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**Psychological Aspects and Its Relationship to
Quality of Life Toward Mothers of Autistic
Children**

A Thesis Submitted

By

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Supervised by

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

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Dedication

I dedicate my thesis work to those who are dearest to my heart and whose memory will remain until my last breath (my father and mother) may god have mercy on them .

to my first supporter and the most precious thing I have my husband .

to all members of my family.

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Abstract

Background: The mother has a fundamental and important influence on the child's growth and development in various developmental, emotional and mental aspects, and this influence increases if the child suffers from a disability such as autism. Autism is a group of neurodevelopmental conditions characterized by challenges with social interaction, verbal and nonverbal communication, the presence of repetitive behavior, and narrowed interests. Other prominent indications are difficulty making friends and odd reactions to sensory inputs as the period of his dependence on his parents is prolonged, and thus problems arise that require special needs and psychological pressures increase and thus affect the quality of life. **Aim of the study** is to assess the relationship between the psychological aspects and quality of life toward mothers of autistic children.

Methodology: A non-experimental study design conducted in Hilla city during the period from september 19th 2022 to july 1st 2023. The study sample consist of 100 mothers of autistic children are selected according to non-probability sampling approach (convenience). The validity of the questionnaire was verified by experts and its reliability was verified through a pilot study. Data was collected through the interview and analyzed by applying descriptive and inferential statistical analysis.

Results: The results indicated that the average age of the respondents is 23.86 years were college graduated and housewife. Over than half (54% and 43%) of the study participants were found to high psychological aspects and average quality of life. The psychological aspects differ according to mothers age and monthly income. The simple liner regression indicate that the autistic children age and duration of autism are predicted mothers quality of life ($p = .000$). The quality of life is negatively correlated to psychological aspects ($p = .000$).

Conclusion: The study concluded that the average of the psychological aspects of the respondents was within the high level, and that the quality of life was within the average level. A negative association was found between the psychological aspects of mothers of autistic children and their quality of life.

Recommendation: Social and autism-based care institutions must support families of children with autism and draw attention to meet their needs and solve their problems in order to improve their quality of life.

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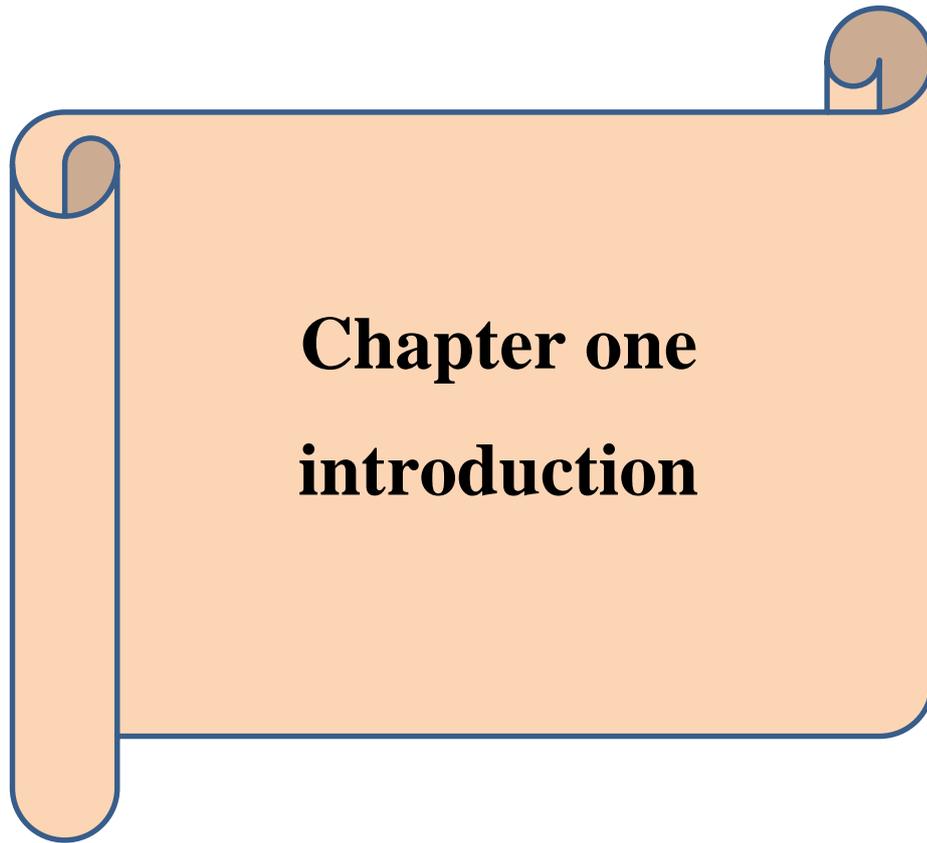
List of Abbreviations and Symbols

