characteristics of the parents. Also the result showed that the total parental stress level in families of children with autism are 95 top-class standard specified scale of the normal range of the total degree of the stress of 15-75 rank Minah. Which shows that the relationship of the child in the study sample and the control sample is an indication of the vulnerability of the parental system to the risk which requires the intervention of preventive services and counseling (Abd Alqader, 1997).

## 2.4.1.2 Foreign studies:

The Relationship between the Broader Autism Phenotype, Child Severity, and Stress and Depression in Parents of Children with Autism Spectrum Disorders

This study examined the relationship between child symptom severity, parent broader autism phenotype (BAP), and stress and depression in parents of children with ASD. One hundred and forty-nine parents of children with ASD completed a survey of



parenting stress, depression, broader autism phenotype, coping styles, perceived social support, and child symptom severity. Parents reported elevated parenting stress and depression relative to normative samples. A path analysis indicated that both child symptom severity and parent BAP were positively correlated with these outcomes. The relationship between BAP and the outcome measures was partially mediated by maladaptive coping and social support and the relationship between child symptom severity and outcomes was partially mediated by social support (Ingersoll and Hambrick, 2011, pp. 337-344).

# Parenting Stress and Coping Styles in Mothers and Fathers of Pre-School Children with Autism and Down Syndrome

The study examined the profile of stress in mothers and fathers of preschool children with autism, Down syndrome and typically developing children. A further aim was to assess the association between parenting stress and coping style. Methods indicate that a total of 162 parents were examined using Holroyd's 66-item short form of Questionnaire of Resources and Stress for Families with Chronically III or Handicapped Members and the Coping Inventory for Stressful Situations by Endler and Parker. The results indicated a higher level of stress in parents of children with autism. Additionally, an interaction effect was revealed between child diagnostic group and parent's gender for two scales of parenting stress: dependency and management and limits of family opportunities. Mothers of children with autism scored higher than fathers in parental stress; no such differences were found in the group of parents of children with Down syndrome and typically developing children. It was also found that parents of children with autism differed from parents of typically developing children in social diversion coping. Emotion-oriented coping was the predictor for parental stress in the samples of parents of children with autism and Down syndrome, and task-oriented coping was the predictor of parental stress in the sample of parents of typically developing children. The results strongly supported earlier findings on parenting stress in parents of children with autism. They also shed interesting light on the relationship between coping styles and parental stress (Dabrowska and Pisula, 2010, pp.266-280).

# The Impact of Child Symptom Severity on Stress among Parents of Children with ASD: The Moderating Role of Coping Styles

The study examined the impact of autism severity and parental coping strategies on stress in parents of children with ASD. Children's autism symptoms and parental coping strategies (task-oriented, emotion-oriented, social diversion, and distraction) were evaluated as predictors of four types of parental stress (parent and family problems, pessimism, child characteristics, and physical incapacity). In order to examine potential buffering effects of coping strategies on stress associated with the child's symptom severity, the interactive effects of autism symptoms with coping strategies were also examined. Participants included 77 primary caregivers of a child with ASD. Using multiple regression analyses, emotion-oriented coping scores were associated with more parent and family problems, and task-oriented coping was associated with lower physical incapacity scores.



The child's autism severity was the strongest and most consistent predictor of stress. Further, emotion-oriented coping moderated the relationship between pessimism stress and autism symptomatology, and distraction coping was a moderator between parent and family stress and autism symptoms. Results revealed that increasing our knowledge of the coping strategies that are more or less effective and under what conditions some coping strategies may be either beneficial or harmful for this population of parents has direct implications for treatment and parent education efforts (Lyon et al., 2010, pp.516-524).

#### Families with Children Who Have Autism Spectrum Disorders: Stress and Support

Many individuals with autism spectrum disorders have behavior repertoires that might be expected to have an impact on members of both the immediate and extended family. This article examines this impact, reviewing relevant literature related to stressors and supports for families of individuals with ASD. The focus of the article highlights research on stressors and supports in the following areas (a) stress in the marital subsystem, (b) stress in the parental subsystem, (c) stress in the sibling subsystem, (d) coping strategies used by families, and (e) informal and formal sources of support used by families. Implications and recommendations for future research and practice are discussed (Meadan, Halle, and Ebata, 2010, pp.7-36).

# An Item Response Theory Analysis of the Parenting Stress Index-Short Form with Parents of Children with Autism Spectrum Disorders

The Parenting Stress Index-Short Form (PSI-SF) is one of the most widely used instruments for measuring parenting stress in families of children with autism spectrum disorders. However, no research to date has examined the psychometric properties of the PSI-SF in a sample of parents of young children with ASD. In this regard, item response theory (IRT) can be used to estimate how much information or discrimination each item of a scale offers across the entire range of the latent variable being measured, by creating individual item information curves or profiles. The purpose of this study was to use IRT to examine the discriminability of PSI-SF items in a sample of parents of young children with ASD who experience varying levels of parental stress. Methods: The study involved the parents of 141 children with autism spectrum disorders (91.4% mothers; mean age 36.2 years) who completed the PSI-SF following diagnosis. Item characteristic curves were constructed for each of the PSI-SF items and examined with regard to item functioning. Results indicated that, for the most part, changes in parental distress severity were reflected in changes on item scores. However, several items on the subscales measuring parent-child dysfunctional interactions and child behavior difficulty functioned poorly to discriminate parents across a range of total stress severity. The parent-child dysfunctional interaction and difficult child subscales of the PSI-SF scale should be used with caution with parents of young children with ASD. More research is required to examine PSI-SF content validity, at least among parents of children with ASD and perhaps parents of children with other disabilities as well (Zaidman-Zait et al., 2010, pp. 1269-1277).



#### Positive Experiences of Mothers and Fathers of Children with Autism

The present study examined the positive experiences of parents raising school-aged children with autism within the context of parenting stress. Participants included 23 mother/father pairs raising children with autism (ages 5 to 11 years, M = 7.39). Parents completed measures of parenting stress and positive experiences of raising their children. Consistent with previous research in a pre-school aged population of children with autism, mothers reported significantly more positive experiences than did fathers. Mothers' and fathers' reports of their positive experiences were negatively related to their reports of parenting stress. Fathers', but not mothers', positive experiences were negatively related to their partners' reports of parenting stress. Findings are discussed within a positive psychology framework suggesting that a focus on positive experiences may buffer against negative well-being (Kayfitz, Gargg, & Orr, 2010, pp. 337-343).

# Using Matched Groups to Explore Child Behavior Problems and Maternal Well-Being in Children with down Syndrome and Autism

Mothers of children with Down syndrome, autism, and mixed etiology intellectual disabilities, matched on child age, gender, and communication skills (n = 19 in each group) completed measures of their child's adaptive and problem behaviors, their own parenting stress, and positive perceptions of their child. Children with autism were rated as having more problem behaviors and lower levels of social competence than children with Down syndrome and mixed etiology intellectual disabilities. Mothers of children with autism scored lower on positive perceptions of their child, and higher on stress than the other two groups. After selecting closely matched groups, we found several group differences in child behavior but little evidence of group differences in maternal outcomes (Griffith, Hastings, Nash & Hill, 2010, pp.610-619).

#### Coping, Distress, and Well-Being in Mothers of Children with Autism

As is the case in stress research generally, studies examining the relationship between coping and mental health outcomes in parents of children with autism frequently classify parental coping methods as being either problem- or emotion-focused. We argue that this dichotomization of coping strategies oversimplifies the way parents respond to their child's autism. In the present study, the coping methods employed by 113 mothers of children with autism were investigated using the Brief COPE. Exploratory factor analysis of Brief COPE subscales identified four reliable coping dimensions: engagement coping, distraction coping, disengagement coping, and cognitive reframing coping. In addition, using multiple regression, we examined the relationship of coping strategies to negative and positive maternal outcomes (depression, anger, and well-being). In general, maternal use of avoidant coping (distraction and disengagement) was found to be associated with increased levels of maternal depression and anger, while use of cognitive reframing was associated with higher levels of maternal well-being. In several instances, child characteristics, particularly severity of child maladaptive behavior, moderated the effect of coping on



maternal outcomes. Study findings are discussed in light of previous research in the area; in addition, study limitations and clinical implications are highlighted (Benson ,2010, pp. 217-228).

# Parenting in Families with a Child with Autism Spectrum Disorder and a Typically Developing Child: Mothers' Experiences and Cognitions

The parenting experiences of mothers in a family with a child with autism spectrum disorder and a typically developing (TD) child were studied using a qualitative analysis of mothers' perceptions of the impact of autism on family and personal life. An additional quantitative comparison was performed to evaluate the effect of ASD on mothers' parenting cognitions about their other, TD child. Mothers differentiated clearly in parenting cognitions about their child with ASD and about their TD child. Strong associations were found between mothers' symptoms of stress and depression, and their parenting cognitions about both their children. To maximize intervention outcome, family interventionists should consider parenting experiences and should become aware of interfering maternal feelings and cognitions, such as guilt or low parental self-efficacy beliefs (Meirsschaut and Roeyers and Warreyn, 2010, pp.661-669).

## Living with Children Diagnosed with Autistic Spectrum Disorder: Parental and Professional Views

The number of children diagnosed with an autistic spectrum disorder is rising and is now thought to be as high as 1:100. While the debate about best treatment continues, the effects of having a child diagnosed with ASD on family life remain relatively unexplored. This article, by Karola Dillenburger of Queens University Belfast, Mickey Keenan of the University of Ulster, Alvin Doherty from the Health Service Executive Western Region, Tony Byrne of Parents' Education as Autism Therapists and Stephen Gallagher of the University of Ulster, sets out to adjust that balance. Drawing upon data from a comprehensive study of parental needs, these authors argue that parental and professional views do not always concur; that families make extraordinary sacrifices; that siblings are affected; and that parents are under tremendous stress. Parents argue that educational and social service supports are not efficient and that they are forced to rely largely on support from within the family or from friends. In particular, some important differences between parental and professional perceptions became apparent in relation to interventions based on Applied Behaviour Analysis. The authors of this article propose that these differences need to be taken seriously by teachers and other professionals as well as by policy-makers (Dillenburger et al., 2010, pp. 13-23).

# The Relationship of Repetitive Behavior and Sensory Behavior to Parenting Stress in Mothers of Boys with Autism and Mothers of Boys with Fragile X Syndrome

This study investigated the relationship between repetitive behaviors and sensory behavior to the parenting stress of mothers of boys with fragile X syndrome and mothers of



boys with autism. Participants consisted of two groups: 51 mothers with boys diagnosed with fragile X syndrome (M = 71.3, SD = 56.5) and 30 mothers with boys diagnosed with autism (M = 86.8, SD = 29.3). Data was taken from an extant data base of two completed studies. Mothers of the participants completed the "Parenting Stress Index-SF", the "Repetitive Behavior Scale- R," and the "Sensory Experiences Questionnaire." Results indicated that parenting stress was predicted by group, repetitive behavior, and sensory behavior which accounted for 41% of the variance. Group was a main effect with the mothers of boys with autism having higher parenting stress and repetitive behavior was a main effect predicting parenting stress for both groups. In subsequent analyses run separately for each group, sensory behavior was predictive of parenting stress in the fragile X group but not in the autism group. Determining how repetitive behavior and sensory behavior contribute to parenting stress for mothers of boys with fragile X syndrome and mothers of boys with autism adds to the literature. It also provides information for the family, teachers, and outside professionals that can be used to develop interventions and in turn reduce parental stress levels (Richardson, 2010).

# The Experiences of Parents during Diagnosis and Forward Planning for Children with Autism Spectrum Disorder

For families of children diagnosed with ASD getting a diagnosis is a traumatic experience on which future care and education plans for the child depend. In this paper parental experiences of diagnosis and forward planning for children with ASD are reported. This is part of a large cross-sectional study conducted in Northern Ireland and the Republic of Ireland that assessed the needs and experiences of parents of children diagnosed with ASD. Questionnaires were designed and completed by 95 parents, reporting on 100 children, as well as 67 multi-disciplinary professionals. Findings confirm that diagnostic and planning processes are extremely stressful for parents, that statutory diagnosis takes a long time, that care and education plans do not include full parental participation, and that reviews of plans do not consistently include intervention data. Policy and practice implications of these findings are important for future revisions of diagnostic tools and manuals (Keenan, 2010, pp.390-397).

# Stress and Self-Perceived Parenting Behaviors of Parents of Children with Autistic Spectrum Conditions

The relationships between parenting stress and self-perceived parenting behaviors in 138 parents of children with autistic spectrum conditions were studied over 9-10 months. Apart from perceived communication being attenuated, there were no major areas of self-perceived parenting weakness. Parenting stress closely interacted with self-perceived involvement, communication, and limit setting over time. In parents of young children (below 4), high initial levels of parenting stress resulted in less subsequent self-perceived involvement, and poorer communication, with the child. Good self-perceived initial skills for limit setting resulted in lower levels of parenting stress. These relationships help to explain the impact of parenting stress on child behavior problems, and may be consistent



with development of parental adaptive behavioral strategies to deal with extreme stress levels (Osborne & Reed, 2010, pp. 405-414).

# The Impact of Children with High-Functioning Autism on Parental Stress, Sibling Adjustment, and Family Functioning

The article discuses a study conducted to investigate the impact of children with high-functioning autism (HFA) on parental stress, sibling adjustment, and family functioning; the study involves a sample of parents of 15 children with HFA and parents of 15 matched control children who completed questionnaires measuring the dependent variables. The results indicate parents of children with HFA experience significantly more parenting stress than parents of children with no psychological disorder, which was found to be directly related to characteristics of the children. The study further shows that the higher intellectual functioning in children with HFA does not compensate for the stress associated with parenting children with autism spectrum disorders. Because the intervention efforts directed at children with HFA will not eliminate the child's primary symptoms, treatment programs may need to address parental stress, which in turn will help optimize treatment outcome for the child and the family (Rao and Beidel, 2009, pp. 437-451).

#### Parental Stress and Autism: Are There Useful Coping Strategies?

According to previous researchers, parents of children diagnosed with ASD consistently report more stress than parents of typically developing children or children with other developmental disorders (e.g., Down syndrome). This has peaked interest in the field in a related area, that being, identifying the coping strategies parents use to deal with the stressors of rearing a child on the autism spectrum. The available literature on coping strategies primarily has focused on interviewing parents to find out what strategies they currently use and if these are effective, which has resulted in mixed findings. A selected synthesis of the stress literature pertaining to coping strategies is provided to highlight the high levels of reported stress already experienced by families of children with ASD and what strategies the parents report aid them in coping with the stress (Mancil, Boyd and Bedesem, 2009, pp. 523-537).

## Enrichment, Stress, and Growth from Parenting an Individual with autism spectrum disorder

Past researchers have focused primarily on the associated negative impact of caring for a child with special needs. In this study, caregivers report the enrichment and stress of caring for a child with an autism spectrum disorder. Eighty caregivers completed the "Social Communication Questionnaire", "Effects of the Situation Questionnaire", and "Posttraumatic Growth Inventory". Enrichment and stress scores were compared to symptom severity data and posttraumatic growth scores. Consistent with prior research, caregivers reported greater levels of stress than enrichment. On just over half of the stress/enrichment variables, parental ratings of stress and enrichment were negatively correlated. Scores of total stress and enrichment were not correlated to the severity of the



individual's symptoms or caregivers' growth scores. These findings suggest that although stress is a major concern for caregivers, enrichment and growth may also occur in varying degrees (Phelps, McCammon, Susan, Wuensch, & Golden, 2009, pp. 133-141).

## Factors Contributing to Stress in Parents of Individuals with Autistic Spectrum Disorders

The study explores the experiences of parents of individuals with ASD, and examines the influences of parent gender and child age on perceived stress, stress and coping, child-rearing involvement, support and information/education accessed. Questionnaires assessed general perceived stress, involvement, stress and coping related to caregiving, social support, and amount of information/education accessed in 23 mothers and 19 fathers of 3- to 18-year-old individuals with ASD. When compared with fathers, mothers were significantly more stressed, more involved, and reported higher levels of stress and coping related to caregiving. Differences were found according to child age, regarding helpfulness of support and access to information/education. Parent gender and child age moderated correlations between some variables. Content analyses identified factors contributing to parental stress and its alleviation. The positive relationships between the amount of information accessed and the quality of support received by parents, and between parental stress and involvement vary according to the life stage of the child. Mothers experienced a greater caregiving burden when compared with fathers (Tehee, Honan & Hevey, 2009, pp. 34-42).

#### Children with Autism: Quality of Life and Parental Concerns

Past research has shown that children with autism and their families have compromised quality of life (QOL) in several domains. This study examined QOL and parental concerns in children with autism during early childhood, childhood, and adolescence compared to children with Attention Deficit Disorder (ADD)/ Attention Deficit Hyperactivity Disorder and to typical controls from a US national sample. Families with children diagnosed with autism reported more profound QOL effects than families of children with ADD/ADHD or unaffected controls. Children with autism were significantly less likely to attend religious services, more likely to miss school, and less likely to participate in organized activities. Parental concerns over learning difficulty, being bullied, stress-coping, and achievement were overwhelming in the autism group relative to the comparison groups (Lee , Harrington , Louie & Newschaffer, 2008, pp. 1147-1160).

## Parenting Stress in Mothers and Fathers of Toddlers with Autism Spectrum Disorders: Associations with Child Characteristics

In this study elevated parenting stress is observed among others of older children with ASD, but little is known about parents of young newly diagnosed children. Associations between child behavior and parenting stress were examined in mothers and fathers of 54 toddlers with ASD (mean age = 26.9 months). Parents reported elevated



parenting stress. Deficits/delays in children's social relatedness were associated with overall parenting stress, parent–child relationship problems, and distress for mothers and fathers.. Regulatory problems were associated with maternal stress, whereas externalizing behaviors were associated with paternal stress. Cognitive functioning, communication deficits, and atypical behaviors were not uniquely associated with parenting stress. Clinical assessment of parental stress, acknowledging differences in parenting experiences for mothers and fathers of young children with ASD, is needed (Davis and Carter, 2008, pp. 1278-1291).

# Preschoolers with Autism Spectrum Disorders: The Impact on Families and the Supports Available to Them

As more children are diagnosed at a younger age with ASD, a new population of families is growing requiring services. Little is known about their characteristics and need for support. Instead, past research has tended to focus on specialist assessments and interventions. Over 100 parents with a child aged under five years of age were interviewed individually at home using a semi-structured questionnaire and standard rating scales. Although all children had been given a confirmed diagnosis of ASD at specialist community clinics, wide variations existed in the children's developmental difficulties and in the characteristics of their families. A majority of families reported marked impacts on family life with increased levels of parental stress. However, the amount and type of professional support available to families were not related to child or family characteristics. Family-centered intervention and support services are required and they should be available confirmed parents irrespective of their child having diagnosis (Cassidy, McConkey, Truesdale-Kennedy, & Slevin, 2008, pp. 115-128).

#### There is Significant Stress among Parents Having Children with Autism

This study aimed to assess the level of parenting stress and associating factors of stress in parents rearing children with autism. The sample included 60 parents (30 fathers, 30 mothers) of 30 children with diagnosis of autism. The sample was taken from different hospitals and institutions of mental retardation in Islamabad, Rawalpindi and Wah Cantt, Pakistan from 2005-2006. Stress in parents was measured through parental stress scale (PSS). PSS score of fathers was  $46.63\pm7.99$  and mothers  $50.03\pm9.60$  (p 0.01). Score for parents of children 4-9 years age was  $50.38\pm7.93$  and for parents of children 10-18 years age  $47.13\pm10.26$  (p 0.01). Score for parents of boys was  $46.81\pm8.39$  and for parents of girls  $50.00\pm9.34$  (p 0.01). There was significant stress in parents of autistic children. Mothers experienced more stress than fathers. The level of stress was different in parents with the increasing age of the children. The implication is that mothers of children with autism are more prone to experience stress, thus requiring special attention from mental health professionals (Sabih & Sajid ,2008).



# Sense of Coherence, Parenting Attitudes and Stress among Mothers of Children with Autism in Hong Kong

The moderating and mediating relationships of among sense coherence, parental attitudes and parenting stress for caregiving parents of children with autism were tested. hundred and fifty-seven mothers One with autism recruited from representative community service centres in Hong Kong completed the Chinese versions of Sense of Coherence Scale (SOC), Confidence and Acceptance subscales of Parent-Attitude Survey Scales and Parenting Stress Index Short Form. Accounting for mothers' demographic background, SOC showed a moderating effect with child's symptoms and parenting stress. Mothers with a strong SOC perceived lower stress than their counterparts even when their children presented with more severe autistic symptoms. Two proximal factors in parenting, parental confidence and acceptance of the child, were found to partially mediate SOC and stress. The stress experience of mothers of children with autism is related strongly to a global sense of coherence as well as more specific parenting attitudes (Mak, Ho & Law, 2007, pp. 157-167).

## The Impact of Behaviour Problems on Caregiver Stress in Young People with Autism Spectrum Disorders

The purpose of this study was to examine the correlates of caregiver stress in a large sample of young people with ASD. Two main objectives were to: (1) disentangle the effects of behaviour problems and level of functioning on caregiver stress; and (2) measure the stability of behaviour problems and caregiver stress. Parents or teachers of 293 young people with ASD completed measures of stress, behaviour problems and social competence. Parents also completed an adaptive behaviour scale. Eighty-one young people were rated twice at a 1-year interval. Parents and teachers did not perfectly agree on the nature and severity of behaviour problems. However, both sets of ratings indicated that behaviour problems were strongly associated with stress. Conduct problems in particular were significant predictors of stress. Adaptive skills were not significantly associated with caregiver stress. Parental reports of behaviour problems and stresswere quite stable over the 1-year interval, much more so than teacher reports. Parent ratings suggested that behaviour problems and stress exacerbated each other over time. This transactional model did not fit the teacher data. Results of this study suggested that it is a specific group of externalized behaviours that are the most strongly associated with both parent and teacher stress. Results were discussed from methodological and conceptual perspectives (Lecavalier, Leone, & Wiltz, 2006, pp. 172-183).

# Stress Levels and Adaptability in Parents of Toddlers with and without Autism Spectrum Disorders

The toddler years can be a particularly stressful time for all parents, however, parents of children with disabilities may experience additional sources of stress. Recent literature on early education for children with disabilities promotes inclusion with typical



peers with increases in the availability of inclusive programs. However, little is known about early intervention inclusion programs and parental factors such as stress and adaptability. The current study expands the research for children with disabilities by investigating the associations of having a young child with ASD on multiple dimensions of parental stress for mothers and fathers and how participation in an inclusive toddler program may be related to these stress levels. Results for this community sample are consistent with previous research indicating that that both mothers and fathers of children with ASD report significantly elevated levels of both child and parent related stress in comparison with parents of typically developing toddlers. Following their child's participation in the inclusion program, mothers of children with ASD report significant reductions in child-related stress but no reductions in the parent-related stress domain. No changes were seen with either child or parent domain for fathers. Lastly, a child's level of social skills was a significant predictor of child-related maternal stress for children with autism. This pattern was not seen in fathers of these children. Implications for early intervention program modifications, such as increasing family support and incorporating adjunctive parent interventions for parents with elevated levels of stress are discussed (Baker-Ericzen, Brookman-Frazee and Stahmer, 2005, pp. 194-204).

#### 2.4.2 Studies about resilience

There are no Arabic studies study about the resilience among parents of children with ASD; so the researcher only discuss foreign studies about this topic.

#### Resilience in Families with an Autistic Child

The primary aim of this study was to identify characteristics and resources that families have that enable them to adapt successfully and be resilient despite the presence of an autistic child in the family. The study was rooted within the contextual framework of the Resilience Model of Stress, Adjustment and Adaptation of McCubbin and McCubbin (1996). Parents of 34 families whose children attend a special school for autistic learners in the Western Cape, South Africa completed self-report questionnaires and answered an open-ended question. Resilience factors identified in this study include higher socioeconomic status; social support; open and predictable patterns of communication; a supportive family environment, including commitment and flexibility; family hardiness; internal and external coping strategies; a positive outlook on life; and family belief systems (Greeff, Van der & Kerry-Jan, 2010, pp. 347-355).

# Belief Systems of Families of Children with Autism Spectrum Disorders or Down Syndrome

Parents in 16 families of children with autism spectrum disorders or Down syndrome participated in a qualitative study examining family (i.e., all caregivers in the home) belief systems. All families had children who had recently entered elementary school or who were in the early years of high school. As a result of their experiences, families reported becoming more certain about what matters. Families adopted perspectives



of optimism, acceptance, and appreciation, and of striving to change the environment or to meet their children's needs as well as possible. These perspectives provided families with a sense of hope, meaning, and control over their situations. The findings indicate the strengths and resilience of families in the face of life's adversities. Implications for families and service providers are discussed (King et al., 2009, pp. 50-64).

# Creating a Different Kind of Normal: Parent and Child Perspectives on Sibling Relationships when One Child in the Family Has Autism Spectrum Disorder

This article reports findings from a study that explored the nature of sibling relationships when one child in the family has autism. It employs a collective case study approach to capture the perspectives of parents and young children (aged four to seven years) from three different families. A multifaceted exploration of sibling relationships was achieved by employing qualitative methods including in-depth interviews with parents and children and naturalistic observations. Family systems theory and ecocultural theory provided the theoretical backdrop to this research. The results support previous research which points to issues such as differential treatment of siblings and the development of a non-typical relationship with the sibling with autism. Where this study diverges is in its interpretation of these findings. This article challenges the subjective nature of the concept of "normalcy" which pervades the dominant discourse in disability research. It seeks to understand the resilience and processes of families as they set about creating their own kind of normal (Bachraz, & Grace, 2009, pp. 317- 330).

#### Emerging resilience in a family affected by autism

The purpose of this phenomenological study was to examine the attributes conducive to the healthy adaptation of a family despite having a child with autism to gain a better understanding of autism and the effects of autism on family life. The study comprised a non-random sample of the whole four family members, which includes the child with autism. It is often the family as a whole that is greatly affected by the diagnosis and so all members of the family were deemed essential for the results (Lori, 2008).

Using a phenomenological framework, the study comprised data collected during semi-structured interviews with the four members of one family. The participants were interviewed in a three-step process to determine if qualities of resilience would emerge. Six themes evolved from the participants' interviews and were used to answer the research questions (Lori, 2008).

Interviews were transcribed and analyzed according to phenomenological procedures seeking the essence of a family's experience of raising a child with autism. The information gathered during the interviews clarified which factors contribute to the family's resilience. The researcher gained background knowledge of the guiding principles the family has used to overcome many of the challenges of autism. As well, direction and insight intended for other families with a child with autism were gained. The contributing



characteristics and attributes that emerged from the data were: acceptance and understanding; adaptability and flexibility; self-efficacy; strength and determination; and support from family or community (Lori, 2008).

The findings support the existing understanding of factors that contribute to resilience in families affected by autism. The data collected during the interviews revealed that the participants share many of the same feelings of frustration, guilt and stress as other families affected by autism but also attain strength and a sense of hope or optimism for the future. Once the parents were able to move through the cycle of grief their healthy adaptation became apparent. The themes derived from the lived experiences of the participants demonstrate how they have emerged from adversity with resilience (Lori, 2008).

#### **Evidence of Resilience in Families of Children with Autism**

Family resilience is a growing field of inquiry, investigating factors that contribute to a family's becoming stronger in spite of dealing with adversity. Despite the growing interest in studying family resilience, the topic has not been explored in families with children who have disabilities. This report, a part of a larger study--using both quantitative and qualitative methodologies--is an examination of factors of family resilience in the families of children with autism. Evidence of family resilience such as family connectedness and closeness, positive meaning-making of the disability, and spiritual and personal growth were identified and examined in this part of the study. The study uses a survey methodology, analysing responses to several rating scales and written responses to three open-ended questions. Survey respondents consisted of 175 parents and other primary caregivers of a child with autism -ages between 2 and 18 years. Results suggest identification of specific resilience processes, such as: making positive meaning of disability, mobilization of resources, and becoming united and closer as a family; finding greater appreciation of life in general, and other people in specific; and gaining spiritual strength. This study presents evidence that a considerable number of families of children with autism display factors of resilience--reporting having become stronger as a result of disability in the family (Bayat, 2007, pp. 702-714).

## Promoting Joint Attention in Toddlers with Autism: A Parent-Mediated Developmental Model

Joint attention, a foundational nonverbal social-communicative milestone that fails to develop naturally in autism, was promoted for three toddlers with early-identified autism through a parent-mediated, developmentally grounded, researcher-guided intervention model. A multiple baseline design compared child performance across four phases of intervention: focusing on faces, turn-taking, responding to joint attention, and initiating joint attention. All toddlers improved performance and two showed repeated engagement in joint attention, supporting the effectiveness of developmentally appropriate methods that build on the parent-child relationship. A complementary qualitative analysis explored family challenges, parent resilience, and variables that may have influenced



outcomes. Intervention models appropriate for toddlers with autism are needed as improved early identification efforts bring younger children into early intervention services (Schertz and Odom, 2007, pp. 1562- 1575).

#### 2.4.3 Comments on the literature review:

ASD considered as a new trend in researches at Gaza Strip and it seek attention in recent years so the researcher not find any direct or indirect studies about this topic in Gaza Strip so the researcher go to what will help from previous studies in Arabic countries which also few .

The researcher also go to studies in foreign countries despite difference in beliefs, ideas and trends between the parent in Gaza Strip and other parents but it the same disorder belong their children; so the researcher benefit from this review in determine the dimensions that related to this topic to help in preparing the scale that will be used in research and in identify statistical process that needed to analyze the result of subjects response on scale's questions and in result interpretation to the end of the study.

The first research question asks about the level of psychological stress among parents of children with ASD. According to the literature researched, there are no study focus on the level of psychological stress in specific but it focus on parental stress which more general concept that include between its fold the concept of psychological stress. This review of the literature has illustrated that, parents of children diagnosed with ASD consistently report significant level of stress.

From the review of previous studies that it examine the level of parental stress in general as the study of Dabrowska and Pisula (2010), Mancil, Boyd and Bedesem (2009), Davis and Carter (2008), and Abd Alqader (1997), while in this study the researcher will examine the level of psychological stress.

Also most of the previous studies consistent with that there is a high level of parenting stress among fathers and mothers of children with ASD and the level of stress in mothers is greater than in fathers as in the study of Dabrowska and Pisula (2010), Tehee, Erin; Honan and Heavy (2009) and Sabih and Sajid (2008).

The second research question asks about the level of resilience among parents of children with ASD . According to the literature researched, there are no study focus on the level of resilience among parents in specific but it focus on the family as a whole. And there are no Arabic study measure or study the level of resilience among parents of children with ASD. Study of Bayat (2007) indicate that there is a strong resilience among families with autistic child as a result of disability also he identify specific resilience process . Another study of Greef, Van der and Kerry-Jan (2010) identify resilience factors in families with autistic child which include family belief system that studied in separate study of King et. al. (2009) which indicate the same findings of the previous studies, but for the families



of ASD children not autism alone. While in the study of Lori (2008) the findings support the existing understanding of factors that contribute to resilience in families affected by autism.

In the other hand, previous studies differ from this study in that deal with autism alone not ASD also most of studies deal with family members in general not parents in specific. During the review of the content of the previous studies ,the researcher benefit in determine the dimensions that related to this thesis also helping in preparing the scale that will used in the research and in identify the statistical process that needed in the research to analyze the result of subjects response on scales and in result interpretations at the end of the study.

#### 2.4.4 Conclusion:

This chapter reviewed the theoretical and empirical research on the experiences of parents with children living with ASD. To further the understanding of the relationships between psychological stress and resilience among parents with a child diagnosed with ASD, a study was conducted which specifically explored the relationship between these variables. The following chapter discusses this study in detail.



# Chapter 3

# Research Design and

Methodology



## **Chapter Three**

## **Research Design and Methodology**

## 3.1 Purpose

In this chapter the main methodological parts will be indicated by the researcher as it used to examine the relationship between psychological stress and resilience experienced by parents of children diagnosed with ASD. Chapter 3 includes; review of the research method, study design appropriateness, a discussion of the population, sampling method and period of the study. In addition, study place, eligibility criteria, ethical consideration, study instruments (description of both psychological stress scale, Resilience scale and Demographic Information Sheet), data collection procedures and data analysis procedures. The following sections describe the specific method and results of each phase individually.

The researcher builds a complex, holistic picture, analyzes words, reports detailed views of informants, and conducts the study in a natural setting.

## 3.2 Research method and design appropriateness

This study make use of cross-sectional non-experimental descriptive correlational design, in order to answer study questions about the level of psychological stress among parents of children diagnosed with ASD, and the level of resilience and the relationship between them also its relationship with child characteristics. The researcher adopted the selection of descriptive design in which the investigator deliberately seeks to examine links (or relationships) between variables without introducing an intervention (Walker, 2005, p. 4) because this type of studies is useful for descriptive purposes. The descriptive correlational design study the relationships among variables and describe the degree of relationship between variables quantitatively by using quantitative scales, one purposes of descriptive correlational design is to describe the relationships between variables, or to use this relationships to make predictions related to these variables (Agha, 2000). This design is relatively easy and economically to perform, which is needed in the present study which has limited resources, since there is no institutional fund for such a study. Also this design enables the researcher to meet the study objectives in short time.

It was hypothesized that higher levels of psychological stress, as measured by the Psychological Stress Scale, would correlate with lower levels of resilience, as measured by the Resilience scale and vice versus. In the current study, the researcher used quantitative method to collect data from the participant through answering the items in the various existing scales.



#### 3.3 Study population

The study population includes all the parents (fathers and mothers) of children diagnosed with ASD. The age range of parents was 17-76 years. The age range of children was between 3-13 years from both sexes. The population was collected from Community Mental Health Rehabilitation Center in Gaza Strip and the total of the population is 390 parent according to total number of registered patients in psychiatric hospital that collected by the researcher from the setting of the study.

## 3.4 Eligibility criteria

The inclusion criteria of the study were the parents of registered children with ASD in Community Mental Health Rehabilitation Center (psychiatric hospital), diagnosed by psychiatrist according to DSM-IV from both sexes and age range was between 3-13 years .And age range of parents was 17-67 from both sexes in Gaza Strip .There was no significant exclusion criteria in this study.

## 3.5 Sample and sampling technique:

This is a descriptive study which included 195 child with confirmed diagnosis of ASD (girls and boys) aged 0-13 year of age, who were registered in the psychiatric hospital in Gaza Strip, the parents of those children was the population of the study which expected to be 390 parents they participated voluntarily in this study. The sample was selected through stratified random sample as the population heterogeneous; so this type of samples considered the best one. The sample consist of 193 participants that calculated by Stephen Thompson formula as the following:

$$n = \frac{N \times p(1-p)}{[N-1 \times (d^2 \div z^2)] + p(1-p)]}$$
 (Hassan, 2010)

To apply stratified random sample method of collecting data, the population divided into five strata that include five governorate, as indicated in the table (3.1).

Table (3.1) The total population size according to governorate

Address	frequency
North governorate	86
Gaza	90
Middle Zone	64
Khanyounis	50
Rafah	10
Total	390



From each stratum a sample, of pre-specified size, is drawn independently in different strata by a simple random sample selection scheme that is used in each stratum, to allocate over all sample size n among L strata (Barakat, 2007). That is how to find n = (size of strata divided size of population) then multiply by the size of sample. According to this formula the sample size of each governorate that must be selected randomly are Gaza equal 44, North governorate equal 42 Middle Zone equal 32, Khanyounis equal 24, and Rafah equal 5 subjects. Then 193 questionnaires were distributed to the research sample and one hundred and sixty questionnaires was returned from them; so the response rate was higher than 75%.

## 3.6 Setting of the study

The study was carried about parents of children with ASD in five different areas of Gaza Strip (North Gaza, Gaza, Middle Zone, Khan younis and Rafah). The sample was collected from Community Mental Health Rehabilitation Center. Filling the questionnaire took place in the family home.

Home—based data collection despite its strength there are many limitations as there are areas with difficult or no transport, this forced the researcher to visit the parents by foot. Also, poor road conditions, weather conditions and the possibility of the existence of crimeridden areas put the researcher in high emotional stress, and affect the capturing data by home visit. Although the body of support for the equivalence of home visit-based data is growing, further research is needed before definitive conclusions can be stated.

## 3.7 Period of the study

The study was conducted on January 2012 to March 2013 and the questionnaires were completed by the parents during January 2013 from 12 p.m to 7 p.m; the researcher worked three days a week with an average 12 questionnaire per day, this ensured that data available about the parents and children in the medical records and were checked by the researcher. The estimate duration of the study approximately was 15 months.

#### 3.8 Data collection

The data collected - in the presence of the researcher - from the parents by using structured self-administered questionnaire by which the respondents complete the instrument themselves, using a paper and pen format. In this study Likert scale was used. The first step in gathering the data involved the completion of the resilience scale ,then psychological stress scale and demographic information sheet. The psychological stress scale took approximately fifteen to twenty minutes, while Resilience Scale took ten to fifteen minutes to be completed, and the demographic information sheet lasted for three to five minutes. The researcher from Islamic University contacted general director of mental health, who gave their permission to conduct the research. Detailed information about the study's scale was given to the parents by the researcher using their own Arabic language, before consent to participate was obtained, see appendix (C).



Difficulties faced the researcher through data collection are that the participants who completed the survey might have been biased in their answers based on their reaction to prior questions. For example, the potential for a participant to feel a sense of empowerment and satisfaction with the way in which he or she is coping and managing based on the questions asked may influence the way in which they responded to the following questions especially in that the participants answer two scales of Psychological stress and resilience that may be contradictory in its content. The researcher overcome this difficulty by allow break time for the participants after filling each questionnaire, also Demographic information sheet was ordered in the last of package of scales introduced to the participant to be sure that the answers will not be biased.

## 3.9 Pilot sample:

The researcher conduct a pilot study on sample of 30 individual to test homogeneity of items, and the ability to test the phenomenon that wanted to be measured through some statistical process, and the point of view of the respondents toward items of the questionnaire to be suitable for their level of knowledge and abilities. Also the researcher committed to the conditions of scientific research during the distribution of the questionnaire on the study sample as the following:

There is enough time to answer items and no limited time for answers, no right or wrong answer, the respondent must answer item individually without any interference from any person except for some clarification that not lead to guide the respondent on the answer. The respondent should answer all items without exception, see appendix (B).

## 3.10 Instruments of the study

In order to conduct a research study and to get good and sure results, one of the most important roles to achieve that mission is to use the most suitable instrument. Several features should be taken into consideration when choosing an instrument; mainly the acceptability, applicability, procedural adequacy, reliability and validity. In the current study the researcher used the measurement that were designed to meet the goals of the study, which include Psychological Stress Scale, Resilience Scale, and Demographic Information Sheet.

## 3.10.1 Psychological Stress Scale

The researcher used Psychological Stress Scale which was prepared by Abd Al-Aziz Al-Shakhs and Zidane Al- Sartawi at year (1998) on United Arab Emirates environment (Appendix D) in order to identify the level of psychological stress experienced by parents of mentally retarded children, deaf, visually and physically handicapped children. This scale is appropriate for this study due to high similarity between the experience of parent with mentally or physically handicapped children and the parents of children with ASD also due to suit the age group and ease of scale's items. Psychological Stress Scale consist of seven subscales saturated by all the items, namely psychological and organic symptoms, feelings of despair and frustration, cognitive and psychological



problems of the child, family problems, anxiety for the future of the child, the problems of performance independence of the child, and inability to bear the burdens of child.

To make sure that the scale is appropriate for the Palestinian environment, the population and the age group and that the scale is valid and reliable, the researcher tracking the steps of Al-Shakhs and Al-Sartawi, and it was clear that their actions are accurate and they committed in terms of the scientific research, and led the researcher to build scale is characterized by validity through applying the scale on a sample of parents of children of ASD in the Palestinian's environment in the same age group that has been applied the scale in Emirate's environment, the sample consist of 30 parents of children with ASD of the ages range 17-76 year and the scale consist from 80 items. The items no. 80 and 68 was deleted and the item 39 of behaviors is polite was replaced with behaviors frequent, stereotyped and spontaneous before being applied to the pilot sample due to non-suitability for symptoms of ASD, also the word disabled replaced with the patients of ASD, also the items 17 and 20 were merged because they are nearly alike. Many other items was replaced and deleted. The sum total of items become 61 items. In addition ,the third and sixth subscale were merged due to high similarity between the items of those subscales and the new subscale named The child problems, which considered the third subscale, see Appendix (G).

#### 3.10.1.1 Correction of the scale:

Correction of scale follows scalar for answer in Likerts way to measure trends which include five degrees (Never occur: one degree, rarely occur: two degrees, occur few: three degrees, it happens a lot: four degrees, always occur: five degrees), and thus the degree to which can be obtained by participant ranged between 61, 305. And the researcher took into account in formulating expressions measure to be in the first person, and do not use a formula exile, so as not to confuse the respondent, and that have a single meaning only one offset grades (5 - 4 - 3 - 2 - 1), respectively, each gateway if the direction of the item positive some attribute measured by, and grades (1 - 2 - 3 - 4 - 5), respectively, for each item if a negative trend towards attribute. High grades obtained by the parent on the dimensions of the scale indicates that the family face severe psychological stress because of their child's disorder.

## 3.10.1.2 Validity and reliability of Psychological stress scale:

Before distribution of the scale on the study sample its important to assess the quality of this scale, which include comprehensibility, objectivity, validity and reliability (Hassan, 2006). Those conditions will be demonstrated in details for each scale of the study.