Items	Meaning
ASD	Autism Spectrum Disorder
DAS	Depression ,Anxiety and Stress
WHO	World Health Organization
CINAHL	Cumulative Index of Nursing and Allied Health Literature
ASC	Autism Spectrum Condition
DSM-5	Diagnostic and Statistical Manual of Mental Disorder. five edition

ICD-11	International Classification of Disease-eleven edition
NHS	National Health Service
ADHD	Attention Deficit Hyperactivity Disorder
QOL	Quality of Life
GHQ	General Health Questionnaire
ODS	Oppositional Defiant Symptoms
PDD	Pervasive Developmental Disorder
%	Percentage
SD	Standard Deviation
M.S	Mean of scores
F	Frequency
Sig.	Significance

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Chapter one
introduction

Chapter One

Introduction

1.1. Introduction

Humanity currently lives in a time when psychological issues and crises are common, and psychological burden has emerged as a significant issue in modern civilizations. These issues have a significant impact on people's health, as well as their psychological and social compatibility (Pihkala, 2018).

All women aspire to be mothers because having children is seen as a happy event. However, when a child is born disabled, there will be a devastating impact on the family's psychological, social, and economic circumstances and exacerbates their emotional and psychological issues. Because a child with autism differs from other kids with different diseases and disabilities, they are more likely to be mentally disturbed or to have a progressive developmental problem like autism (Althiabi, 2021).

The first three years of a child's life are when autism first manifests, and it is a developmental disorder that affects children. Autism is one of the most challenging disorders that a child and his family can experience because it is characterized by a child's lack of social development, cognitive weakness, and cognitive impairment (Dai et al., 2018).

This caused the mother, who is responsible for providing and satisfying the child with his needs, and other family members of the autistic child to experience extreme strain and stress (Hartley *et al.*, 2018). Some psychological illnesses, such as sadness, anxiety, social disengagement, low self-esteem, and a high sensitivity to stress connected to childcare, are present in parents of disabled children (Miranda *et al.*, 2019).

Accordingly, autism has a detrimental impact on the happiness and health of the parents, especially the mother, and that experiencing good quality results in a sense of contentment, well-being, and enjoyment even in challenging circumstances (Shoshani & Yaari, 2022).

The feeling of quality of life is relative and not related to the individual, such as the positive self-concept, satisfaction with life and work, social status, and happiness one feels, as well as some aspects of judgment, in light of the various directions that the concept of quality of life has been studied from. They directly affect them, including the availability of resources, income, personal cleanliness, health status, housing and employment status, degree of education, and other elements that have an impact on the individual (Musetti *et al.*, 2021).

According to Papadopoulos (2021), the mother is the person who the autistic child is closest to, and she doesn't only feel guilty but also helpless because of the new role that this child's presence and his responsibilities, which he is not fully aware of, have placed on her. As a result, the experience lifestyle changes and are subject to restrictions that prevent them from engaging in their prior activities.

Benson (2018) showed a reduction in the level of physical health among mothers of autistic children, the issues and emotions experienced by the mother directly endanger both her psychological and physical health. Additionally, Pisula and Porbowicz-Dörsmann (2017) sought to understand psychological stress and its relationship to the quality of life of parents of autistic children. They discovered that these parents face high psychological pressures, which also prevented psychological stress from differing depending on the child's gender.

Additionally, Kuru and Piyal (2018) sought to understand the quality of life of families with mentally handicapped children enrolled in educational facilities. Their findings, which included significant differences which showed

that the quality of life for these families is generally poor. There are no statistically significant variations based on the mother's educational attainment or the family's economic standing, and there are none based on the health condition.

Due to the difficulties connected with ASD, it has also been noted that some caregivers perceive the diagnosis as having a negative effect or placing a burden on the family. Different families may, however, see ASD as a family-unifying experience or as teaching their children compassion and empathy for others (Pecor *et al.*, 2021).

Whether family members see the diagnosis positively or negatively, there is an impact on the family dynamics, relationships, and quality of life. The relationship and cooperation between parents may suffer when a kid or sibling has ASD, the stress levels and mental health may also worsen. The majority of ASD children's families follow traditional family structures, with mothers frequently serving as the child's primary caregiver and supporter (Ameis *et al.*, 2020).

When caring for a kid with a handicap or ASD, mothers are frequently more likely to encounter parenting-related challenges at home. Mothers were found to be more stressed than men in one study that looked at stressors connected to children, resources available, and coping mechanisms among parents of children with ASD (Amireh, 2019).

1.2. Importance of the Study

With a prevalence of 1 in 54, autism has spreaded like an epidemic throughout the world, albeit prevalence varies quite a bit between different regions (Knopf, 2020). According to a local study which had done in special education institutions, the prevalence was 6.31%, with males being more likely to experience it (Akhter *et al.*, 2018).

There are misunderstandings about autism, and it has also been apparent that there is a huge awareness gap between medical experts and allied medical professionals (Akhter *et al.*, 2020).

The illness with the highest prevalence around the globe is autism, whose numbers are rising quickly. According to what was widely agreed upon, the handicap rate in the United States of America was 6.4%, and the prevalence of autism cases was 72% (Whigham, 2020).

According to the International Center for Disease Control's most recent data studies, autism affects one out of every 88 children, making it the third most common disease (Campisi *et al.*, 2018). As for the most common mental illnesses in Iraq, children with autism are at the top of the list with more than 80,000 patients in 2019 alone (Al Khateeb *et al.*, 2019).

Additionally, Autism spectrum disorder is a neurodevelopmental condition that manifests as a range of communication, social, behavioral, and sensory difficulties (Glod *et al.*, 2020).

ASD (Autism Spectrum Disorder) is now projected to affect one in 68 children in the United States, with boys being 4.5 times more likely to be affected than females. Additionally, as more children with ASD get older, they will face difficulties navigating and adjusting to this difficult milestone (Clothier & Absoud, 2021).

Due to the high prevalence rate of ASD, autism spectrum disorders are currently a prominent topic in the field of special education. The peculiarities of autism set it apart from all other disabilities and make life for the family extremely challenging for the parents as well. Typically, families are left to handle the difficult task of raising an autistic child on their own. Families are also worried about communication, education, and related services, interactions

with experts, a child's independence, and his or her concerns for the future (Zaki & Moawad, 2016).

The positive emotions and feelings of capacity displayed by mothers of children with autism spectrum disorder (ASD) are comparable to those of many other mothers. In contrast to mothers of usually developing children and mothers of children with other neurodevelopmental disorders, a large body of evidence reveals that mothers of children with ASD endure dramatically impacted mental health, including stress, despair, and anxiety (Adams *et al.*, 2018).

Despite the growth of autism treatment programs, this progress did not adequately address the needs of mothers of autistic children, exposing them to a variety of psychological and physical issues that raise their stress levels. This puts the mother under more stress and lowers the quality of her life (Iadarola *et al.*, 2019).

Caretakers of autistic children in Iraq reported higher adverse effects and less favorable psychological wellbeing. Many caregivers have managed to deal with the ongoing challenge by exercising patience and accepting the consequences to adapt well in the face of adversity, but as a result, the quality of their lives has been diminished. They appear to be at high risk of developing depression, stress, anxiety, and distress (Al-Dujaili & Al-Mossawy, 2017).