### Validity of Psychological stress scale

Validity defined as comprehensive assessment which provides physical evidence and theoretical justification necessary for the stability of the adequacy and appropriate on any interpretation or action builds on test score or it range of test to measure what it developed to measure. It consist from three parts which include content validity, construct



validity and criterion related validity (Hassan, 2006). The following section will describe validity in details.

## A. Content Validity

Content validity can be defined as the quality of a sample of items that contained in the measuring tool and the extent of their representation of the subject matter of interest (Hassan, 2006). It was conducted by consulting a group of experts so it usually called validity of arbitrators. The researcher introduce the questionnaire to nine experts in the field of psychology and education in many Universities in Gaza Strip, see appendix (E). They was requested to evaluate and identify whether the items agreed with the scope of the study and the extent to which these items reflect the concept of the research problem and that the questionnaire was designed well enough to provide relations and tests between variables, see appendix (F) and (G). The experts did agree that the questionnaire was valid and suitable enough to measure the concept of interest with some amendments, no modification on the scale was suggested by experts.

#### **B.** Construct validity

Construct validity describe the degree to which the scale measures the hypothesized composition or theoretical feature that was prepared to be measured (Hassan, 2006). It calculated through measuring the Pearson correlation coefficients between the whole subscale and each items fall in this subscale, Where calculated correlation coefficients between items and subscale belonging to it which ranged between 0.906- 0.310, and this value is mostly high and significant at 0.05 except for items 42,44 and 55.

Also correlation coefficients was calculated for subscales with each other, which ranged between 0.372 to 0.025, most of them significant at 0.05, except for the first subscale which not correlated with other subscales, lastly, the correlation coefficients between each subscale and the whole scale all of subscales were correlated and statistically significant at 0.05, see table (3.2). This indicate that the scale has high internal consistency, which is in turn an indicator of validity.



Table (3.2) Correlation coefficients between each subscale and the whole psychological stress scale

		1	orogical i					
		First	Second	Third	Fourth	Fifth	Sixth	Total
		subscale	subscale	subscale	subscale	subscale	subscale	Scale
First	Pearson Correlation	1	.439*	.112	.025	.303	.350	.654**
subscale	Sig. (2-tailed)		.015	.556	.897	.104	.058	.000
Second	Pearson Correlation	.439*	1	.559**	.577**	.640**	.465**	.862**
subscale	Sig. (2-tailed)	.015		.001	.001	.000	.010	.000
Third	Pearson Correlation	.112	.559**	1	.717**	.496**	.404*	.717**
subscale	Sig. (2-tailed)	.556	.001		.000	.005	.027	.000
Fourth	Pearson Correlation	.025	.577**	.717**	1	.520**	.372*	.648**
subscale	Sig. (2-tailed)	.897	.001	.000		.003	.043	.000
Fifth	Pearson Correlation	.303	.640**	.496**	.520**	1	.516**	.752**
subscale	Sig. (2-tailed)	.104	.000	.005	.003		.003	.000
Sixth	Pearson Correlation	.350	.465**	.404*	.372*	.516**	1	.620**
subscale	Sig. (2-tailed)	.058	.010	.027	.043	.003		.000
Total	Pearson Correlation	.654**	.862**	.717**	.648**	.752**	.620**	1
Scale	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

#### 3.10.1.3 The reliability of psychological stress scale:

The reliability means the confidence of the scores obtained on the scale without external interfering, or giving the same results if the scale reapplied. It was estimated by using internal consistency method which reflect the extent to which items correlated to each other within the scale and with the total scale, this method become clear by applying the standard method Alpha Cronbach, which means average of transactions resulting 7from fragmentation of the test in different ways (Hassan, 2006). Alpha Cronbach for the total degree of the scale equal 0.93, while ranged between 0.614 - 0.917 for the seven subscales, as presented in table (3.3), this reflect high reliability of the scale.



<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

Table (3.3) Cronbach's Alpha method for psychological stress scale

No.	Subscales	No. of items	Cronbach's Alpha
1	Psychological and organic symptoms	17	0.917
2	Feeling of despair and frustration	11	0.900
3	Problems of the child	15	0.870
4	Family problems	5	0.758
5	Anxiety for the future of the child	9	0.749
6	Inability to bear burdens of the child	4	0.614
	Total scale	61	0.939

In other hand, reliability was measured by using Split- Half Method which described as splitting the scale to two equal parts ,mostly even and odd items after applied on one group of subjects. In this method the researcher used Spearman- Brown Equation to test reliability which equal 0.968 for the total degrees of scale , this result indicate high reliability.

After the tests of validity and reliability was applied on Psychological Stress Scale, its indicate high validity and reliability so no modification on items or scale as a whole, see appendix (H).

#### 3.10.2 Resilience scale:

It's necessary that the researcher should prepare scale to measure resilience among parent of children diagnosed with ASD in Gaza Strip ,which appropriate for cultural ,social and political reality also to be suitable for study population. To achieve this the researcher revised theoretical framework and previous studies in the field of resilience also many of scales, for example:

- Multiracial Challenges and Resilience Scale designed by (Salahuddin, 2008)
- The Brief Resilient Coping Scale designed by (Sinclair & Wallston, 2004)
- Resiliency Attitudes Scales designed by (Biscoe & Harris, 1994)
- Resilience scale designed by (Wagnild & Young, 1993)

From the review to the pervious scales it was clear that the researcher can benefit only from the statement of these scales and can't depend on it on measurement of the resilience level for study population due to non-suitability with features of Palestinian parents, as it measure resilience levels for population different from this study population also many of these scales measure resilience level in the normal conditions not in the conditions of Israeli occupation and siege as in Gaza Strip.

For the pervious reasons, the researcher designed new scale appropriate for the study and its population and prepared scale *according to the following steps*:



Through meeting with group of parents and ask them exploratory question and then the researcher derive the items of the scale using parent's answers. This question is "how can you cope with the presence of a child with ASD in your family, mention factors help you in dealing with the experience of having such a child from your point of view". They have many answers from which the researcher take items of the questionnaire.

Determination of the scale's subscales that derived from the theoretical framework of the study ,which include individual ,family and community subscales and it defined operationally as indicated in the following:

The *individual subscale* personal qualities which include psychological or physical processes that act as protective or risk factors that parent internally possess in the presence of the child diagnosed with ASD which include many subscales as optimism, self-efficacy, problem solving, religion, cognitive ability, control, self-esteem supportive believes, social skills and coping.

The *family subscale* protective or risk processes that parents have within their home in the presence of the child diagnosed with ASD which include many subscales as connectedness, support and availability between family members.

The *community subscale* a group of qualities outside the home environment within the community of the parents who have a child with ASD which include community's safety and support, peer support and neighbors support that protect the individuals from risks or expose them to it.

Then, items of each subscale wording after definition of the subscale .The items framed in clear ,simple and easy language away from complexity or lengthy, so it were well determined short and appropriate for the participant age and cognitive ability also suitable for Palestinian environment. The number of items in the initial questionnaire are 50 items which distributed for the previous subscales as the following the first dimension individual subscale contain 30 items, the second dimension family dimension contain 9 items, while the third subscale community subscale contain 11 items.

In other hand, description of the scale aim to measure the level of resilience among parents of children diagnosed with ASD in Gaza Strip which contain of 55 items in initial form of the scale, consist of 54 positive items and 1 negative item, see appendix (I).

#### **3.10.2.1** Correction method for the questionnaire:

The researcher used Likert scale in correction, the degree 1,2,3,4,5 for positive items and 5,4,3,2,1 for negative items respectively. The higher scores of the respondent on the scale ,indicate the higher level of resilience and vice versa. And all questions follows Likart scale as the following: Strongly agree was coded as 1, agree :2, don't know:3, and strongly agree:4, disagree:5.



#### 3.10.2.2 Validity of Resilience scale

It consist from three parts which include content validity, construct validity and criterion related validity (Abou-Hashem, 2006). The following section will describe validity in details.

#### A. Content Validity

Content validity was conducted by consulting a group of experts so it usually called validity of arbitrators. The researcher introduce the questionnaire to nine experts in the field of psychology and education in many Universities in Gaza Strip, see appendix (E). They was requested to evaluate and identify whether the items agreed with the scope of the study and the extent to which these items reflect the concept of the research problem and that the questionnaire was designed well enough to provide relations and tests between variables, see appendix (F) and (I). The arbitration lead to modification ,and deleting 10 items to increase accuracy of the questionnaire, see appendix (J). The experts did agree that the questionnaire was valid and suitable enough to measure the concept of interest.

### **B.** Construct validity

Construct validity calculated through measuring the Pearson correlation coefficients between the whole subscale and each items fall in this subscale, Where calculated correlation coefficients between items and subscale belonging to it which ranged between 0.906 -0.310, and this value is mostly high and significant at 0.05 except for items 42,44 and 55.

Also correlation coefficients was calculated for subscales with each other, which ranged between 0.260 to 0.880, most of them significant at 0.05, except for the second subscale which not correlated with third subscales, lastly, the correlation coefficients between each subscale and the whole scale all of subscales were correlated and statistically significant at 0.05, see table (3.4). This indicate that the scale has internal consistency, which is in turn an indicator of validity.



Table (3.4) Correlation coefficients between each subscale and the whole resilience scale

		Total			
			Third	Third	Third
		Scale	subscale	subscale	subscale
Total scale	Pearson Correlation	1	.880**	.718**	.708**
	Sig. (2-tailed)		.000	.000	.000
First subscale	Pearson Correlation	.880**	1	.537**	.396*
	Sig. (2-tailed)	.000		.002	.030
Second subscale	Pearson Correlation	.718**	.537**	1	.260
	Sig. (2-tailed)	.000	.002		.165
Third subscale	Pearson Correlation	.708**	.396*	.260	1
	Sig. (2-tailed)	.000	.030	.165	

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

#### 3.10.2.3 Reliability of the Resilience scale

Reliability of an instrument is the degree of consistency with which it measures the attribute it is supposed to be measuring. The reliability can be achieved by using Cronpach's Alpha coefficient and Half-Split Method through the SPSS software.

#### A. Cronbach's Coefficient Alpha

This method is used to measure the reliability of the questionnaire between each field and the mean of the whole fields of the questionnaire. The normal range of Cronbach's coefficient alpha value between 0.0 and +1.0, and the higher values reflects a higher degree of internal consistency (Brakat, 2007). As shown in table (3.5) the Cronbach's coefficient alpha was calculated and the results were in the range from 0.859 and 0.910, and the general reliability for all items equal 0.915. This range is considered high; the result ensures the reliability of the questionnaire.



<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed)

Table (3.5)

Cronbach's Alpha method for Reliability

Number	Section	No. of items	Cronbach's Alpha
1	Individual subscale	25	0.870
2	Family subscale	8	0.910
3	Community subscale	12	0.859
	Total	45	0.915

#### **B.** Half Split Method

This method depends on finding Pearson correlation coefficient between the means of odd rank questions and even rank questions of each field of the questionnaire. Then, correcting the Pearson correlation coefficients can be done by using Spearman Brown correlation coefficient of correction. The corrected correlation coefficient (consistency coefficient) is computed according to the following equation:

Consistency coefficient = 2r/(r+1), where r is the Pearson correlation coefficient. The normal range of corrected correlation coefficient 2r/(r+1) is between 0.0 and + 1.0 (Brakat, 2007), the correlation coefficients value is 0.870 and the general reliability for all items equal 0.930 , and the significant ( $\alpha$ ) is less than 0.05 so all the corrected correlation coefficients are significance at  $\alpha$  = 0.05. It can be said that according to the Half Split method, the dispute causes group are reliable.

After the tests of validity and reliability was applied on Psychological Stress Scale, its indicate high validity and reliability so no modification on items or scale as a whole, see appendix (K).

## 3.10.3 Demographic Information Sheet

The following descriptive items are solicited from demographic questionnaire that divided into two parts, first questions about parents include: age, gender, employment ,place of residence, disorders complains of, educational level, monthly income and marital status. Secondly, questions about the child include child's age, gender, and order in the family as described in details in appendix (L).

#### 3.11 Ethical considerations

The ethical considerations and procedures are very important conditions in applying the research. On important procedure is consent form in which the participants have the



right to refuse or participate in this study. Every subject in the study will have an explanatory letter about the study, the researcher will explain to all parents the important issues in the research. Consent form is optional and emphasis confidentiality, ethical concepts, respect for trust and respect for people who have been considered.

Immediately after receiving the packet, the researcher separated the consent form from the completed questionnaires, see appendix (D). The packet contained the following:

- 1. Instructions.
- 2. Informed Consent.
- 3. Demographic Information sheet.
- 4. Psychological Stress Scale.
- 5. Resilience Scale.

#### 3.12 Statistical Analysis:

To achieve the research goal, researcher used the statistical package for the Social Science for manipulating and analyzing the data. The collected data processed and analyzed by the researcher under the supervision of the academic supervisors.

#### Statistical methods are as follows:

- Frequencies and Percentile
- Cronbach-Alpha Test
- Spearman–Brown Coefficient
- Person correlation coefficients
- Independent samples t test
- One way ANOVA test

In the following chapter the results of the various statistical analysis will be reported.



# Chapter 4

Data Analysis and Results



## **Chapter Four**

## **Data Analysis and Results**

#### 4.1 Introduction:

This study include the psychological stress and resilience among parents of children diagnosed with autism spectrum disorders ,also the relationship between psychological stress and resilience and its relationship with some demographic variables of both parent and child. This

study applied on Gaza Strips governorates .This chapter will display the results according to the sequence of the study's questions. In this chapter the researcher clarified the main results of the study after data collection and analysis by using statistical tools of sample of 160 subjects. The researcher used Statistical program for social sciences (SPSS) for data entry and analysis. The researcher used many statistical tests like descriptive statistics, frequencies, percentage, mean, standard deviation. In addition to differences between study variables using t- independent test and one- way ANOVA test.

## **4.2 Descriptive statistics for sample of study:**

The following tables illustrate the descriptive statistics of the study samples which consist from two parts the first, for the parents and the second, for the child:

#### 4.2.1 Personal data for the parents

#### Age:

Table (4.1) illustrate the distribution of the study sample according to the parent's gender, its frequency and percentage illustrated as the following:

Table (4.1) Sample size according to the parent's age

Age	Frequency	Percentages
20-30 year	57	38.5
31-40 year	57	38.5
up 40 year	46	23.1
Total	160	100.0



#### Gender:

Table (4.2) show the distribution of the study sample according to the parent's gender, its frequency and percentage illustrated as the following:

Table (4.2) Sample size according to the gender

Gender	Frequency	Percentages
Male	74	46.3
Female	86	53.8
Total	160	100.0

## **Occupation:**

Table (4.3) show the distribution of the sample according to the occupation, frequency and percentage for each one as the following:

**Table (4.3) Sample size according to the occupation** 

Occupation	Frequency	Percentages
Work	73	45.6
Not work	87	54.4
Total	160	100.0

#### Address:

Table No. (4.4) show the distribution of the sample on Gaza Strip, frequency and percentage for each governorate as the following

**Table (4.4) Sample size according to the address** 

Address	Frequency	Percentages
North governorate	38	46.9
Gaza	75	23.8
Middle- Zone	18	11.3
Khanyounis	24	15
Rafah	5	3.1
Total	160	100.0



#### **Disorders suffering from:**

The table (4.5) illustrate the frequency and percentage of disorders that parents of children with ASD suffering from for the study sample.

Table (4.5) Sample size according to the disorder

Disorder	Frequency	Percentages
Physical disorders	12	7.5
Psychiatric disorders	3	1.9
Both disorders	0	0
Free from disorders	145	90.6
Total	160	100.0

#### **Marital status:**

Table (4.6) show the distribution of the sample according to the marital status ,its frequency and percentage illustrated as the following:

Table (4.6) Sample size according to the marital status

Marital status	Frequency	Percentages
Married	157	98.1
Separated without divorce	2	1.3
Divorced	1	0.6
Widower	0	0
Total	160	100.0

#### **Education:**

The table (4.7) illustrate the frequency and percentage of the educational level for the study sample.

Table (4.7) Sample size according to the educational level

Education	Frequency	Percentages
Elementary and		
	22	13.8
preparatory		
Secondary	65	40.6
University	73	45.6
Total	160	100.0



#### Monthly income:

Table (4.8) show the distribution of the study sample according to the parent's monthly income ,its frequency and percentage illustrated as the following:

Table (4.8) Sample size according to the monthly income

Monthly income	Frequency	Percentages
less than 500 NIS	70	43.8
500-1000 NIS	19	11.9
1100-2000 NIS	36	22.5
2100- 3000 NIS	22	13.8
more than 3000 NIS	13	8.1
Total	160	100.0

#### 4.2.2 Personal data for the child

#### Age:

Table (4.9) show the distribution of the study sample according to the sociodemographic characteristics of the child which include age, gender ,and order within the family ,its frequency and percentage illustrated as the following:

Table (4.9) Sample size according to the child's age, gender, and order within the family

No.	Variables	Sections	Frequency	Percentages
1.	Age	3 to 6 years	96	60
		more than 6 year to 13 year	64	40
2.	Gender	Male	111	69.4
		Female	49	30.6
3.	Order	The first	31	19.4
		The last	19	11.9
		Other	110	68.8



#### 4.5 Statistical analysis for the research's questions:

#### The first question

What is the **level of psychological stress** among parents of children diagnosed with ASD in Gaza Strip?

The research apply descriptive statistics to identify the level of the psychological stress, according to these statistics, the mean, standard deviation, minimum and maximum value, and weight mean for total degree of psychological stress in addition to its subscales will illustrated in table (4.10)

Table (4.10) Descriptive statistics for Psychological Stress scale and its subscales

No.	Subscale	Item's no.	Mean	Std. Deviation	Minimum value	Maximum	Weight mean*	Rank
						value		
1.	Psychological & organic symptoms	17	44.50	13.96	20	76	52.35	fifth
2.	Feeling of despair and frustration	11	27.46	10.06	11	54	49.92	Sixth
3.	Child's problems	15	55.31	9.29	28	72	73.74	Third
4.	Family problems	5	16.18	4.69	5	25	64.72	Fourth
5.	Anxiety for the future of child	9	35.45	6.10	15	45	78.77	First
6.	Inability to bear burdens of child	4	14.98	3.12	4	20	74.49	Second
Total	Psychological stress scale	61	193.91	34.33	114	274	63.57	

<sup>\*</sup>weight mean calculated by dividing mean on total score then multiply the result in 100%.

The pervious table illustrated that the total level of psychological stress among parents of children diagnosed with ASD was slightly high, as the weight mean was (63.57%). Also, the previous table showed that the fifth subscale is ranked as the first one, then the sixth subscale, after that third subscale, then fourth subscale followed by the first subscale while the second subscale considered the last one; so the researcher conclude that the main reason for stress is the anxiety for the future of child, this anxiety stem from vague nature of ASD in general and sometimes decrease knowledge about the disorder especially



in Gaza Strip as this subject remained covered, and few only spot the light on it. Feeling of despair and frustration considered the last one due to spiritual values and religious belief among parents which direct them toward hopefulness and faith that having a child with ASD is a test from God.

#### The second question

What is the **level of resilience** among parents of children diagnosed with ASD in Gaza Strip?

The research apply descriptive statistics to identify the level of the resilience, according to these statistics, the mean, standard deviation, minimum and maximum value, and weight mean for total degree of resilience in addition to resilience subscales will illustrated in table (4.11)

Table (4.11) Descriptive statistics for total degree of resilience scale and subscales

Scale &	No.	Total	score	Mean	S.D.	Minimum	Maximum	Weight	Rank
subscales	of items	High	Low			value	Value	mean*	
Individual subscale	25	125	25	101.4	10.71	58	123	81.18	2 <sup>nd</sup>
Family subscale	8	40	8	33.02	5.70	15	40	82.55	1 <sup>st</sup>
Communit y subscale	12	60	12	42.05	7.89	23	58	70.08	3 <sup>rd</sup>
Resilience scale (Total)	45	225	45	176.5 6	19.23	108	214	78.47	

<sup>\*</sup>weight mean calculated by dividing mean on total score then multiply the result in 100%

The pervious table illustrated that the total level of resilience among parents of children diagnosed with ASD was moderately high, as the weight mean was (78.47%). Also, table showed that the second subscale is ranked as the first one, then the first subscale, while the third subscale considered the last one.

#### The third question

Is there a relationship between the level of **psychological stress** and the level of **resilience** among parents of children diagnosed with ASD in Gaza Strip?

To answer this question, Pearson correlation was used between psychological stress and resilience among parents of children diagnosed with ASD, and the results indicated that the p-value equal 0.039 which is less than 0.05, and the value of Pearson correlation is equal -,164 which is more than the critical value which is equal 0.246 that means there is a week



negative relationship between psychological stress and resilience at significant level  $\alpha = 0.05$ .

Table (4.12) Correlations between psychological stress and resilience

		Resilience level	Psychological stress level
Resilience level	Pearson Correlation	1	164 *
	Sig. (2-tailed)		.039
	N	160	160
Psychological stress	level Pearson Correlation	164 *	1
	Sig. (2-tailed)	.039	
	N	160	160

#### The fourth question

Are there a significant differences about the **psychological level** among parents of children diagnosed with ASD in Gaza Strip due to the following **socio-demographic characteristics** of the parents (age, gender, occupation and educational level) at significant level  $\alpha = 0.05$ ?