This gap in the literature has been filled in part by the scant study on the mental health of the people living in Islamic nations, which has a variety of cultural consequences. Family, professionals, and community perceptions of developmental impairments and their treatments are influenced by culture. Disability's cultural component cannot be discounted. With a mainly Muslim population, Iraq is an Islamic nation with a booming economy. Its culture includes practices like opposing birth control, keeping privileged children at home, and viewing them as gifts from God or the other way around. As a result,

caring for special needs children adds even more psychological and financial strain to families' already precarious financial situation. (Naslund *et al.*, 2017)

1.3. Statement of The Problem

In the Iraq cultural background, women are primary caregivers as mothers, wives, and adult daughters. They are predominantly involved in caregiving while putting their health and well-being on the back foot, thus creating a vicious cycle that leads to a lot of anxiety, depression and stress (DAS) as well as, life deterioration. The factors contributing to the development of stress followed by burden depend on multiple elements, including family, personal, financial as well as sociocultural issues. Based on the evidence, mothers of differently-abled children and especially those with autism, perceive a high level of psychological burden compared to mothers of typically developing children. Therefore, the study interested in the psychological aspects and its relationship to quality of life among mothers of autistic children.

1.4. Objectives of the Study

The study aimed at

1. To assess the psychological aspects among mothers and quality of life for mothers of autistic children
2. To determine the differences in psychological aspects with regards mothers socio-demographic characteristics.
3. To identify if the child age, gender, living arrangement, duration of autism and living status can predict quality of life among mothers of autistic children.
4. To find out the relationship between psychological aspects and quality of life among mothers of autistic children.

1.5. Study Hypothesis

The study hypothesizes the following:

Null Hypothesis (H0): There will be no effect of psychological aspects on the quality of life among mothers of autistic children.

Alternative Hypothesis (H1): Psychological aspects will have an effect on the quality of life among mothers of autistic children.

1.6. Definitions of Terms

1.6.1. Psychological Aspects

Theoretical Definition

Refers to the effects that illnesses and conditions have on a person's emotional and mental wellbeing (Happé & Fletcher-Watson, 2005).

Operational Definition

Anxiety, depression and stress faced by mothers of children with autism.

1.6.2. Quality of Life

Theoretical Definition

An individual's sense of their position in life in relation to their objectives, expectations, standards, and worries, as well as the culture and value systems they are a part of (WHOQOL, 2016).

Operational Definition

The extent to which a mother of an autistic kid is in good physical and mental health, and is able to engage in or enjoy life events.

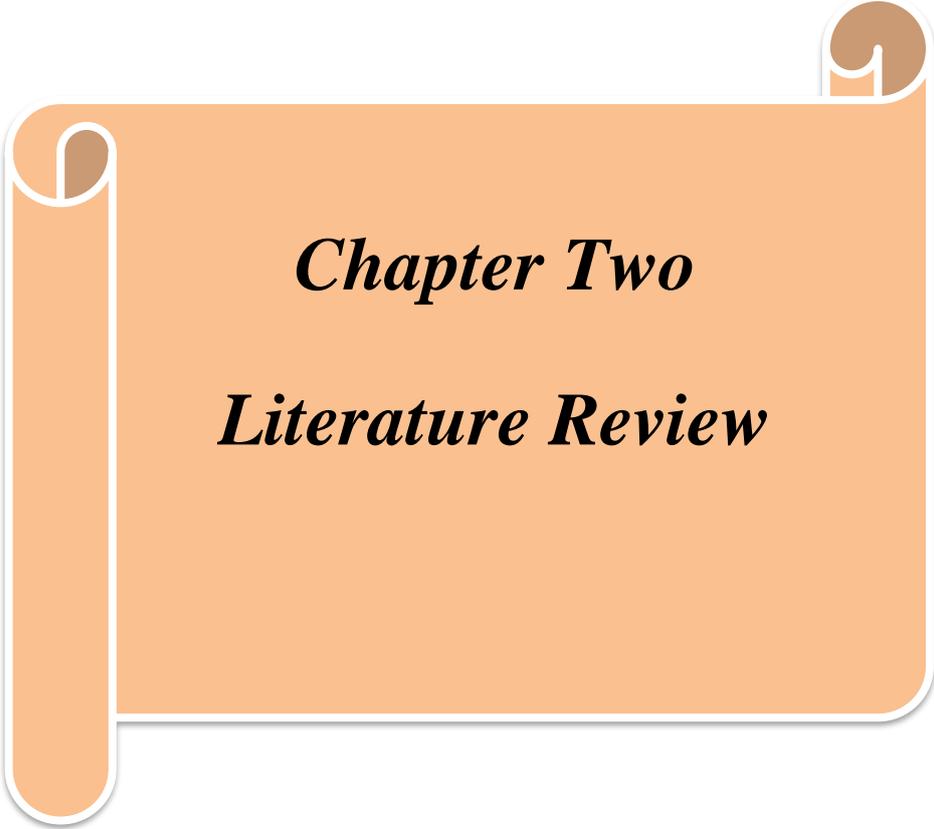
1.6.3. Autism

Theoretical Definition

A neurological condition marked by difficulties with social interaction and fixation on narrow, repetitive interests (Autism Speaks, 2019)

Operational Definition

Is a developmental disability brought on by brain differences.

An orange scroll graphic with a white border and a white shadow. The scroll is partially unrolled, with the top and bottom edges curled up. The text is centered on the unrolled portion.

Chapter Two

Literature Review

Chapter Two

Literature Review

Thorough literature review which is presented in this chapter. It was decided to look through several databases for studies that had been released within the previous five years. A combination of the following phrases was used to search the Cumulative Index of Nursing and Allied Health Literature (CINAHL), Cochrane Database, and Google Scholar:

2.1. Autism Spectrum: An Overview

The autism spectrum, also known as autism, autism spectrum disorder (ASD), or autism spectrum condition (ASC) in the context of a professional diagnosis, is a group of neurodevelopmental conditions characterized by challenges with social interaction, verbal and nonverbal communication, the presence of repetitive behavior, and narrowed interests. Other prominent indications are difficulty making friends and odd reactions to sensory inputs (Randall *et al.*, 2018).

Since autism is typically thought of as a spectrum disorder, each individual's manifestation of the condition will vary. An autistic person is likely to exhibit some of the symptoms, but not all of them, and to variable degrees (Lord *et al.*, 2020).

Over the course of their lives, some autistic people remain nonspeakers, while others have relatively unimpaired spoken language. People's needs for assistance vary greatly, and even the same person may show up differently at different times (Fletcher-Watson & Happé, 2019).

Previous editions of the diagnostic manuals, the Diagnostic and Statistical Manual of Mental Disorders (DSM-5, published in 2013) and the International Classification of Diseases (ICD-11, released in 2021), both list

autism spectrum disorder (ASD) as a single disorder. There have been ongoing disagreements regarding the validity of these divisions (Jose *et al.*, 2020).

While the majority of autistic advocates, most autistic people, and a rapidly growing number of researchers see autism as a component of neurodiversity—the inherent variation in human thinking and experience—with strengths, differences, and weaknesses—psychiatry traditionally classifies autism as a neurodevelopmental disorder (Opar, 2019).

According to this perspective, which is supported by the movement for autism rights, autism is not a pathological illness, but this does not prohibit autistic people from being disadvantaged and possibly needing a lot of help because of co-occurring disorders and a lack of a person-environment fit. This generally optimistic and comprehensive perspective on autism has caused some conflict between autistic people, advocates, charities, researchers, and practitioners (Kapp, 2020).

Autism is highly heritable and thought to be primarily hereditary, but there are numerous genes involved, and environmental variables may also be important. Scientists are still attempting to figure out what causes autism. Despite the fact that there is no known treatment for autism, early behavioral interventions can aid in the development of social, language, and self-care abilities. However, those with severe autism, often known as autistic people with significant support requirements, are unlikely to live independently, thus interventions for these people concentrate on things like identifying and learning alternative forms of communication (Mandy & Lai, 2016).

It is unknown why attention deficit hyperactivity disorder, seizures, intellectual disability, and other disorders frequently co-occur with autism. There are persistent differences over what should be considered in an autism

diagnosis, whether there are significant subtypes of autism, and the importance of autism-associated features in the general population (Rosen *et al.*, 2021).

The combination of expanded criteria and greater awareness has resulted in a trend of progressively rising estimates of autism prevalence, fueling the divisive notion that the condition is on the rise and that vaccines are to blame (DeStefano & Shimabukuro, 2019).