### This question divided into sub-questions as the following:

Are there a significant differences about the **level of psychological stress** among parents of children diagnosed with ASD in Gaza Strip due to **parent's age** at significant level  $\alpha = 0.05$ ?

To answer the question the researcher used the one way ANOVA and the result illustrated in table (4.13) which show that the p-value equal 0.179 which is greater than 0.05 and the value of F test equal 1.267 which is less than the value of critical value which is equal 3.07, which means that there are no statistical differences about the psychological stress's level among parents of children diagnosed with ASD in Gaza Strip due to parent's age at significant level  $\alpha=0.05$ .

Table No. (4.13) One way ANOVA test for difference in the psychological stress's level due to parent's age

Field	Source	Sum of Squares	df	Mean Square	F value	Sig.(P- Value)
The psychological stress's	Between Groups		32	1417.3	1.267	0.179
level among parents and	Within Groups	142093.12	127	1118.8	1.207	0.175
parent's age	Total	187448.77	159			



Critical value of F at df "2,117" and significance level 0.05 equal 3.07

Are there a significant differences about the **level of resilience** among parents of children diagnosed with ASD in Gaza Strip due to **parent's age** at significant level  $\alpha = 0.05$ ?

To answer the question the researcher used the one way ANOVA and the result illustrated in table (4.14) which show that the p-value equal 0.767 which is greater than 0.05 and the value of F test equal ,789 which is less than the value of critical value which is equal 3.07, which means that there are no statistical differences about the resilience's level among parents of children diagnosed with ASD in Gaza Strip due to parent's age at significant level  $\alpha = 0.05$ .

Table (4.14) One way ANOVA test for difference in resilience level due to parent's age

Field	Source	Sum of Squares	df	Mean Square	F value	Sig.(P- Value)
	Between Groups	9855.98	32	1417.3	0.789	0.767
The resilience's level among	Within Groups	48999.26	127	1118.8	0.767	0.707
parents and parent's age	Total	187448.77	159			

Critical value of F at df "2,117" and significance level 0.05 equal 3.07

Are there significant differences about the **psychological stress's level** among parents of children diagnosed with ASD in Gaza Strip due to **parent's gender** at significant level  $\alpha = 0.05$ ?

To answer the question the researcher used the Independent Samples Test and the result illustrated in table (4.15) which show that the p-value equal 0.019 which is less than 0.05 and the absolute value of T test equal -2.37 which is less than the value of critical value which is equal 1.98, that's means there is a statistical differences about the psychological stress's level among parents of children diagnosed with ASD in Gaza Strip due to parent's gender at significant level  $\alpha=0.05$ .



Table (4.15) Independent Samples Test for difference in psychological stress's level due to parent's gender

Field	Gender	N	Mean	Std. Deviation	T	P- value
the psychological stress's level among parents of children diagnosed with	Male	74	187.05	32.93	-2.37	0.019
ASD in Gaza Strip due to parent's gender	Female	86	199.81	34.60		

Critical value of t at df "118" and significance level 0.05 equal 1.98

Are there significant differences about the **resilience's level** among parents of children diagnosed with ASD in Gaza Strip due to **parent's gender** at significant level  $\alpha = 0.05$ ?

To answer the question the researcher used the Independent Samples Test and the result illustrated in table (4.16) which show that the p-value equal 0.421 which is greater than 0.05 and the absolute value of T test equal 0.806 which is less than the value of critical value which is equal 1.98, that's means there are no statistical differences about the resilience's level among parents of children diagnosed with ASD in Gaza Strip due to parent's gender at significant level  $\alpha=0.05$ .

Table (4.16) Independent Samples Test for difference in the resilience's level due to parent's gender

Field	Gender	N	Mean	Std. Deviation	T	P- value
the resilience's level among parents of children diagnosed with ASD in	Male	74	177.89	19.62	0.806	0.421
Gaza Strip due to parent's gender	Female	86	175.4	18.94		

Critical value of t at df "118" and significance level 0.05 equal 1.98

Are there significant differences about the **psychological stress's level** among parents of children diagnosed with ASD in Gaza Strip due to **occupation** at significant level  $\alpha = 0.05$ ?

To answer the question the researcher used the Independent Samples Test and the result illustrated in table (4.17) which show that the p-value equal 0.042 which is less than 0.05 and the absolute value of T test equal -2.024 which is more than the value of critical value which is equal 1.98, that's means there is a statistical differences about the



psychological stress's level among parents of children diagnosed with ASD in Gaza Strip due to parent's gender at significant level  $\alpha = 0.05$ .

Table (4.17) Independent Samples Test for difference in psychological stress's level due to parent's occupation

Field	Gender	N	Mean	Std. Deviation	T	P- value
the psychological stress's level among parents of children diagnosed with	Work	73	187.97	31.03	-2.024	0.042
ASD in Gaza Strip due to parent's gender	Not Work	87	198.89	36.30		

Critical value of t at df "118" and significance level 0.05 equal 1.98

Are there significant differences about the **resilience's level** among parents of children diagnosed with ASD in Gaza Strip due to **occupation** at significant level  $\alpha = 0.05$ ?

To answer the question the researcher used the Independent Samples Test and the result illustrated in table (4.18) which show that the p-value equal 0.165 which is greater than 0.05 and the absolute value of T test equal 1.39 which is less than the value of critical value which is equal 1.98, that's means there are no statistical differences about the resilience's level among parents of children diagnosed with ASD in Gaza Strip due to parent's gender at significant level  $\alpha=0.05$ .

Table (4.18) Independent Samples Test for difference in the resilience's level due to parent's occupation

Field	Gender	N	Mean	Std. Deviation	T	P- value
the resilience's level among parents of children diagnosed with ASD in	Work	73	178.87	18.74	1.39	0.165
Gaza Strip due to parent's gender	Not work	87	174.63	19.52		

Critical value of t at df "118" and significance level 0.05 equal 1.98



Are there significant differences about the **level of psychological stress** among parents of children diagnosed with ASD in Gaza Strip due to **educational level** at significant level  $\alpha = 0.05$ ?

To answer the question the researcher used the one way ANOVA and the result illustrated in table (4.19) which show that the p-value equal 0.697 which is less than 0.05 and the value of F test equal 0.362 which is greater than the value of critical value which is equal 3.07 , that's means there is a statistical differences about the level of psychological stress among parents of children diagnosed with ASD in Gaza Strip due to educational level at significant level  $\alpha=0.05$ .

Table (4.19) One way ANOVA test for difference in the level of psychological stress due to educational level

Field	Source	Sum of Squares	Df	Mean Square	F value	Sig.(P- Value)
The psychological stress's	Between Groups	860.20	2	430.10	0.362	0.697
level among parents and	Within Groups	186588.5	157	1188.46		
educational level	Total	187488.7	159			

Critical value of F at df "3,116" and significance level 0.05 equal 2.68

Are there significant differences about the **resilience's level** among parents of children diagnosed with ASD in Gaza Strip due to **educational level** at significant level  $\alpha = 0.05$ ?

To answer the question the researcher used the one way ANOVA and the result illustrated in table (4.20) which show that the p-value equal 0.033 which is less than 0.05 and the value of F test equal 3.499 which is greater than the value of critical value which is equal 3.07, that's means there is a statistical differences about the resilience's level among parents of children diagnosed with ASD in Gaza Strip due to educational level at significant level  $\alpha = 0.05$ . Then, Scheffe Multiple Comparisons test was done, table (4.21) show that the differences between "secondary", and "university" in favor of "secondary".

Table (4.20) One way ANOVA test for difference in to the resilience's level due to educational level

Field	Source	Sum of Squares	Df	Mean Square	F value	Sig.(P- Value)
The resilience's level among parents and educational level	Between Groups	2511.3	2	1255.66	3.499	0.033
	Within Groups	56.343.3	157	358.87		
	Total	58855.2	159			

Critical value of F at df "3,116" and significance level 0.05 equal 2.68



Table (5.21) Scheffe Multiple Comparisons of resilience level due to educational level

		Mean			95% Confidence Interval	
		Difference (I-				
(I) education	(J) education	J)	Std. Error	Sig.	Lower Bound	Upper Bound
2.00	3.00	-11.96224-*	4.67267	.040	-23.5097-	4147-
	4.00	-6.93400-	4.60747	.325	-18.3204-	4.4524
3.00	2.00	11.96224*	4.67267	.040	.4147	23.5097
	4.00	5.02824	3.23069	.301	-2.9557-	13.0122
4.00	2.00	6.93400	4.60747	.325	-4.4524-	18.3204
	3.00	-5.02824-	3.23069	.301	-13.0122-	2.9557

<sup>\*.</sup> The mean difference is significant at the 0.05 level.

The next chapter will discuss the results of the study in more details, investigating each variable in specific.



# Chapter 5

# Discussion, Conclusion and Recommendations



# **Chapter Five**

#### **Discussion, Conclusions and Recommendations**

#### **5.1 Introduction:**

The purpose of this study was to identify the level of resilience and psychological stress among parents of children diagnosed with ASD. The results of the study that attained from the statistical analysis of the quantitative data also demographic variables of both parent and child that obtained in this study will be discussed. This chapter will discuss these findings in details. In addition, the results of the study delivered from the previous chapter will be discussed in order to compare the study with the historical background of the other research results in this field. This discussion will be followed by the conclusions drawn from the study. Study limitations will be presented and implications of the findings to clinical social work practice and theory will be explored. Lastly, recommendations for further inquiry will be presented.

#### **5.2 Discussion**

# **5.2.1** Descriptive analysis for study sample

From the table (4.1) to table (4.9) the researcher conclude that majority of parents' ages between 20 to 40 years, but half of them are female. While, more than half are not working 54.4%, In addition, most of them from North governorate46.9, also only 5 of them from Rafah. However, 90.6 of the sample free from physical or psychiatric disorders, Also 98.1% of them are married. Being free from disorders and married are an important issues that decrease confounding factors in the study results.

In other hand, majority of study's sample are well educated as 45.6% of parents finished university education, this reflect high validity of the study results as a consequence of answers of educated parents. In addition, near the half of parents with month income below than 500 NIS, this affirm that Gaza Strip is well educated area, despite low economic status

After analyzing personal data of the child diagnosed with ASD in Gaza Strip as shown in table (4.9), most of them are from 3 to 6 year old 60%, while 69.4 of them are females. In addition to that, the majority of them ordered in the family as the child other than the first or the last between family members, which may include the third, fourth, ... etc. as the Gaza Strip highly fertile area with high birth rate .



#### **5.2.2 Psychological Stress**

The findings of the study showed slightly high levels of psychological stress, the fifth subscale of psychological stress is ranked as the first one, see table (4.10); this reflect that the main reason for stress is the anxiety for the future of child, anxiety stem from vague nature of ASD in general and sometimes decrease knowledge about the disorder especially in Gaza Strip as this subject remained covered, and few only spot the light on it. This findings is of interest, as it consistent with numerous other studies that indicate that parents of children diagnosed with ASD are experiencing high levels of psychological stress. The literature has documented that parents of children with ASD\_reported elevated parenting stress and depression relative to normative samples (Ingersoll & Hambrick, 2011). While, others studied parenting stress in parents of children with autism and indicate a positive correlation between autistic disorder and parental stress (Dabrowska & Pisula, 2010). In addition, it was noted that there are high level of parental stress in the families of autistic children (Abed Alqader, 1997). Also families that rearing autistic child make extraordinary sacrifices; and the parents are under tremendous stress (Dillenburger et al., 2010).

Strong associations were found between mothers' symptoms of stress and depression, and their parenting cognitions about both their children, such as guilt or low parental self-efficacy beliefs (Meirsschaut, Roeyers & Warreyn, 2010). The depression contain in its context the feeling of frustration and despair which is the subscale of psychological stress the weight mean for it is 49.92%, see table (4.10).

The mothers of boys with autism having higher parenting stress and repetitive behavior was a main effect predicting parenting stress for them (Richardson, 2010), this result consistent with the result of the study that indicated in the table (4.10), as the repetitive behavior is one of the child's problem in which weight mean 73.74% that ordered the second subscale responsible for psychological stress. Deficits or delays in children's social relatedness were associated with overall parenting stress, parent—child relationship problems, and distress for mothers and fathers, also regulatory problems were associated with maternal stress, whereas externalizing behaviors were associated with paternal stress (Davis & Carter, 2008).

In addition, parents of children with HFA experience significantly more parenting stress than parents of children with no psychological disorder, which was found to be directly related to characteristics of the children also the higher intellectual functioning in children with HFA does not compensate for the stress associated with parenting children with autism spectrum disorders (Rao & Beidel, 2009). Also parent ratings suggested that behaviour problems -in young people with ASD -and parents stress exacerbated each other over time (Lecavalier, Leone & Wiltz, 2006).



The study further emphasize the results of Davis and Carter (2008); Lecavalier, Leone and Wiltz (2006), and Rao & Beidel (2009) about the third subscale of the problems of child that related to high level of psychological stress.

Diagnostic and planning processes are extremely stressful for parents, that statutory diagnosis takes a long time, that care and education plans do not include full parental participation, and that reviews of plans do not consistently include intervention data (Keenan et al., 2010). This processes lead to increase anxiety of the parents and thereby increase psychological stress level as reflected by this study.

Parents of children diagnosed with ASD consistently report more stress than parents of typically developing children or children with other developmental disorders (e.g., Down syndrome) (Mancil, Boyd & Bedesem, 2009).

A majority of families reported marked impacts on family life with increased levels of parental stress. However, the amount and type of professional support available to families were not related to child or family characteristics (Cassidy et al., 2008).

Accounting for mothers' - of children with autism recruited from representative community service centers in Hong Kong - demographic background, SOC showed a moderating effect with child's symptoms and parenting stress. Mothers with a strong SOC perceived lower stress than their counterparts even when their children presented with more severe autistic symptoms. Two proximal factors in parenting, parental confidence and acceptance of the child, were found to partially mediate SOC and stress. The stress experience of mothers of children with autism is related strongly to a global sense of coherence as well as more specific parenting attitudes (Mak, Ho & Law, 2007).

In addition, there is an improvement in the management of life in order to reduce the stress among the mothers of autistic children after the application of the pilot program (Ghazaleh, 2004).

In the study of Dabrowska & Pisula (2010) there is parenting stress in parents of children with autism. While, a path analysis indicated that both child symptom severity and parent BAP were positively correlated with these outcomes. The relationship between BAP and the outcome measures was partially mediated by maladaptive coping and social support and the relationship between child symptom severity and outcomes was partially mediated by social support (Ingersoll & Hambrick, 2011).

Also both mothers and fathers of children with ASD report significantly elevated levels of both child and parent related stress in comparison with parents of typically developing toddlers. Following their child's participation in the inclusion program, mothers of children with ASD report significant reductions in child-related stress but no reductions in the parent-related stress domain. No changes were seen with either child or parent domain for fathers. Lastly, a child's level of social skills was a significant predictor of



child-related maternal stress for children with autism. This pattern was not seen in fathers of these children (Baker-Ericzen, Brookman-Frazee & Stahmer, 2005).

#### 5.2.3 Resilience

There is a moderately high resilience among parents of children diagnosed with ASD was, as the weight mean was (78.47%) as shown in table (4.11), this result stressed by what seen on the real world of the ability of those parents to adapt and live with children with ASD, as the Palestinian people face wars and siege this help to create resilience character among those people to adapt with conditions imposed on them. Also, the results showed that the second subscale is ranked as the first one, then the first subscale, while the third subscale considered the last one, see table (4.11). This result could be interpreted as that the community aspect is not very important for those parents due to new trend of people in Gaza Strip toward closeness and decrease socialization and contact with the outside community.

There is research suggesting that there are strengths and resilience among families of ASD children in the face of life's adversities (King et al., 2009). Resilience factors identified in the study of Greeff and van der Walt (2010) include higher socioeconomic status; social support; open and predictable patterns of communication; a supportive family environment, including commitment and flexibility; family hardiness; internal and external coping strategies; a positive outlook on life; and family belief systems these factors correspond to the resilience subscales and items which include in this study.

The findings of the study of Lori Jo-Ann Mierau, 2008 support the existing understanding of factors that contribute to resilience in families affected by autism. Also the study presents evidence that a considerable number of families of children with autism display factors of resilience--reporting having become stronger as a result of disability in the family (Bayat, 2007). A complementary qualitative analysis explored family challenges, parent resilience, and variables that may have influenced outcomes. (Schertz and Odom, 2007). Although, stress is a major concern for caregivers, enrichment and growth may also occur in varying degrees, enrichment and growth indicate resilience (Phelps et al, 2009). Families with children diagnosed with autism reported more profound QOL effects than families of children with ADD/ADHD or unaffected controls. Parental concerns over learning difficulty, being bullied, stress-coping, and achievement were overwhelming in the autism group relative to the families of children with ADD/ADHD or unaffected controls (Lee, Harrington, Louie & Newschaffer, 2008).

The results mentioned above is consistent with this study's results but it vary in that it study the autism in specific not ASD, and the sample of studies is the family which may include other members rather than parents alone.

Results revealed that increasing our knowledge of the coping strategies -which consider part of resilience- that are more or less effective and under what conditions some coping strategies may be either beneficial or harmful for this population of parents of ASD



children has direct implications for treatment and parent education efforts (Lyon et al., 2010), it consistent with the result of this study in the sample which include parents of ASD children but differ in the address of this sample as it not in Gaza Strip.

#### **5.2.4** Psychological stress and resilience

Although psychological stress and resilience in parents of children diagnosed with ASD are negatively correlated (see table 4.12) -this mean that high level of resilience is associated with lower level of resilience and vice versa-, there is no study about parents of children with ASD investigate this relation directly. This may be indicative that this relationship need to be further explored from other perspectives.

Another study investigate that mothers of children with autism scored lower on positive perceptions of their child, and higher on stress than the mothers of children with Down syndrome, and mixed etiology intellectual disabilities, matched on child age, gender, and communication skills After (Griffith et al., 2010). In general, maternal use of avoidant coping (distraction and disengagement) was found to be associated with increased levels of maternal depression and anger, while use of cognitive reframing was associated with higher levels of maternal well-being (Benson, 2010).

Mothers' and fathers' reports of their positive experiences were negatively related to their reports of parenting stress also focus on positive experiences may buffer against negative well-being here positive experiences (Kayfitz et al., 2010). While, caregivers of autistic children reported greater levels of stress than enrichment which were negatively correlated (Phelps, Wuensch & Golden, 2009), parents are important and primary caregiver for those children.

From other perspective, the study of Dabrowska & Pisula (2010) indicate that there is a relationship between coping styles and parental stress coping among parents of children with autism, as coping consider important part of resilience as it consider protective process, as coping can influence the resilience by protecting or buffering people from negative outcomes associated with risk (Compas, 1987; Pedro-Carroll, 2001).

The concepts mentioned in the previous studies as positive experience, cognitive reframing, enrichment and positive perceptions may contain in its folds the same meaning of resilience, indirectly. The pervious results derived by other researchers emphasize the negative relationship between psychological stress and resilience parenting stress which consistent with the result of this study

# 5.2.5 Socio-demographic characteristics of parents

The socio-demographic characteristics of parents of children with ASD appeared to play a role in parents' level of psychological stress and resilience. These characteristics include parents' age, gender, education, and occupation.



First of all the statistical difference between psychological stress and resilience due parents' age was tested, the result showed that there are no statistical differences due to parent age. The researcher interpret this result due to high similarity of feelings and reactions of parents from different age groups as ASD is catastrophe and dangerous threat for them; so forced parents to increase psychological stress and decrease resilience. Therefore with increasing age, parental burden increase and the ability to tolerate stress decrease, if added to that burden of having child diagnosed ASD, it is expected to increase psychological stress.

In the contrary, younger parents face illness of their child at the beginning of their lives with a lack of experience on this sick child, making them more shocked and unhappy, and therefore it may be that the reasons for each age group is that no differences in degrees of psychological stress and thus resilience.

The gender of the parents also plays a role in psychological stress level. A significant relationship was found between psychological stress and the gender of the parents (see table 4.15) as the mothers have more psychological stress than fathers. This results consistent with the reality of parents as females are less than males in communicating with others and they have less sense of security and self-trust due to their inability to present alone in public places, this may be a normal consequence of the Palestinian and Islamic culture toward women as it sometimes concentrate on prohibiting women from going outside the home except for necessary issues.

Also mothers more anxious about the future of their child than fathers; due to increase cohesion and integrity with family and difficulty to separate from their child; so the researcher derive that the mothers are more anxious about the future of child and have higher level of psychological stress.

Consistent with the previous research as in the study of Sabih and Sajid (2008), which examined 60 parents of 30 children with diagnosis of autism, the result showed that mothers experienced more stress than father.