2.1.1. Epidemiology

According to the World Health Organization (WHO), around 1 in 100 children are autistic. Since the 1990s, a significant increase in diagnoses has occurred, possibly as a result of greater awareness of the disorder (WHO, 2022).

While the prevalence of ASD is similar across cultures, it differs significantly by gender, with males being diagnosed at a rate of 1 in 70 compared to only 1 in 315 girls at the age of eight (Baio *et al.*, 2018). However, girls are more likely to have a corresponding cognitive impairment, which suggests that less severe types of ASD are probably not being detected in females and female children. Gender disparities in the manifestation of clinical symptoms may contribute to inequalities in prevalence, with women and girls with autism exhibiting less abnormal behaviors and being less likely to be diagnosed with an ASD as a result (Russell *et al.*, 2022).

A 92% of children who were diagnosed with one of the diseases that is now included in ASD under DSM-IV will still meet the diagnostic criteria for ASD under DSM-5. The prevalence of autism remains mostly unchanged from the prevalence according to the DSM-IV criteria, nevertheless, when both ASD and the social (pragmatic) communication disorder categories of the DSM-5 are combined. The most accurate prediction for the prevalence of ASD is 0.7%, or 1 child in 143. The DSM-5 diagnostic criteria encompass additional

developmental disorders as well as very moderate types of autism, such as Aspergers (Baio *et al.*, 2018).

The DSM-5 diagnostic criteria encompass additional developmental disorders and relatively moderate types of autism, such as Aspergers. ASD rates remained steady from 2014 to 2016, although they increased by twice that amount (1.25 vs. 2.47%) when compared to the years between 2011 and 2014. As the profiles of people with autism become less and less dissimilar from the profiles of the general population, a Canadian meta-analysis from 2019 supported these results (Rødgaard *et al.*, 2019).

Since data was first kept in 2000, the rates of ASD diagnoses in the US have been rising significantly. Although it is still uncertain if this pattern reflects a real increase in incidence, it probably reflects modifications to the diagnostic standards for ASDs, better detection, and greater public understanding of autism. According to NHS estimates from 2012, there were 1.1% of adults in the UK over the age of 18 who had autism (Sharma *et al.*, 2018).

ASD is present in 25 out of every 1,000 children, according to a 2016 poll in the United States. However, it is believed that the majority of autistic people reside in low- and middle-income nations. It is crucial to highlight that rates of autism are poorly understood in many low- and middle-income countries, which impacts the accuracy of global ASD prevalence estimates (Stewart & Lee, 2017).

The number of autism diagnoses in the UK increased by 787% between 1998 and 2018. Although unexplained environmental risk variables cannot be ruled out, this increase is mostly due to changes in diagnostic methods, referral patterns, service availability, age at diagnosis, and public awareness (especially among women). The evidence that is now available does not rule out the

possibility that the genuine prevalence of autism has increased (Underwood *et al.*, 2022).

A true increase would entail shifting the emphasis from genetics to psychosocial and altering environmental factors, and increasing financing in these areas. If there has been any change in the prevalence rates of autism, it has been proven that vaccination is not a risk factor for the condition and is not the reason for it (Amaral *et al.*, 2019).

Males are more likely than females to receive an ASD diagnosis. The sex ratio typically ranges from 4.3:1 to more than 5.5:1 and is significantly altered by cognitive impairment; it may even be as low as 2:1 in cases of intellectual disability. Although several possibilities have been looked at on the higher incidence in men, the reason for the disparity is still unknown. One theory is that women are underdiagnosed (Hull *et al.*, 2020).

2.1.2. Classification

1. Spectrum Model

It is now understood that autism is a highly variable neurodevelopmental condition that manifests extremely differently from person to person and is usually regarded to cover a large and deep spectrum. Some require a lot of assistance, may not talk, and may have developmental delays; this is particularly common when other coexisting diseases are present (Abdullah *et al.*, 2019).

Other people may have more typical speech-language and intellectual abilities, but have unusual social/conversational skills, narrow interests, and wordy, pedantic communication. They may also have relatively low support needs (