From other perspective, the study about factors contributing to stress in parents of individuals with ASD, resulted that mothers experienced a greater caregiving burden when compared with fathers, mothers were significantly more stressed, more involved, and reported higher levels of stress and coping related to caregiving (Tehee, Honan & Hevey, 2009). Also Tehee et al., (2009) indicate that parent gender moderated correlations between some variables as perceived stress, stress and coping, child-rearing involvement, support and information/education accessed.

In other hand, there is no statistical difference between the resilience level and gender of parent (see table 4.16). It is unclear that if gender risk or protective process across all conditions (Shean, 2010, p. 30). Therefore, contrary to the findings of this study that mothers reported significantly more positive experiences than did fathers (Kayfitz et al., 2010).



Parents level of psychological stress statistically significant due to occupation (see table 4.17), as psychological stress higher in nonworking than working parents. This may be due to lower income jobs yield less fund to be allocated for the treatment of the child with ASD which lead to increase level of psychological stress.

Conversely, work lead to increase income level, thereby increase availability of treatment resources and providing educational programs for child by paying to many specialist to care about their child. In addition, the pervious literature noted that work can be a source of resilience by supporting the development of new skills (Bancrof, 2004), this contrary to the findings of the study as that resilience level in parents is not statistically significant due to occupation (see table 4.18).

There is a statistical differences about the resilience's level among parents of children diagnosed with ASD in Gaza Strip due to educational level at significant level  $\alpha=0.05$ , in favor of the parents who finish secondary school rather than university, see table (4.21). This findings may be stressed as intelligence is a protective factor (Gramzy and Masten, 1991) that enhance resilience and most of the time higher educational level are more related to higher income rather than to higher intelligence in Gaza Strip; so well educated people or at university level not necessary have high intelligence. In addition, higher educational level lead to increase chance for work thereby increase going outside home which lead to decrease family cohesiveness, while nonworking parent stay more time in the home; so increase knowledge and skills related to their autistic child and this lead to higher feeling of self-efficacy in performing their roles within the family context, leading to higher resilience among those parents.

In other hand, there is no statistical differences about psychological stress among parents of children diagnosed with ASD in Gaza Strip due to educational level at significant level  $\alpha=0.05$ , see table (4.20). The researcher belief that no differences of psychological stress among parents of children diagnosed with ASD, due to that ASD as mentioned previously threatening parents and cause high psychological stress despite their educational level. Also this may be due to inadequate knowledge and awareness among parents about ASD, dealing and living with those children, regardless the educational level; as understanding the reality of ASD need special knowledge and skills for learning. Also, this may be due to the similarity of conditions that parents exposed to unique health problems of child and other physical and social problems

Finally, Abd Alqader (1997) explored that there is a positive correlation between the characteristics of parents of autistic children and life stressors the total parental stress level in families of children with autism are 95 top-class standard specified scale of the normal range of the total degree of the stress of 15-75 rank Minah, this consistent with study findings.



# 5.3 Limitations and Recommendations

The following section will discuss the limitations of this study and provide recommendations and suggestions for further research.

#### **5.3.** 1 Limitations

There were several limitations to this study. First, a limitation to this research is that, the majority of the participants were in place that so far from the place of work for the researcher. Secondly, there are a few participants in this study and only five of them live in Rafah, thus limiting the generalizability of the findings. Beside that, lack of resources, previous studies and concern about this topic especially in Palestine or Arabic countries. In addition, frequent cut offs the electricity lead to loss of internet connections and thereby no enough time to continue this study.

In other hand, a limitation, as well as strength, in this study was the use of a newly Developed or modifiable scale, but this limitation was resolved by the researcher through validty and reliability tests. Sometimes, the stigmatization toward having a child with ASD may lead to refuse to answer the tools

Another limitation in the study was that despite efforts to collect all the sample but there many obstacles emerged as that phone number registered in child file is not true or no answers for the calls; so they may have been inadvertently excluded from participating ,also there is a difficulty in recognizing address of the parent as there is distance in theses area and this time consuming . Another possible limitation is the timing of questionnaires distribution to participants. The timing of the distribution of questionnaires during inappropriate period may have negatively affected the response rate.

Finally, there is no way to know whether the views of the participants in this study are representative of the views of the larger population of parent in other areas.

# **5.3.2** Recommendations, implications for practice and further research:

On the basis of findings of the current study results, and in the light of the problem of the study and the theoretical framework, the researcher offering a number of important recommendations for parents and family and private educational institutions especially institutions based on the care of children with ASD, which can be useful in supporting efforts in dealing appropriately with ASD; even help to reduce the stress and composition of positive trends and resilience for parents who have a child diagnosed with ASD:

• Since the parents are the first teacher of the child, also they are the most important elements of the community in which the child live; so the need to guide them must be done as their guidance have conclusive results not only in the direction and guidance of child



with ASD, but to move the parents toward optimism and maturity, psychological and social gratification and mutual satisfaction between family members

- There is no doubt that the guidance of parents is a technical process in which the guider should provide the information in easy and understandable manner, and to highlight the work that parents succeeded in it with the child, and must enlighten parents capabilities toward their child and modify their ambitions toward the child, without exaggeration in their optimistic or pessimistic feeling, to avoid feeling of despair which leading to increase stress.
- In terms of the impact of parents on children, and also the importance of the resilience of parents in the family, the researcher recommends that all those involved in the process of psychological counseling to work to help the parents of child with ASD to develop themselves and treat their family problems, even the family coherent and able to care for their children whether they diagnosed with ASD or healthy, and help the parents to accept the shock and face the stressors and problems they are exposed to it.
- The psychological workers should focus on the dissemination of prevention-based community mental culture based on commitment with orders of Islam and away from the prohibitions, this pioneer issue makes individuals perceive stress as a test; so they become patience and working seriously in strong psychiatric system based on faith in God.
- The need to supply special education centers by psychiatric nurses; because they are more able than others to alleviate the problems, especially as social and psychological experienced by parents of children with ASD as a result of their child's illness.
- Policy and practice implications of the study findings are important for future revisions of diagnostic tools and manuals.
- The implication is that mothers of children with ASD are more prone to experience stress, thus requiring special attention from mental health professionals.
- The identification of effective resilience skills may be useful for parents to deal with the psychological stress symptoms through workshops and mutual learning methods.
- The need to set up libraries to benefit by educational researchers and parents of children with ASD everywhere, so that they are accessible to everyone.
- The contribution of other institutions, especially the media and take advantage of the crowd people, and use that to provide educational programs for families of children showing the positive effects and the factors that increase resilience and thus reduce stress.
- Preparation seminars through social institutions carried out by specialized professors to help parents explain modern methods of dealing with child diagnosed with ASD.



- Interest in the work of training workshops to display positive experience for parents in dealing with ASD in the family to benefit of it and try to emulate it and work training sessions for parents about the different methods of dealing with children in educational institutions from Ministry of Health and Education
- The establishment of workshops by workers in the therapeutic and counseling field to explain to the individuals the problems resulting from the stress and the best way to use resilience in dealing with the stress as an educational and preventive factor.

#### **Suggestions for further researches**

- The expansion of theory to guide the study of related experiences of parents of children with ASD is critical, as the complexity of these issues may be lost or oversimplified by relying on resilience and stress theories; so further research into the predictive value of variables is needed and should include multi-method research designs.
- Implications for early intervention program for the parent, such as increasing family support, support services and incorporating adjunctive parent interventions for parents with elevated levels of stress are required and they should be available to parents irrespective of their child having a confirmed diagnosis.
- Researches more specifics in management of psychological stress and enhancing resilience from Islamic perspective.
- Protective guidance, counseling and education researches for parents of children with ASD.
- Research about management of autism spectrum disorders from psychological and medical way.
- Research study specific details of confirming diagnosis for autism spectrum disorders.
- Detailed researches about impact of child with ASD on the family members as a whole.
- Building tools for psychological stress that are unique for children with ASD in Gaza Stress.
- Prevalence of autism spectrum disorders in Gaza Strip.
- Proposals for projects about children diagnosed with ASD and their parents.
- Assessing the autistic children stressors.



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# Appendix (A)

#### Diagnostic criteria for PDDs according to DSM-IV (APA, 1994)

Pervasive Developmental Disorders (also known Autism Spectrum Disorders)
Listed below are the diagnostic criteria for the five Pervasive Developmental Disorders, also known as Autism Spectrum Disorders, as defined by DSM-IV, published by the American Psychiatric Association, Washington D.C., 1994, the main diagnostic reference of mental health professionals in Gaza Strip.

299.00 Autistic Disorder

299.80 Pervasive Developmental Disorder, Not Otherwise Specified

299.80 Asperger's Disorder

299.80 Rett's Disorder

299.10 Childhood Disintegrative Disorder

299.00 Autistic Disorder

An autism screening tool must meet all three primary areas defined by the DSM-IV description for autistic disorder (#'s 1-3 under A below) to qualify for a positive rating from First Signs:

- A. A total of six (or more) items from (1), (2), and (3), with at least two from (1), and one each from (2) and (3):
- (1) qualitative impairment in social interaction, as manifested by at least two of the following:
- (a) marked impairment in the use of multiple nonverbal behaviors, such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction
- (b) failure to develop peer relationships appropriate to developmental level
- (c) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest)
- (d) lack of social or emotional reciprocity
- (2) qualitative impairments in communication, as manifested by at least one of the following:
- (a) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
- (b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
- (c) stereotyped and repetitive use of language or idiosyncratic language
- (d) lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level
- (3) restricted, repetitive, and stereotyped patterns of behavior, interests, and activities as manifested by at least one of the following:
- (a) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus



- (b) apparently inflexible adherence to specific, nonfunctional routines or rituals
- (c) stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting or complex whole-body movements)
- (d) persistent precoccupation with parts of objects
- B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (1) social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play.
- C. The disturbance is not better accounted for by Rett's disorder or childhood disintegrative disorder.

299.80 Pervasive Developmental Disorder, Not Otherwise Specified (PDD-NOS) This category should be used when there is a severe and pervasive impairment in the development of reciprocal social interaction or verbal and nonverbal communication skills, or when stereotyped behavior, interests, and activities are present, but the criteria are not met for a specific pervasive developmental disorder, schizophrenia, schizotypal personality disorder, or avoidant personality disorder. For example, this category includes "atypical autism" --presentations that do not meet the criteria for autistic disorder because of late age of onset, atypical symptomatology, or subthreshold symptomatology, or all of these.

299.80 Asperger's Disorder (or Asperger Syndrome)

An Asperger/HFA screening tool must meet all six areas defined by the DSM-IV description of Asperger Syndrome (A-F below) to qualify for a positive rating from First Signs:

- A. Qualitative impairment in social interaction, as manifested by at least two of the following:
- (1) marked impairment in the use of multiple nonverbal behaviors, such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction
- (2) failure to develop peer relationships appropriate to developmental level
- (3) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest to other people)
- (4) lack of social or emotional reciprocity
- B. Restricted, repetitive, and stereotyped patterns of behavior, interests, and activities, as manifested by at least one of the following:
- (1) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
- (2) apparently inflexible adherence to specific, nonfunctional routines or rituals
- (3) stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements)
- (4) persistent preoccupation with parts of objects
- C. The disturbance causes clinically significant impairment in social, occupational, or other important areas of functioning.
- D. There is no clinically significant general delay in language (e.g., single words used by age 2 years, communicative phrases used by age 3 years).
- E. There is no clinically significant delay in cognitive development or in the development



of age-appropriate self-help skills, adaptive behavior (other than in social interaction), and curiosity about the environment in childhood.

F. Criteria are not met for another specific pervasive developmental disorder or schizophrenia.

299.80 Rett's Disorder (or Rett Syndrome)

- A. All of the following:
- (1) apparently normal prenatal and perinatal development
- (2) apparently normal psychomotor development through the first 5 months after birth
- (3) normal head circumference at birth
- B. Onset of all of the following after the period of normal development:
- (1) deceleration of head growth between ages 5 and 48 months
- (2) loss of previously acquired purposeful hand skills between ages 5 and 30 months with the subsequent development of stereotyped hand movements (i.e., hand-wringing or hand washing)
- (3) loss of social engagement early in the course (although often social interaction develops later)
- (4) appearance of poorly coordinated gait or trunk movements
- (5) severely impaired expressive and receptive language development with severe psychomotor retardation
- 299.10 Childhood Disintegrative Disorder
- A. Apparently normal development for at least the first 2 years after birth as manifested by the presence of age-appropriate verbal and nonverbal communication, social relationships, play, and adaptive behavior.
- B. Clinically significant loss of previously acquired skills (before age 10 years) in at least two of the following areas:
- (1) expressive or receptive language
- (2) social skills or adaptive behavior
- (3) bowel or bladder control
- (4) play
- (5) motor skills
- C. Abnormalities of functioning in at least two of the following areas:
- (1) qualitative impairment in social interaction (e.g., impairment in nonverbal behaviors, failure to develop peer relationships, lack of social or emotional reciprocity)
- (2) qualitative impairments in communication (e.g., delay or lack of spoken language, inability to initiate or sustain a conversation, stereotyped and repetitive use of language, lack of varied make-believe play)
- (3) restricted, repetitive, and stereotyped patterns of behavior, interests, and activities, including motor stereotypies and mannerisms
- DD. The disturbance is not better accounted for by another specific pervasive developmental disorder or by schizophrenia.



# Appendix (B)

# Resilience Resources at Individual, Family, and Social/Environment Levels

(Olsson et al., 2003, pp. 5-6)

Resources	Protective mechanism

Individual level

Constitutional resilience Positive temperament

Robust neurobiology

Sociability Responsiveness to others

Prosocial attitudes

Attachment to others

Intelligence Academic achievement

Planning and decision making

Communication skills Developed language

Advanced reading

Personal attributes Tolerance for negative affect

Self-efficacy

Self esteem

Foundational sense of self

Internal locus of control

Sense of humour

Hopefulness

Strategies to deal with stress

Enduring set of values

Balanced perspective on experience



Malleability and flexibility

Fortitude, conviction, tenacity, and resolve

Family level

Supportive families Parental warmth, encouragement, assistance

Cohesion and care within the family

Close relationship with a caring adult

Belief in the child

Nonblaming

Marital support

Talent or hobby valued by others

Socioeconomic status Material resources

Community level

School experiences Supportive peers

Positive teacher influences

Success (academic or other)

Supportive communities Belief in the individual

Nonpunitive visions and resources

Cultural resources Traditional activities

Traditional spirituality

Traditional languages

Traditional healing



#### Appendix (C)

#### **Data collection form**

Mr./ Mrs..... God bless you

The researcher conducts a study on "Psychological stress and resilience among parents of autistic children in Gaza Strip,"; to obtain a master's degree - specialty Community Mental Health Nursing. And for that purpose have been prepared the following tools:

- 1. Psychological Stress Scale.
- 2. Resilience Scale.
- 3. Demographic Information Sheet.

The information published about you will be highly confidential and will only be used for research purposes only. You have the freedom to agree or refuse to participate in this study. It is therefore necessary to answer yes when approving or not when rejection.

If your answer agreeing to participate, please kindly respond to these tools frankly after reading each paragraph carefully, knowing that there is no correct or wrong answer, but it is important to express answer honestly how you feel and feel about from your point of view. Since the validity of the research results subject to honestly answer, and that will not take you a long time. Please do not discuss your answer with your colleagues while filling the questionnaire or after the completion of the answer. Try not to leave the questions without express your opinion, and answer the question immediately without hope.

Each questionnaire provides a set of instructions, so please read the instructions carefully before answering the questions.

Dear Responder your cooperation is a national action service for scientific research in our country. I promise to update you with any new information regarding autism as seminars and therapeutic sessions if there is an opportunity. this as a part of recognition for your cooperation and your precious time you spent in answer.

Appreciate your cooperation

I agree to participate in the study: ( ) Yes ( ) No

The researcher:

Sally Khaled Abou-Dagga



# Appendix (D)

# Initial proposed Psychological stress scale before any modifications

No	Subscales and items	Never occur	Rarely	Occur	Occur	Always
	First subscale : Psychological and organi	c sympto	Occur	Few	a lot	Occur
1	I feel sluggish and lazy and not wanting to					
	work.					
2	I feel tired and exhausted after any activity,					
	even simple.					
3	I suffer from insomnia and difficulty sleeping.					
4	I grieve and cry for a simple reason.					
5	I do not feel any pleasure in my life.					
6	I feel shortness of breath for no apparent reason.					
7	I feel disturbances in heart rate for no apparent reason.					
8	I suffer from headache for no apparent reason.					
9	I can't control myself and agitated for simplest reason.					
10	I blame myself heavily on the simplest things.					
11	It difficult for me to take decisions even					
10	simple.					
12	I feel loss of appetite and lack of the desire to eat.					
13	I feel upset and suffocation in the presence of					
	others.					
14	I feel frustrated and do not want to life.					
15	I feel pain in joints for no apparent reason.					
16	It is Difficult for me to remember things even simple.					
17	I suffer from digestive disturbance.					
18	I'm worried most of the time without a rationale.					
19	I suffer from constant stomach pain that lead					
	to loss of enjoy in tasting food.					
20	I suffer from intestines disturbances which					
	cause constipation or diarrhea.					
	Second subscale: Feelings of despair and	frustrati	on		1	
21	I feel that my family in danger of breakdown due to my disabled son.					
22	I feel that my life has crashed due to the arrival of my disabled son.					
23	I feel that others are looking to me inferiority					
	look due to my disabled son.					
24	I feel that my relatives are trying to avoid					
	dealing with my family due to my disabled					
	son.					



		Never	Rarely	Occur	Occur	Always
No	Subscales and items	occur				
- 10	<b>34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35 34 35</b>		Occur	Few	a lot	Occur
25	I feel that my friends are leaving me due to		0 0 0 0 0 0 0 0			3 7 7 7 7
	my disabled son.					
26	I think that the presence of disabled person in					
	my family is a major disaster.					
27	Taking my son abroad during holiday strain					
	me and spoil on my pleasure.					
28	I feel that everything I do with my son is a					
	wasted effort.					
29	Many instructions and directions that I should					
20	give to my son bothering me.					
30	It pains me that my son would not be a natural					
31	extension of my family.  I have feeling that I caused my son's disability.					
32	I feel that the social status of the family will					
32	suffer greatly because of the presence of					
	disabled person in it.					
33	I think it is useless to teach my son, even					
	simple career.					
34	It hurts that people's reluctance to marry from					
	our family members due to our disabled son.					
	Third subscale: The problems of child	•		•		
35	My son has great difficulty in understanding.					
36	It's difficult for my son to concentrate long					
	time.					
37	I feel that my son lacks motivation to learn.					
38	I feel that my son not trust himself.					
39	I regret my son's impolite behavior.					
40	It is difficult for my son to deal with his					
41	colleagues.					
41	It is difficult for my son to cope with his family members.					
42	Inability to control the behavior of my					
+4	disabled son, worries me.					
43	My child can't express his feelings.				1	
44	It is difficult for me to deal with my disabled					
''	son.					
45	It is worries me that my son fear from					
	everything.					
46	I think that my son needs ongoing guidance					
	and surveillance.					
47	I feel tension when took my son to public places.					
	Fourth subscale: Family problems					
48	I can't visit my friends whenever I want.					
49	My family members give up a lot of					
	necessities because of my disabled son.					
50	I avoid talking with others about my disabled					
	son.	1	I	1	ĺ	



No	Subscales and items	Never occur	Rarely	Occur	Occur	Always
	3 32 62 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3		Occur	Few	a lot	Occur
51	I feel embarrassed or confused because of my disabled son .					
52	I think that my son will be a permanent problem for my family.					
	Fifth subscale: Anxiety about the future of ch	ild				
53	I feel very sad when I think in my son 's status.					
54	I feel anxious and tight when I think about the fate of my son when he grows up.					
55	I feel frustrated when realize that my son will never live a normal life.					
56	I keen to provide extra protection for my son.					
57	It hurts me the feeling that my son will spend his whole life disabled.					
58	I feel frustrated and disappointed about lifestyle of my disabled son.					
59	I feel that my child capabilities is limited so that he cannot perform the tasks of everyday life.					
60	I think that the family of disabled child perform tasks beyond the tasks performed by regular family.					
61	I am concerned when I shortened in the care of my son.					
62	I feel that my son's achievements much less than what is expected of him.					
63	I wish that the presence of my son just a bad dream I will wake up from it.					
64	I feel distressed for distorted images provided by the media about persons with disabilities.					
65	My son get upset when he feels of my neglect for him.					
	Sixth subscale: Independent Performance pro	oblems of	child	I	1	
66	My son can't depend on himself on wearing his clothes.					
67	My son cannot use the bathroom by himself.					
68	My son finds it difficult to identify the home address.					
69	My child can participate in sports.					
70	My son can't control himself while walking and exposed to fall.					
71	My son can't walk without help.					
72	It is difficult for my son to learn the simple skills.				1	
73	It bothers me that my child can't maintain cleanliness.					



No	Subscales and items	Never occur	Rarely	Occur	Occur	Always
			Occur	Few	a lot	Occur
	Seventh subscale: Inability to bear the burder	ns of child				
74	I am concerned that my son's disability requirements far exceed my financial abilities.					
75	I feel that people do not care for the feelings of the child's family.					
77	The requirements of the care of my son are so many and stressful for me.					
78	It is difficult for the disabled child's family to develop plans for the future.					
79	It pains me the lack of appropriate support to the family of the disabled child.					
80	It bothers me that my son aggressive in unbearable manner.					



# Appendix (E)

The names of arbitrators for the questionnaires

	The names of arbitrators for the questionnaires									
No.	Name of arbitrator	Specialty	Place of work							
1.	Dr. Abdel Fattah Abdel-Ghani al-	Associate Professor	Department of							
	Hams	of Mental Health -	Psychology							
		Ph.D Philosophy of								
		Education	The Islamic							
2.	Dr. Mohammed-Wafaie A. Elhelou	Dh.D. Educational	University of Gaza							
2.	Dr. Monammed-warate A. Emelou	Ph.D., Educational Psychology	Department of Psychology							
		rsychology	rsychology							
			The Islamic							
			University of Gaza							
			j							
3.		Assistant Professor	The Islamic							
		Ph.D. Philosophy of	University of Gaza							
	Dr.Atef Othman Al-Agha	Education	,							
4.	J	Ph.D. in Mental	The Islamic							
		Health- Associate	University of Gaza							
	Dr. Jamil Hassan Attiya Al-Tahrawi	Professor in the								
		Department of								
		Counseling and								
		educational								
5.	Dr. Sameer Mokhemar	guidance Ph.D. in Psychology	Al Aqsa University							
6.	Dr. Na'eem Al-Abadlah	Assistant Professor	Al Aqsa University							
0.	Di. Nu com zu zionani	71351314111 1 10103501	711 7 Iqsa Omversity							
		Ph.D. in clinical								
		Psychology								
7.	Dr. Fayez Ali Al-Aswad	Associate Professor	Al Azhar University							
		Ph.D. in Psychology								
		- College of								
0	Du Oussallander Al D 111	Education	Al Nassain ( Cli )							
8.	Dr. Omar Hamdan Al-Buhisi	Master in mental health- Medical	Al Nousirat Clinic for mental health							
			101 mentai heatth							
9.	Saedah Abou Al Gouseen	manager Master in	Al Souranee Clinic							
'.	Successi Troot In Gouscell	psychology	for mental health							
		r ~ J ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~								



#### Appendix (F)

#### Letter directed to the arbitrators



The Islamic University of Gaza

Dean of High Studies

Faculty of Nursing

#### Request to scale's arbitration

Dr.: Es	quire
---------	-------

I have the honor to note you that I study the title of "Psychological stress and resilience among parents of autistic children in Gaza Strip," as a requirement for the degree of Master of Community Mental Health Nursing at the Islamic University; so I design a scale to measure the resilience, which have been defined in the study as "a set of processes that help parents of children with autism spectrum disorders in the use of internal and external sources of resistance to psychological and social risks they face." This questionnaire consists in its initial form of "55" items . This scale is limited in the following:

The *individual subscale* personal qualities which include psychological or physical processes that act as protective or risk factors that parent internally possess in the presence of the child diagnosed with ASD which include many parts as optimism, self-efficacy, problem solving, religion, cognitive ability, control, self-esteem supportive believes, social skills and coping. And the items that express this subscale are (1-34). The *family subscale* protective or risk processes that parents have within their home in the presence of the child diagnosed with ASD which include many subscales as connectedness, support and availability between family members. And items that express this subscale are (35-42).

The *community subscale* a group of qualities outside the home environment within the community of the parents who have a child with ASD which include community's safety and support, peer support and neighbors support that protect the individuals from risks or expose them to it. And items that express this subscale are (43-55).



Note that the alternatives answer of items in the resilience questionnaire are strongly agree, agree, neutral, disagree, strongly disagree.

In the other hand, the researcher modified psychological stress scale for parents of disabled (Al-Shakhs and Al-Sartawi, 1998) to become appropriate for measuring stress for parents of autistic children. Psychological stress in this study is the bad influence that occur in the presence of a child diagnosed with ASD- and is characterized by negative properties-on the parent that raises undesirable mental, emotional or physical reactions that expose them for the tension, stress, anxiety, grief, and sorrow, and may suffer from some psychosomatic symptoms which exhausted their energies and prevent their ability to focus on their work. This measure consists in the initial image of the "61" phrase. And this measure is limited to the following subscales:

Physical and psychological symptoms, feelings of despair and frustration, the child's problems, family problems, anxiety for the child's future, and the inability to bear burden of the child. Note that in answer to alternatives paragraphs are never happens, happens rarely, little happens, happens a lot, not always happen.

I put between your hands these scales to take advantage of your experience and your knowledge bumper, be sure to check out the review of items in each subscale and give your opinion and suggestions on the scale in their validity and suitability to the environment of the Gaza Strip, and if is it worth to be in the scale and belong to him or not, and how affiliation of each item for the specified subscale, and linguistic construction, and any suggestions then modify any words you see need to be modified to achieve the goal of the current study and graduated scale that are useful to the reader in the hope of increasing the scientific yield of the coded data.

With my sincere thanks and appreciation

Researcher / Sally Khaled Abu Dagga



# Appendix (G)

## Psychological stress Scale for arbitration

#### **Note:**

- Approval degree options: high, low, not approved
- The appropriateness of the items for the subscale: appropriate, inappropriate
- The validity of item linguistically: valid, invalid

No	Subscales and items	Approval degree	Items' appropriateness for subscale	Validity of item linguistically	Clarity of wording
	First subscale: Psychological and organ	nic symptoms			
1	I feel sluggish and lazy and not				
	wanting to work.				
2	I feel tired and exhausted after any				
	activity, even simple.				
3	I suffer from insomnia and difficulty				
	sleeping.				
4	I grieve and cry for a simple reason.				
5	I do not feel any pleasure in my life.				
6	I feel shortness of breath for no				
7	apparent reason.				
7	I feel disturbances in heart rate for no				
8	apparent reason.  I suffer from headache for no apparent				
8	reason.				
9	I blame myself heavily on the simplest				
	things.				
10	I feel loss of appetite and lack of the				
10	desire to eat.				
11	I feel upset and suffocation in the				
	presence of others.				
12	I feel frustrated and do not want to life.				
13	I feel pain in joints for no apparent				
	reason.				
14	It is Difficult for me to remember				
	things even simple.				
15	I suffer from digestive and intestines				
	disorders as constipation and diarrhea.				
16	I'm worried most of the time without a				
	rationale.				
17	I suffer from constant stomach pain				
	that lead to loss of enjoy in tasting				
	food.	J. C			
10	Second subscale: Feeling of despair and	a irustration		<u> </u>	
18	I feel that my family in danger of				
	breakdown due to my patient child.				



No	Subscales and items	Approval degree	Items' appropriateness for subscale	Validity of item linguistically	Clarity of wording
19	I feel that my life has crashed due to				
	the arrival of my patient child.				
20	I feel that others are looking to me				
	inferiority look due to the patient child.				
21	I feel that my relatives are trying to				
	avoid dealing with my family because				
	my child's disease.				
22	I think that the presence of a patient in				
	my family is a major disaster.				
23	Taking my child abroad during holiday				
	strain me and spoil on my pleasure.				
24	I feel that everything I do with my				
	child is a wasted effort.				
25	Many instructions and directions that I				
	should give to my child bothering me.				
26	It pains me that my child would not be				
	a natural extension of my family.				
27	I have feeling that I caused my child's				
	illness.				
28	I feel that the social status of the family				
	will suffer greatly because of the				
	presence of an patient.				
20	Third subscale: The problem of the chi	ild		T	1
29	My child has difficulty in expression				
20	and language				
30	I think that the constant preoccupation				
	of my child with things is thumping and restricted.				
31	I feel that my child lacks motivation to				
31	learn.				
32	I feel that my child trust himself.				
33	I regret my child's stereotyped and				
55	restricted behavior and movements.				
34	It is difficult for my child to deal with				
37	his colleagues.				
35	It is difficult for my child to cope with				
	his family members.				
36	Inability to control the behavior of my				
	patient, worries me.				
37	My child can't express his feelings.				
38	It is difficult to deal with my patient				
	child.				
39	I think that my child needs ongoing				
	guidance and surveillance.				
40	My child get upset when he feels of my				
	neglect for him.				
41	My child can dependent on others in				
	many things.				
42	My child can participate in sports.				



No	Subscales and items	Approval degree	Items' appropriateness for subscale	Validity of item linguistically	Clarity of wording
43	It bothers me that my child can maintain cleanliness.				
	Fourth subscale: Family problems				
44	I can't visit my friends whenever I				
	want.				
45	My family members give up a lot of necessities because of my patient child.				
46	I avoid talking with others about my patient.				
47	I feel embarrassed or confused because of my patient.				
48	I think that my son will be a permanent problem for my family.				
49	I feel very sad when I think in my child's status.				
50	I feel anxious and tight when I think about the fate of my child when he				
51	I keen to provide extra protection for my child.				
52	I feel frustrated and disappointed about lifestyle of my child patient.				
53	I feel that my child capabilities is limited so that he cannot perform the tasks of everyday life.				
54	I think that the family of a patient child.				
	perform tasks beyond the tasks performed by regular family.				
55	I am concerned when I shortened in the care of my son.				
56	I wish that the presence of my son patient just a bad dream I will wake up from it.				
57	My child walk a consistent ,natural gait.				
	Sixth subscale: Inability to bear the bu	rdens of child	I		
58	I feel that people do not care for the feelings of the child's family.				
59	The requirements of the care of my son				
60	are so many and stressful for me.  It is difficult for the patient's family to				
	develop plans for the future.				
61	It pains me the lack of appropriate support to the family of the sick child.				



#### Appendix (H)

#### **Psychological Stress Scale in final form**

#### **Instructions to answer on the scale:**

Being parent of sick child's with one of the autism spectrum disorders, whether father or mother exposing you to the degree of psychological stress as a result of their child's disease. Here you will find a set of those paragraphs that describe the feelings of the parents and the problems that they face in their lives. Read each item of those items. then decided on the extent of those feelings in your life and how it applies to you. By placing signal (/) in the box that expresses your feelings. Note that each number expresses the degree of those feelings you have.

If the feelings and issues that are involved in the paragraph does not occur at all, put signal in the first box.

If the feelings and issues that are involved in paragraph occur rarely, put signal in the second box.

If the feelings and issues that are involved in paragraph talked a little, put signal in the third box.

If the feelings and issues that are involved in paragraph talked a lot, put signal in the fourth box.

If the feelings and issues that are involved in paragraph occur Always, put signal in the fifth box.

		<b>N</b> T	D 1			4.1
		Never	Rarely	Occur	Occur	Always
No	Subscales and items	occur				
			Occur	Few	a lot	occur
	First subscale: Psychological and organi	c sympto	ms			
1	I feel sluggish and lazy and not wanting to					
	work.					
2	I feel tired and exhausted after any activity,					
	even simple.					
3	I suffer from insomnia and difficulty sleeping.					
4	I grieve and cry for a simple reason.					
5	I do not feel any pleasure in my life.					
6	I feel shortness of breath for no apparent					
	reason.					
7	I feel disturbances in heart rate for no apparent					
	reason.					
8	I suffer from headache for no apparent reason.					
9	I blame myself heavily on the simplest things.					
10	I feel loss of appetite and lack of the desire to					
	eat.					
11	I feel upset and suffocation in the presence of					
	others.					
12	I feel frustrated and do not want to life.					
13	I feel pain in joints for no apparent reason.		_			_



		Never	Rarely	Occur	Occur	Always
No	Subscales and items	occur	1 turing	occur	occur	111 Ways
210			Occur	Few	a lot	occur
14	It is Difficult for me to remember things even		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			
	simple.					
15	I suffer from digestive and intestines disorders					
	as constipation and diarrhea.					
16	I'm worried most of the time without a					
	rationale.					
17	I suffer from constant stomach pain that lead					
	to loss of enjoy in tasting food.					
	The second subscale: Feelings of despair	and frus	tration			
18	I feel that my family in danger of breakdown					
	due to my patient child.					
19	I feel that my life has crashed due to the					
	arrival of my patient child.					
20	I feel that others are looking to me inferiority					
	look due to the patient child.					
21	I feel that my relatives are trying to avoid					
	dealing with my family because my child's					
	disease.					
22	I think that the presence of a patient in my					
22	family is a major disaster.					
23	Taking my child abroad during holiday strain					
24	me and spoil on my pleasure.					
24	I feel that everything I do with my child is a wasted effort.					
25	Many instructions and directions that I should					
23	give to my child bothering me.					
26	It pains me that my child would not be a					
20	natural extension of my family.					
27	I have feeling that I caused my child's illness.					
28	I feel that the social status of the family will					
	suffer greatly because of the presence of an					
	patient.					
	Third subscale: The problems of child		•		•	•
29	My child has difficulty in expression and					
	language					<u></u>
30	I think that the constant preoccupation of my					
	child with things is thumping and restricted.					
31	I feel that my child lacks motivation to learn.					
32	I feel that my child trust himself.					
33	I regret my child's stereotyped and restricted					
	behavior and movements.					
34	It is difficult for my child to deal with his					
	colleagues.					
35	It is difficult for my child to cope with his					
	family members.				1	
36	Inability to control the behavior of my patient					
27	, worries me.					
37	My child can't express his feelings.					
38	It is difficult to deal with my child patient.		]			



		Never	Rarely	Occur	Occur	Always
No	Subscales and items	occur				·
			Occur	Few	a lot	occur
39	I think that my child needs ongoing guidance					
	and surveillance.					
40	My child get upset when he feels of my					
	neglect for him.					
41	My child can dependent on others in many					
- 40	things.					
42	My child can participate in sports.					
43	It bothers me that my child can maintain					
	cleanliness.					
4.4	Fourth subscale: Family problems I can't visit my friends whenever I want.	1	1	<u> </u>	1	
44	My family members give up a lot of					
43	necessities because of my patient child.					
46	I avoid talking with others about my patient.					
47	I feel embarrassed or confused because of my					
7/	patient.					
48	I think that my son will be a permanent					
	problem for my family.					
	Fifth subscale: Anxiety about the future of ch	ild	1		1	
49	I feel very sad when I think in my child's					
	status.					
50	I feel anxious and tight when I think about the					
	fate of my child when he grows up.					
51	I keen to provide extra protection for my					
	child.					
52	I feel frustrated and disappointed about					
	lifestyle of my child patient.					
53	I feel that my child capabilities is limited so					
	that he cannot perform the tasks of everyday life.					
54	I think that the family of a patient child					
34	perform tasks beyond the tasks performed by					
	regular family.					
55	I am concerned when I shortened in the care					
	of my son.					
56	I wish that the presence of my son patient just					
	a bad dream I will wake up from it.					
	•					
57	My child walk a consistent ,natural gait.					
	Sixth subscale: Inability to bear the burdens	of child	1		<u> </u>	
£0	<u> </u>		1		1	
58	I feel that people do not care for the feelings of the child's family.					
59	The requirements of the care of my son are so		-		-	
27	many and stressful for me.					
60	It is difficult for the patient's family to develop					
	plans for the future.					
61	It pains me the lack of appropriate support to					
	the family of the sick child.					



# Appendix (I)

#### **Resilience Scale for arbitration**

#### **Note:**

- Approval degree options: high, low, not approved
- The appropriateness of the items for the subscale: appropriate, inappropriate
- The validity of item linguistically: valid, invalid

No	Items	Approval	Items'	Validity of	Clarity of
		degree	appropriateness	item	wording
			for subscale	linguistically	
	First: Individual subscale				
1	I try to make my life better in spite of my disease.				
2	I can learn from the past and use this information to make the future better.				
3	I'm optimistic that my child will be able to learn new skills.				
4	My child's disease will make me strong in the face of things of my life.				
5	I control myself at all times.				
6	My success in my life depends on my effort and not on luck or chance.				
7	I hurt myself sometimes.				
8	I put realistic plans for the future that I can implement them.				
9	I take my decisions alone without pressure from anyone.				
10	I rely on myself in the affairs of my life.				
11	I feel a mix of conflicting feelings, at times.				
12	I like myself and take care.				
13	I try to do my best in every situation.				
14	I can achieve my goals despite the difficulties and obstacles that I face.				
15	I think that the failure is internal personal trait.				
16	I feel responsibility towards others and initiate to help them.				
17	I distinguish between right and wrong easily.				
18	I overcome all the problems that I'm having.				



No	Items	Approval	Items'	Validity of	Clarity of	
		degree	appropriateness	item	wording	
			for subscale	linguistically		
19	I discuss problems and feel good about solutions.					
20	God's supplies me in strength and patience in the face of my child's disease.					
21	I feel better when I pray or read the Quran.					
22	My life has meaning and purpose to live for.					
23	I believe that the disease is a test from God to test the strength of my faith.					
24	I adhered with certain values and principles.					
25	I keep good social relationships with others.					
26	I keep a sense of humor despite the problems faced.					
27	I deal with things steadily and quietly.					
28	I express my feelings through my work and practice my hobbies.					
29	I sow confidence in my child to help him solve his problems by himself.					
30	I show love and acceptance for my child.					
31	I gather information about the disease of my child.					
32	I participate in the treatment of my child					
	patient significantly.					
33	I help my child to do some life skills as dressing, food , drink, and others.					
34	I express my feelings toward my son's illness.					
	Second: Family subscale					
35	I enjoy spending time with my family.					
36	I share responsibility with my family.					
37	I show love and affection for family members.					
38	I feel safe at home.					
39	My family support and comfort me					
40	I and my family members help each other in the house.					
41	My family strong and cohesive through difficult times.					
42	There are people in my family, I talk to him about anything.					
	Third: Community subscale					
43	I feel secure in the society in which they live.					



No	Items	Approval	Items'	Validity of	Clarity of
		degree	appropriateness	item	wording
			for subscale	linguistically	
44	Participate in the activities of the mosque and religious centers.				
45	I think that this is a good community to raise children.				
46	I can depend upon people in this community.				
47	My friends encourage me and cheer me when I'm sad.				
48	I am a good and important friend.				
49	My friend helps me in difficult circumstances.				
50	I am talking to a friend when I feel upset.				
51	My friend comfort and take care of me.				
52	I wish I had more friends that I feel proximity of them				
53	I have a close friends, take care of them.				
54	I like my neighbors.				
55	My neighbors stay beside me and help me in difficult circumstances.				



#### Appendix (J)

#### **Resilience Scale in final form**

#### **Instruction to answer:**

You have to put a sign (/) in front of the item in the box that shows the degree of applicability to you as in the following example:

I have a good ability to plan for the future.

If your answer was strongly express consent, tick (/) at the bottom of this column, and so on.

Strongly agree	Agree	Uncertain	disagree	Strongly disagree
/				

No.	Items	Strongly	Agree	Uncertain	Disagree	Strongly
		agree	119100			disagree
	First :Individual subscale					
1	I can learn from the past and use that					
	information to make the future better.					
2	My child's disease will make me					
	strong in the face of things of my life.					
4	I control myself at all times.					
5	I put realistic plans for the future that					
	I can implement them.					
6	I take my decisions alone without					
	pressure from anyone.					
7	I depend on myself in the affairs of					
	my life.					
	I have a combination of conflicting					
	emotions.					
8	I like and take care of myself.					
9	I try to do my best in every situation.					
10	I can achieve my goals despite the					
	difficulties and obstacles that I face.					
13	I overcome all the problems that I'm					
	facing.					
14	I discuss problems and feel good					
	about solutions.					
15	I feel better when I pray or read the					
	Quran.					
16	My life has meaning and purpose to					
1.5	live for.					
17	I believe that the disease is a test from					
10	God to test the strength of my faith.					
18	I adhere to certain values and					
	principles.					



No.	Items	Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
19	I keep good social relationships with others.					
20	I keep a sense of humor despite the problems faced.					
21	I deal with matters steadily and quietly.					
22	I express my feelings through my work or practicing my hobbies.					
23	I build confidence in my child to help him solve his problems alone.					
24	I show love and acceptance for my child.					
25	I gather whole information about the disease of my child.					
26	I participate in the treatment of my child patient significantly.					
27	I help my child to do some life skills as clothing, food, drink, and others.					
	Second: Family subscale					
28	I enjoy spending time with my family.					
29	I share responsibility with my family members.					
30	I show love and affection for family members.					
31	I feel safe at home.					
32	My family support and comfort me.					
33	My family members help each other's in the home.					
34	My family strong and cohesive during difficult times.					
35	There is someone in my family, I can talk to about anything.					
	Third: Community subscale					
36	I feel secure in the society in which I live.					
37	I think that this is a good community to raise children.					
38	My friends encourage and cheer me when I'm sad.					
39	I'm good and important friend.					
40	My friend helps me in difficult circumstances.					
41	I am talking to a friend when I feel upset.					
42	Friend comfort and take care of me.					
43	I have close friends take care of them.					
44	I like my neighbors.					
45	My neighbors stay beside me and help me in difficult circumstances.					



## Appendix (K): Demographic information sheet

For you before read paragraphs tools please read the following questions carefully and answer them honestly, and tick (/) in front of answer that it considers apply to you:

Age	
Gender male ( )	female ( )
Occupation	
Place of residence	
Gaza □	
Governorate of North □	
middle governorate	
Khan Younis □	
Rafah □	
Diseases suffering from:	
physical disorders □	
psychiatric disorders □	
both disorders □	
free from disorders $\Box$	
What is your level of education	n?
Elementary or Preparatory	
Secondary	
A university □	
What is the total monthly inco	ome?



Less than 500 shekels □

## For your child, please answer the following questions:

- 1. What is the sex of your child? Male  $\square$  Female  $\square$
- 2. What is the age of your child exactly?
- 3. What is the order of the child between his family?

Thanks



# Appendixes in Arabic Language: الملاحق باللغة العربية

# مقياس الضغوط النفسية في صورته الأولية قبل التعديل مقياس الضغوط النفسية لأولياء أمور المعوقين (السرطاوي والشخص 1998)

يحدث	يحدث	يحدث	يحدث	لا يحدث	العبارة	
دائماً	كثيراً	قليلاً	نادراً	مطلقاً		
					البُعد الأول: الأعراض النفسية والعضوية	
					أشعر بالخمول والكسل وعدم الرغبة في النشاط	1
					أشعر بالتعب و الإرهاق عقب أي نشاط ولو بسيط	2
					أعاني من الأرق وصعوبة في النوم	3
					أحزن و أبكي لأبسط الأسباب	4
					لا أشعر بأي متعة في حياتي	5
					أشعر بضيق في التنفس دون سبب واضح	6
					أتعرض لاضطرابات في دقات القلب دون سبب واضح	7
					أعاني من الصداع دون سبب واضح	8
					لا أستطيع التحكم في أعصابي وأثور لأبسط الأسباب	9
					ألوم نفسي بشدة على أبسط الأشياء	10
					يصعب على اتخاذ أي قرار و لو بسيط	11
					أشعر بفقد الشهية وعدم الرغبة في نتاول الطعام	12
					أشعر بالضيق والاختتاق في وجود الآخرين	13
					أشعر بالإحباط وعدم الرغبة في الحياة	14
					أشعر بآلام في مفاصلي دون سبب واضح	15
					يصعب على تذكر الأشياء و لو البسيطة	16
					أعاني من اضطرابات الهضم	17
					أشعر بالقلق معظم الوقت دون مبرر	18
					أعاني من ألم مستمر بمعدتي يفقدني الاستمتاع بتذوق	19
					الطعام.	
					أعاني من اضطرابات في الأمعاء تسبب لي الإمساك تارة و	20
					الإسهال تارة أخرى.	



يحدث	يحدث	يحدث	يحدث	لا يحدث	العبارة	
دائماً	كثيراً	قليلاً	نادراً	مطلقاً		
					البعد الثاني: مشاعر اليأس والإحباط	
					أشعر بأن أسرتي مهددة بالانهيار بسبب ابني المعوق	21
					أشعر أن حياتي قد تحطمت بسبب قدوم ابني المعوق	22
					أشعر أن الآخرين ينظرون إلى نظرة دونية بسبب ابني	23
					المعوق.	
					أشعر أن أقاربي يحاولون تجنب التعامل مع أسرتي بسبب	24
					ابني المعوق	
					أشعر أن أصدقائي قد تخلو عني بسبب ابني المعوق	25
					أعتقد أن وجود فرد معوق في الأسرة يعد كارثة كبيرة لها	26
					إن اصطحاب ابني إلى الخارج خلال العطلة يفسد عليّ	27
					متعتي	
					أشعر أن كل ما نفعله مع ابننا هو جهد ضائع	28
					تزعجني كثرة التعليمات والتوجيهات التي يتعين إعطاؤها	29
					لابني	
					يؤلمني أن ابني لن يكون امتدادا طبيعيا لأسرتي	30
					ينتابني الشعور بأنني سبب إعاقة ابني	31
					أشعر أن وضع الأسرة الاجتماعي سوف يعاني كثيرا بسبب	32
					وجود فرد معوق فيها	
					أعتقد أنه لا جدوى من محاولة تعليم ابني ولو مهنة بسيطة	33
					يؤلمني إحجام الناس عن الزواج من أسرنتا بسبب ابننا	34
					المعوق	
					البعد الثالث: المشكلات المعرفية والنفسية للطفل	
					يواجه ابني صعوبة كبيرة في الفهم	35
					يصعب على ابني تركيز الانتباه لفترة طويلة	36
					أشعر أن ابني يفتقد الدافعية للتعلم	37
					أشعر أن ابني لا يثق بنفسه	38
					يؤسفني ممارسة ابني سلوكيات غير مهذبة	39
					يصعب على ابني التعامل مع أقرانه	40



يحدث	يحدث	يحدث	يحدث	لا يحدث	العبارة	
دائماً	كثيراً	قليلاً	نادراً	مطلقاً		
					يصعب على ابني التكيف مع أفراد الأسرة	41
					يقلقني عدم القدرة على ضبط سلوك ابني المعوق	42
					لا يستطيع ابني التعبير عن مشاعره	43
					يصعب على التعامل مع ابني المعوق	44
					يقلقني أن ابني يخاف من كل شيء	45
					أعتقد أن ابني يحتاج إلى توجيه و مراقبة مستمرة	46
					أشعر بالتوتر حينما اصطحب ابني إلى الأماكن العامة	47
					البعد الرابع: المشكلات الأسرية	
					لا يمكنني زيارة أصدقائي وقتما أشاء	48
					يتخلى أفراد الأسرة عن الكثير من الضروريات بسبب وجود	49
					طفل معوق بها	
					أنجنب الحديث مع الآخرين عن ابني المعوق	50
					أشعر أحيانا بالحرج والارتباك بسبب ابني المعوق	51
					أعتقد أن ابني سوف يمثل مشكلة دائمة للأسرة	52
					البعد الخامس: القلق على مستقبل الطفل	
					أشعر بالحزن الشديد عندما أفكر في حالة ابني	53
					أشعر بالقلق و الضيق حينما أفكر في مصير ابني عندما	54
					يكبر	
					أشعر بالإحباط حينما أدرك أن ابني لن يعيش حياة طبيعية	55
					مطلقاً	
					أحرص على توفير الحماية الزائدة لابني	56
					يؤلمني الشعور بأن ابني سيقضي كل حياته معوقاً	57
					أشعر بالإحباط وخيبة الأمل تجاه أسلوب حياة ابني المعوق	58
					أشعر بأن إمكانات ابني محدودة بحيث لا يتمكن من أداء	59
					مهام الحياة اليومية	
					أعتقد أن أسرة الطفل المعوق تؤدي مهاماً تفوق المهام التي	60
					تقوم بها الأسرة العادية	
					أشعر بالقلق عندما أقصر في رعاية ابني	61



يحدث	يحدث	يحدث	يحدث	لا يحدث	العبارة	
دائماً	كثيراً	قليلاً	نادراً	مطلقاً	, ,	
					أشعر أن إنجازات ابني أقل بكثير مما هو متوقع منه	62
					أتمنى لو كان وجود ابني المعوق مجرد حلم مزعج سوف أفيق منه	63
					أشعر بالأسى من الصور المشوهة التي تقدمها وسائل	64
					الإعلام عن المعوقين	
					ينزعج ابني عندما يشعر بعدم اهتمامي به.	65
					البعد السادس: مشكلات الأداء الاستقلالي للطفل	
					لا يستطيع ابني الاعتماد على نفسه في ارتداء ملابسه	66
					لا يستطيع ابني استخدام الحمام بنفسه	67
					يجد ابني صعوبة في التعرف على عنوان المنزل	68
					لا يستطيع ابني المشاركة في الألعاب الرياضية	69
					لا يستطيع ابني التحكم في حركته أثناء المشي ويتعرض	70
					للسقوط	
					لا يستطيع ابني المشي بدون مساعدة	71
					يصعب على ابني تعلم المهارات البسيطة	72
					يزعجني أن ابني لا يستطيع المحافظة على نظافته	73
					البعد السابع: عدم القدرة على تحمل أعباء الطفل	
					يقلقني أن متطلبات رعاية ابني المعوق تفوق كثيراً قدراتي	74
					المادية	
					أشعر أن الناس لا يراعون مشاعر أسرة الطفل المعوق	75
					أشعر بأنني تخليت عن الكثير من الأشياء التي طالما	76
					تمنيتها بسبب ابني المعوق	
					متطلبات رعاية ابني كثيرة ومرهقة بالنسبة لنا	77
					يصعب على أسرة الطفل المعوق وضع خطط للمستقبل	78
					يؤلمني عدم توافر الدعم المناسب لأسرة الطفل المعوق	79
					يزعجني أن ابني عدواني بصورة لا تطاق	80



# الرسالة الموجهة للمحكمين



الجامعة الإسلامية – غزة

عمادة الدراسات العليا

كلية التمريض

، مقياس	تحكيم	طلب
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الأخ/ت الدكتور/ة : ......

أتشرف بإحاطتكم علماً بأنني أقوم بإجراء دراسة حول "الضغوط النفسية والمرونة النفسية لدى آباء وأمهات الأطفال فوي اضطرابات طيف التوحد في محافظات غزة "كمتطلب للحصول على درجة الماجستير في علوم تمريض الصحة النفسية المجتمعية في الجامعة الإسلامية و لذا قمت بتصميم مقياس المرونة النفسية ،والتي تم تعريفها في الدراسة على أنها "مجموعة من العمليات التي تساعد أولياء أمور الأطفال ذوي اضطرابات طيف التوحد في استخدام المصادر الداخلية والخارجية لمقاومة المخاطر النفسية والاجتماعية التي تواجههم". ويتكون هذا الاستبيان في صورته المبدئية من "59 " عبارة. . وينحصر هذا الاستبيان في الأبعاد الآتية:

- 1. البعد الشخصي وهو ما يعبر عن السمات الشخصية للفرد والتي تتضمن العمليات النفسية والعضوية التي تقيه أو تعرضه للمخاطر و تشمل التفاؤل ، التحكم ، الكفاءة الذاتية ، تقدير الذات ، الأخلاق ،حل المشكلات ، المعتقدات الداعمة والدين، المهارات الاجتماعية والتكيف. والعبارات التي تعبر عن هذا البعد هي من (1-30).
  - 2. البعد الأسري و هو مجموعة من العمليات في داخل المنزل كالترابط و الدعم وتوفر أفراد أسرة والتي تعمل على حماية الفرد من المخاطر أو تعرضه لها. والعبارات التي تعبر عن هذا البعد هي من (30–38).
- 3. البعد المجتمعي و هو مجموعة من العمليات في خارج محيط المنزل كسلامة المجتمع و دعمه ، دعم الأصدقاء و دعم الأبيران والتي تعمل على حماية الفرد من المخاطر أو تعرضه لها . والعبارات التي تعبر عن هذا البعد هي من (50-39).



علماً بأن بدائل الإجابة في مقياس المرونة النفسية على الفقرات هي أوافق بشدة ، أوافق ،محايد، لا أوافق، لا أوافق بشدة.

من جهة أخرى قامت الباحثة بتعديل مقياس الضغوط النفسية لأولياء أمور المعاقين (الشخص والسرطاوي، 1998) ليصبح مناسباً لقياس الضغوط النفسية لأولياء أمور الأطفال ذوي اضطرابات طيف التوحد . وتعبر الضغوط النفسية في هذه الدراسة عن ذلك التأثير السيئ الذي يحدثه وجود طفل مريض بأحد اضطرابات طيف التوحد ( وما يتسم به من خصائص سلبية) لدي الوالدين فيثير لديهم ردود فعل عقلية وانفعالية أو عضوية غير مرغوبة؛ تعرضهم للتوتر والضيق والقلق والحزن والأسي، كما قد يعانون من بعض الأعراض النفسية الجسمية التي تستنفذ طاقاتهم وتحول دون قدرتهم علي التركيز فيما يقومون به من أعمال. ويتكون هذا المقياس في صورته المبدئية من " 61 " عبارة. . وينحصر هذا المقياس في الأبعاد الآتية:

الأعراض النفسية والجسمية ، مشاعر اليأس والإحباط، مشاكل الطفل ، المشكلات الأسرية، القلق على مستقبل الطفل، وعدم القدرة على تحمل أعباء الطفل . علماً بأن بدائل الإجابة في على الفقرات هي لا يحدث مطلقاً ، يحدث نادراً، يحدث قليلاً، يحدث كثيراً، يحدث دائماً.

أضع بين يديكم هذه المقابيس رغبة في الاستفادة من خبرتكم وعلمكم الوفير ، فبرجاء التكرم بمراجعة عبارات كل بعد و إعطاء رأيكم السديد و مقترحاتكم بشأن فقرات الاستبيان في مدى صلاحيتها وملائمتها لبيئة قطاع غزة ، وهل هي جديرة بأن توضع في المقياس وتنتمي اليه أم لا، و مدى انتماء كل فقرة للمجال المحدد لها ، وبنائها اللغوي، و أية اقتراحات ثم تعديل أي عبارة ترونها تحتاج إلى تعديل لتحقيق هدف الدراسة الحالية و لتخرج الاستبيانات بصورة مفيدة للقارئ أملاً في زيادة العائد العلمي للبيانات المدونة .

مع خالص الشكر والتقدير

الباحثة / سالى خالد أبو دقة



# مقياس الضغوط النفسية قبل التحكيم

## ملاحظة:

- \* خيارات درجة الموافقة: عالية ، منخفضة ، لا يعمل به
  - \* مدى ملائمة الفقرة للبعد: ملائمة ،غير ملائمة
  - \* صلاحية الفقرة لغوياً: صالحة ، غير صالحة

					رحية المصرة عوية. عداعة المحالفة	
ملاحظات	صلاحية	وضوح	مدی	درجة	العبارة	
	الفقرة	الصياغة	ملائمة	الموافقة		
			الفقرة للبعد			
	لغويا					
					لأول: الأعراض النفسية والجسمية	البعدا
					أشعر بالخمول والكسل وعدم الرغبة في	1
					النشاط.	
					أشعر بالتعب والإرهاق عقب أي نشاط ولو	2
					بسيط.	
					أعاني من الأرق وصعوبة في النوم.	3
					أحزن و أبكي لأبسط الأسباب.	4
					لا أشعر بأي متعة في حياتي.	5
					أشعر بضيق في التنفس دون سبب واضح.	6
					أتعرض لاضطرابات في دقات القلب دون	7
					سبب واضىح.	
					أعاني من الصداع دون سبب واضح.	8
					ألوم نفسي بشدة على أبسط الأشياء.	9
					أشعر بفقد الشهية وعدم الرغبة في نتاول الطعام	10
					أشعر بالضيق والاختناق في وجود الآخرين.	11
					أشعر بالإحباط وعدم الرغبة في الحياة.	12
					أشعر بآلام في مفاصلي دون سبب واضح.	13
					يصعب علىّ تذكر الأشياء و لو البسيطة.	14
					أعاني من اضطرابات الهضم والأمعاء	15
					كالإمساك والإسهال .	
					أشعر بالقلق معظم الوقت دون مبرر.	16



ملاحظات	صلاحية	وضوح	مدی	درجة	العبارة	
	الفقرة	الصياغة	ملائمة	الموافقة		
			الفقرة للبعد			
	لغويا					
					أعاني من ألم مستمر بمعدتي يفقدني	17
					الاستمتاع بتذوق الطعام.	
				T	لثاني: مشاعر اليأس والإحباط	البعد ا
					أشعر بأن أسرتي مهددة بالانهيار بسبب طفلي	18
					المريض.	
					أشعر أن حياتي قد تحطمت بسبب قدوم طفلي	19
					المريض.	
					أشعر أن الآخرين ينظرون إلى نظرة دونية	20
					بسبب ابني المريض.	
					أشعر أن أقاربي يحاولون تجنب التعامل مع	21
					أسرتي بسبب طفلي المريض.	
					أعنقد أن وجود فرد مريض في أُسرتي يعد	22
					كارثة كبيرة لها.	
					إن اصطحاب طفلي إلى الخارج خلال العطلة	23
					يوترني ويفسد عليّ متعتي.	
					أشعر أن كل ما أفعله مع طفلي هو جهد ضائع.	24
					تزعجني كثرة التعليمات والتوجيهات التي يتعين	25
					إعطاؤها لطفلي.	
					يؤلمني أن طفلي لن يكون امتدادا طبيعيا	26
					لأسرتي.	
					ينتابني الشعور بأنني سبب مرض ابني.	27
					أشعر أن وضع أسرتي الاجتماعي سوف	28
					يعاني كثيرا بسبب وجود فرد مريض فيها.	
		l	<u> </u>	<u> </u>		البعد ا
					يواجه طفلي صعوبة في التعبير واللغة.	29
					أعتقد أن انشغال طفلي المستمر بالأشياء شاذ و مقيد.	30
					أشعر أن طفلي يفتقد الدافعية للنعلم.	31



ملاحظات	صلاحية	وضوح	مدی	درجة	العبارة	
	الفقرة	الصياغة	ملائمة	الموافقة		
			الفقرة للبعد			
	لغويا					
					اشعر أن طفلي لا يثق بنفسه.	32
					يؤسفني ممارسة طفلي سلوكيات وحركات	33
					متكررة و مقيدة.	
					يصعب على طفلي التعامل مع زملائه.	34
					يصعب على طفلي التكيف مع أفراد الأسرة.	35
					يقلقني عدم القدرة على ضبط سلوك طفلي	36
					المريض.	
					لا يستطيع طفلي التعبير عن مشاعره.	37
					يصعب علي التعامل مع طفلي المريض.	38
					أعتقد أن طفلي يحتاج إلى توجيه و مراقبة	39
					مستمرة.	
					لا يستطيع طفلي الاعتماد على نفسه في	40
					بعض الأشياء.	
					لا يستطيع طفلي المشاركة في الألعاب	41
					الرياضية.	
					لا يستطيع طفلي المشي مشية طبيعية	42
					منتاسقة.	
					يزعجني أن طفلي لا يستطيع المحافظة على	43
					نظافته.	
		•			الرابع: المشاكل الأسرية	البعد
					لا يمكنني زيارة أصدقائي وقتما أشاء.	44
					يتخلى أفراد أسرتي عن الكثير من الضروريات	45
					" بسبب وجود طفل مريض بها.	
					أتجنب الحديث مع الآخرين عن طفلي	46
					المريض.	
					أشعر أحيانا بالحرج والارتباك بسبب طفلي	47
					المريض.	



ملاحظات	صلاحية	وضوح	مدی	درجة	العبارة	
	الفقرة	الصياغة	ملائمة	الموافقة		
	1 21		الفقرة للبعد			
	لغويا				- \$15 (1.51c = 15 til . 1.5c-1	40
					أعتقد أن طفلي سوف يمثل مشكلة دائمة لأسرتي.	48
					لخامس: القلق على مستقبل الطفل	
					أشعر بالحزن الشديد عندما أفكر في حالة	49
					طفلي.	
					أشعر بالقلق و الضيق حينما أفكر في مصير	50
					ابني عندما يكبر.	
					أحرص على توفير الحماية الزائدة لابني.	51
					أشعر بالإحباط وخيبة الأمل تجاه أسلوب حياة	52
					ابني المريض .	
					أشعر بأن إمكانات ابني محدودة بحيث لا	53
					يتمكن من أداء مهام الحياة اليومية.	
					أعتقد أن أسرة الطفل المريض تؤدي مهاما	54
					تفوق المهام التي تقوم بها الأسرة العادية.	
					أشعر بالقلق عندما أقصر في رعاية ابني.	55
					أتمنى لو كان وجود ابني المريض مجرد حلم	56
					مزعج سوف أفيق منه.	
					ينزعج ابني عندما يشعر بعدم اهتمامي به.	57
					لسادس: عدم القدرة على تحمل أعباء الطفل	البعد ا
					أشعر أن الناس لا يراعون مشاعر أسرة الطفل	58
					المريض.	
					متطلبات رعاية ابني كثيرة ومرهقة بالنسبة لنا.	59
					يصعب على أسرة الطفل المريض وضع خطط	60
					المستقبل.	
					يؤلمني عدم توافر الدعم المناسب لأسرة الطفل	61
					المريض.	



# مقياس المرونة قبل التحكيم

- \* خيارات درجة الموافقة : عالية ، منخفضة ، لا يعمل به
  - \* مدى ملائمة الفقرة للبعد :ملائمة ،غير ملائمة
  - \* صلاحية الفقرة لغوياً: صالحة ، غير صالحة

ملائمة	وضوح	مدى ملائمة	درجة	الفقرات
الفقرة لغويا	الصياغة	الفقرة للبعد	الموافقة	
				أولاً: البعد الشخصي
				1. أحاول أن أجعل حياتي أفضل بالرغم من مرض طفلي.
				2. أتعلم من الماضي وأستفيد منه لجعل المستقبل أفضل.
				3. أنا متفائل بأن طفلي المريض سيكون قادراً على
				نعلم مهارات جديدة.
				4. مرض طفلي سيجعلني قوياً في مواجهة أمور
				حياتي.
				5. أُقْدِر على التحكم بنفسي في جميع الأوقات.
				6. نجاحي في حياتي يعتمد على مجهودي وليس
				على الحظ أو الصدفة.
				7. أنا أُوِّذِي نفسي في بعض الأحيان.
				تنفيذها.8a. أضع خطط واقعية للمستقبل أستطيع
				9. أَتَخِذ قراراتي بنفسي دون ضغط من أحد.
				10. أَعْتَمِد على نفسي في شئون حياتي .
				11. ينتابني مزيج من المشاعر المتضاربة .
				12. أنا أُحب نفسي و أَعتني بها .
				13. أُحاوِل أن أفعل أفضل ما عندي في كل موقف.
				14. أستطيع تحقيق أهدافي مهما واجهت من صعوبات و
				معيقات.
				15. أعنقد أن الفشل يعود إلى أسباب تكمن في الشخص
				نفسه.
				16. أشعر بالمسئولية تجاه الآخرين و أبادر بمساعدتهم.
				17. من السهل أن أفَرِق بين الحق والباطل.
				18. أَتَعَلَّب على كافة المشاكل التي تواجهني.



ملائمة	وضوح	مدى ملائمة	درجة	الفقرات
الفقرة لغويا	الصياغة	الفقرة للبعد	الموافقة	
				19. أُناقِش المشاكل وأشعر بالرضا عن الحلول.
				20. يمدني الله بالقوة والصبر في مواجهة مرض
				طفلي.
				21. أشعر بأن حالي تصبح أفضل عندما أصلي أو
				أقرأ القرآن.
				22. حياتي لها معنى و هدف أعيش من أجله.
				23. أؤمِن بأن المرض ابتلاء من الله لاختبار قوة
				إيماني.
				24. لدى قيم و مبادئ معينة ألتزم بها.
				25. أحافظ على علاقات اجتماعية جيدة مع
				الآخرين.
				26. أحافظ على روح الدعابة والنكتة مهما واجهت
				من مشاكل.
				27. أَتَعامل مع الأمور بثبات وهدوء.
				28. أُعَبِّر عن مشاعري من خلال عملي و ممارسة
				هواياتي.
				29. أُزْرَع الثقة في طفلي حتى تساعده في حل
				مشاكله بنفسه.
				30. أَظْهِر المحبة والقبول لطفلي المريض.
				31. أُجْمَع المعلومات عما يتعلق بمرض طفلي.
				32. أُشارِك في علاج طفلي المريض بصورة كبيرة.
				33. أُساعِد طفلي في القيام ببعض المهارات الحياتية
				كالملبس والمأكل والمشرب وغيرها.
				34. أُعَبِّر عن مشاعري تجاه مرض ابني.
				ثانياً: البعد الأسري
				35. أَسْتَمتِع بقضاء الوقت مع أسرتي.
				36. أتقاسم المسؤولية مع أفراد أسرتي.
				37. أُطْهِر الحب والمودة الأفراد الأسرة .



ملائمة	وضوح	مدى ملائمة	درجة	الفقرات
الفقرة لغويا	الصياغة	الفقرة للبعد	الموافقة	
				38. أُشعر بالأمان في المنزل.
				39. عائلتي تدعمني و تريحني.
				40. أنا وأفراد أسرتي نساعد بعضنا البعض في
				المنزل.
				41. أسرتي قوية ومتماسكة خلال الأوقات الصعبة.
				42. هنالك شخص في أسرتي يمكنني التحدث معه
				عن أي شيء.
				ثالثاً: البعد المجتمعي
				43. أشعر بالأمن في المجتمع الذي أعيش فيه.
				44. أُشَارِك في أنشطة المسجد والمراكز الدينية.
				45. أعتقد أن هذا مجتمع جيد لتربية الأطفال.
				46. أَعْتَمِد على الناس في هذا المجتمع.
				47. أصدقائي يشجعونني ويبهجونني عندما أكون
				حزيناً.
				48. أنا صديق جيد و مهم.
				49. صديقي يساعدني في الظروف الصعبة.
				50. أتحدث إلى أحد الأصدقاء عندما أشعر بالضيق.
				51. صديقي يريحني ويعتني بي.
				52. أتمنى لو كان لدي المزيد من الأصدقاء الذين
				أشعر بقربهم .
				53. لدي أصدقاء مقربين أهتم بهم.
				54. أنا أحب جيراني.
				55. جيراني يبقون بقربي ويساعدونني في الظروف
				الصعبة .



# استمارة جمع البيانات

أخي وأختى الفاضل/ة ..... حفظك الله

تقوم الباحثة بإجراء دراسة حول " الضغوط النفسية والمرونة النفسية لدى آباء و أمهات الأطفال ذوي اضطرابات طيف التوحد في قطاع غزة " وذلك للحصول على درجة الماجستير – تخصص صحة نفسية مجتمعية . و لأجل ذلك تم إعداد الأدوات التالية:

- 1. مقياس الضغوط النفسية.
- 2. استبانة المرونة النفسية.
- 3. استبانة المتغيرات الديموغرافية.

إن المعلومات التي تصدر عنك ستكون في غاية السرية و لن تستخدم إلا لأغراض البحث العلمي فقط. ولك الحرية أن توافق أو ترفض المشاركة في هذه الدراسة . لذا من الضروري أن تجيب بنعم عند الموافقة أو لا عند الرفض.

إن كانت إجابتك بالموافقة على المشاركة ،يرجى التكرم بالاستجابة على هذه الأدوات بصراحة بعد قراءة كل فقرة فيها بعناية ، مع العلم أنه لا يوجد إجابة صحيحة وأخرى خاطئة ، بل المهم أن تعبر الإجابة بصدق عما تشعر به وتحسه من وجهة نظرك .حيث أن صدق نتائج البحث مرهونة بصدق إجابتك ،والتي لن تستغرق منك وقتاً طويلاً بإذن الله. رجاءً لا تناقش إجابتك مع زملائك أثناء تعبئة الاستبيان أو بعد الانتهاء من الإجابة عليه. حاول أن لا تترك عبارة دون أن تبدي رأيك فيها ،وأجب عن السؤال على الفور دون تأمل.

كل استبيان يقدم مجموعة من التعليمات، لذا الرجاء قراءة التعليمات جيداً قبل الإجابة على الأسئلة. عزيزي المستجيب إن تعاونك عمل وطني و خدمة للبحث العلمي في بلدنا. أعدك بموافاتك بكل جديد بما يخص التوحد من ندوات و جلسات علاجية وغيرها إن سنحت الفرصة وذلك تقديرا لتعاونك ووقتك الثمين الذي قضيته بالإجابة.

شاكرين تعاونك

أوافق على المشاركة في الدراسة: نعم ( ) لا ( )

الباحثة سالى خالد أبو دقة

مقياس المرونة في صورته النهائية



# تعليمات الإجابة على الاستبيان

عليك أن تضع علامة ( / ) أمام العبارة في المربع الذي يوضح درجة انطباقها عليك كما في المثال التالي: لدي القدرة على التخطيط الجيد للمستقبل.

فاذا كانت إجابتك تعبر عن موافقتك بشدة ضع علامة ( / ) أسفل هذه الخانة وهكذا

لا أوافق	لا أوافق بشدة	محايد	أوافق	أوافق بشدة
				/

لا أوافق	لا أوافق	محايد	أوإفق	أوإفق	الفقرات	
بشدة				بشدة		
					أتعلم من الماضي وأستفيد منه لجعل المستقبل	1
					أفضل.	
					مرض طفلي سيجعلني قوياً في مواجهة أمور حياتي.	2
					أَتْحَكُّم بنفسي في جميع الأوقات.	3
					أضع خطط واقعية للمستقبل أستطيع تتفيذها.	4
					أَتَخِذ قراراتي بنفسي دون ضغط من أحد.	5
					أَعْتَمِدِ على نفسي في شئون حياتي .	6
					ينتابني مزيج من المشاعر المتضاربة .	7
					أنا أُحب نفسي و أعتني بها .	8
					أُحاوِل أن أفعل أفضل ما عندي في كل موقف.	9
					أستطيع تحقيق أهدافي مهما واجهت من صعوبات و	10
					معيقات.	
					أَتَغَلَّب على كافة المشاكل التي توجهني.	11
					أناقِش المشاكل وأشعر بالرضا عن الحلول.	12
					أشعر بأن حالي تصبح أفضل عندما أصلي أو أقرأ	13
					القرآن.	
					حياتي لها معنى و هدف أعيش من أجله.	14
					أُؤْمِن بأن المرض ابتلاء من الله لاختبار قوة إيماني.	15
					لدى قيم و مبادئ معينة ألتزم بها.	16



لا أوافق	لا أوافق	محايد	أوإفق	أوإفق	الفقرات	
بشدة				بشدة		
					أحافظ على علاقات اجتماعية جيدة مع الآخرين.	17
					أحافظ على روح الدعابة والنكتة مهما واجهت من	18
					مشاكل.	
					أَنَّعامل مع الأمور بثبات وهدوء.	19
					أُعَبِّر عن مشاعري من خلال عملي و ممارسة	20
					هواياتي.	
					أَزْرَع الثقة في طفلي حتى تساعده في حل مشاكله	21
					بنفسه.	
					أُظْهِر المحبة والقبول لطفلي المريض.	22
					أَجْمَع المعلومات عما يتعلق بِمرض طفلي.	23
					أُشارِك في علاج طفلي المريض بصورة كبيرة.	24
					أُساعِد طفلي في القيام ببعض المهارات الحياتية	25
					كالملبس والمأكل والمشرب وغيرها.	
					أَسْتَمَتِع بقضاء الوقت مع أسرتي.	26
					أَتْقَاسِم المسؤولية مع أفراد أسرتي.	27
					أُظْهِر الحب والمودة لأفراد الأسرة .	28
					أشعر بالأمان في المنزل.	29
					عائلتي تدعمني و تريحني.	30
					أنا وأفراد أسرتي نساعد بعضنا البعض في المنزل.	31
					أُسرتي قوية ومتماسكة خلال الأوقات الصعبة.	32
					هنالك شخص في أسرتي يمكنني التحدث معه عن	33
					أي شيء.	
					أشعر بالأمن في المجتمع الذي أعيش فيه.	34
					أعتقد أن هذا مجتمع جيد لتربية الأطفال.	35
					أَعْتَمِد على الناس في هذا المجتمع.	36
					أصدقائي يُشجعونني ويُبهجونني عندما أكون حزيناً.	37
					أنا صديق جيد و مهم.	38
					صديقي يساعدني في الظروف الصعبة.	39



لا أوافق	لا أوافق	محايد	أوافق	أوافق	الفقرات	
بشدة				بشدة		
					أتحدث إلى أحد الأصدقاء عندما أشعر بالضيق.	40
					صديقي يريحني ويعنتي بي.	41
					أتمنى لو كان لدي المزيد من الأصدقاء الذين أشعر	42
					بقريهم	
					لدي أصدقاء مقربين أهتم بهم.	43
					أنا أحب جيراني.	44
					جيراني يبقون بقربي ويساعدونني في الظروف	45
					الصعبة .	



## مقياس الضغوط النفسية في صورته النهائية

## تعليمات الإجابة على المقياس:

يتعرض ولي أمر الطفل المريض بأحد اضطرابات طيف التوحد سواء كان أباً أو أماً إلى درجة من الضغوط النفسية نتيجة مرض طفلهم . وستجد فيما يلي مجموعة من تلك العبارات التي تصف مشاعر أولياء الأمور و المشكلات التي يتعرضون لها في حياتهم . اقرأ كل عبارة من تلك العبارات . ثم قرر مدى حدوث تلك المشاعر في حياتك ومدى انطباقها عليك . وذلك بوضع إشارة (/) في المربع الذي يعبر عن مشاعرك. لاحظ أن كل رقم يعبر عن درجة حدوث تلك المشاعر لديك.

فاذا كانت المشاعر والمشكلات المتضمنة في العبارة لا تحدث مطلقاً ضع الإشارة في المربع الأول. فاذا كانت المشاعر والمشكلات المتضمنة في العبارة تحدث نادراً ضع الإشارة في المربع الثاني. فاذا كانت المشاعر والمشكلات المتضمنة في العبارة تحدث قليلاً ضع الإشارة في المربع الثالث. فاذا كانت المشاعر والمشكلات المتضمنة في العبارة تحدث كثيراً ضع الإشارة في المربع الرابع. فاذا كانت المشاعر والمشكلات المتضمنة في العبارة تحدث دائماً ضع الإشارة في المربع الخامس.

يحدث	يحدث	يحدث	يحدث	لا يحدث	العبارة			
دائماً	كثيراً	قليلاً	نادراً	مطلقاً				
					عد الأول: الأعراض النفسية والجسمية			
					أشعر بالخمول والكسل وعدم الرغبة في	1		
					النشاط.			
					أشعر بالتعب والإرهاق عقب أي نشاط ولو	2		
					بسيط.			
					أعاني من الأرق وصعوبة في النوم.	3		
					أحزن و أبكي لأبسط الأسباب.	4		
					لا أشعر بأي متعة في حياتي.	5		
					أشعر بضيق في التنفس دون سبب واضح.	6		
					أتعرض لاضطرابات في دقات القلب دون	7		
					سبب واضح.			
					أعاني من الصداع دون سبب واضح.	8		
					ألوم نفسي بشدة على أبسط الأشياء.	9		
					أشعر بفقد الشهية وعدم الرغبة في تتاول الطعام	10		
					أشعر بالضيق والاختتاق في وجود الآخرين.	11		



يحدث	يحدث	يحدث	يحدث	لا يحدث	العبـــارة	
دائماً	كثيراً	قليلاً	نادراً	مطلقاً		
					أشعر بالإحباط وعدم الرغبة في الحياة.	12
					أشعر بآلام في مفاصلي دون سبب واضح.	13
					يصعب على تذكر الأشياء و لو البسيطة.	14
					أعاني من اضطرابات الهضم والأمعاء	15
					كالإمساك والإسهال .	
					أشعر بالقلق معظم الوقت دون مبرر.	16
					أعاني من ألم مستمر بمعدتي يفقدني	17
					الاستمتاع بتذوق الطعام.	
				•	لثاني: مشاعر اليأس والإحباط	البعد ا
				_		
					أشعر بأن أسرتي مهددة بالانهيار بسبب طفلي	18
					المريض.	
					أشعر أن حياتي قد تحطمت بسبب قدوم طفلي	19
					المريض.	
					أشعر أن الآخرين ينظرون إلى نظرة دونية	20
					بسبب ابني المريض.	
					أشعر أن أقاربي يحاولون تجنب التعامل مع	21
					أسرتي بسبب طفلي المريض.	
					أعتقد أن وجود فرد مريض في أسرتي يعد	22
					كارثة كبيرة لها.	
					إن اصطحاب طفلي إلى الخارج خلال العطلة	23
					يوترني ويفسد عليّ متعتي.	
					أشعر أن كل ما أفعله مع طفلي هو جهد ضائع.	24
					تزعجني كثرة التعليمات والتوجيهات التي يتعين	25
					إعطاؤها لطفلي.	
					يؤلمني أن طفلي لن يكون امتدادا طبيعيا	26
					لأسرتي.	
					ينتابني الشعور بأنني سبب مرض ابني.	27



يحدث	يحدث	يحدث	يحدث	لا يحدث	العبارة	
دائماً	كثيراً	قليلاً	نادراً	مطلقاً		
					أشعر أن وضع أسرتي الاجتماعي سوف	28
					يعاني كثيرا بسبب وجود فرد مريض فيها.	
					لثالث: مشاكل الطفل	البعد ا
					يواجه طفلي صعوبة في التعبير واللغة.	29
					أعتقد أن انشغال طفلي المستمر بالأشياء شاذ	30
					و مقيد.	
					أشعر أن طفلي يفتقد الدافعية للتعلم.	31
					اشعر أن طفلي لا يثق بنفسه.	32
					يؤسفني ممارسة طفلي سلوكيات وحركات	33
					متكررة و مقيدة.	
					يصعب على طفلي التعامل مع زملائه.	34
					يصعب على طفلي التكيف مع أفراد الأسرة.	35
					يقلقني عدم القدرة على ضبط سلوك طفلي	36
					المريض.	
					لا يستطيع طفلي التعبير عن مشاعره.	37
					يصعب علي التعامل مع طفلي المريض.	38
					أعنقد أن طفلي يحتاج إلى توجيه و مراقبة	39
					مستمرة.	
					لا يستطيع طفلي الاعتماد على نفسه في	40
					بعض الأشياء.	
					لا يستطيع طفلي المشاركة في الألعاب	41
					الرياضية.	
					لا يستطيع طفلي المشي مشية طبيعية	42
					متناسقة.	
					يزعجني أن طفلي لا يستطيع المحافظة على	43
					نظافته.	
لرابع: المشاكل الأسرية						البعدا
					لا يمكنني زيارة أصدقائي وقتما أشاء.	44



يحدث	يحدث	يحدث	يحدث	لا يحدث	العبارة		
دائماً	كثيراً	قليلاً	نادراً	مطلقاً			
					يتخلى أفراد أسرتي عن الكثير من الضروريات	45	
					بسبب وجود طفل مريض بها.		
					أتجنب الحديث مع الآخرين عن طفلي	46	
					المريض.		
					أشعر أحيانا بالحرج والارتباك بسبب طفلي	47	
					المريض.		
					أعتقد أن طفلي سوف يمثل مشكلة دائمة	48	
					لأسرتي.		
					لخامس: القلق على مستقبل الطفل	البعد ا	
					أشعر بالحزن الشديد عندما أفكر في حالة	49	
					طفلي.		
					أشعر بالقلق و الضيق حينما أفكر في مصير	50	
					ابني عندما يكبر.		
					أحرص على توفير الحماية الزائدة لابني.	51	
					أشعر بالإحباط وخيبة الأمل تجاه أسلوب حياة	52	
					ابني المريض .		
					أشعر بأن إمكانات ابني محدودة بحيث لا	53	
					يتمكن من أداء مهام الحياة اليومية.		
					أعتقد أن أسرة الطفل المريض تؤدي مهاما	54	
					تفوق المهام التي تقوم بها الأسرة العادية.	~ ~	
					أشعر بالقلق عندما أقصر في رعاية ابني.	55	
					أتمنى لو كان وجود ابني المريض مجرد حلم	56	
					مزعج سوف أفيق منه.	57	
					ينزعج ابني عندما يشعر بعدم اهتمامي به.	57	
					لسادس: عدم القدرة على تحمل أعباء الطفل	البُعد ا	

يحدث	يحدث	يحدث	يحدث	لا يحدث	العبـــارة	
دائماً	كثيراً	قليلاً	نادراً	مطلقاً		
					أشعر أن الناس لا يراعون مشاعر أسرة الطفل	58
					المريض.	
					متطلبات رعاية ابني كثيرة ومرهقة بالنسبة لنا.	59
					يصعب على أسرة الطفل المريض وضع خطط	60
					للمستقبل.	
					يؤلمني عدم توافر الدعم المناسب لأسرة الطفل	61
					المريض.	



الديموغرافية	المتغدات	ستبانة

عزيزي الأب/ الأم: الرجاء قراءة الأسئلة الآتية جيداً والإجابة عليها بصدق، و ضع علامة (/) أمام العبارة التي ترى أنها تنطبق عليك:

العمر:

الجنس:	ذكر		أنثى □			
العمل الحالي: يعمل	لا ي	عمل□				
مكان السكن: غزة 🗆	محاف	ظة الشمال ا	المحافظة الو	وسطى 🗆	خان يونس 🗆	رفح □
الأمراض التي تعاني من	ها: أم	راض جسميا	أمراض نفسية	□ أمراض ج	بسمية ونفسية□	، يوجد□
مستواك التعليمي: ابتدائ	ي أو	عدادي 🗆	نوي 🗆 جامعي	ي □		
مجموع الدخل الشهري:		قل من 500	ىيكل 🗆	00 -500	100 شيكل □	
2000 – 1100 شيكل		0 - 2100	30 شيكل □	أكثر من (	3000 شيكل ا	
الحالة الاجتماعية الحالب	ية:	متزوج/ ة □	منفصل دون م	طلاق □ ،	مطلق /ة 🗆	مِل /ة 🗆
الرجاء الإجابة على الأم	ىئلة ال	لآتية عن ط	، المريض بأحد	د اضطرابات	طيف التوحد :	

- 1. ما هو جنس طفلك؟ ذكر 🗆 أنثى 🗆
  - 2. ما هو عمر طفلك بالضبط؟
  - 3. ما هو ترتيب الطفل بين أسرته؟

شكراً لتعاونكم

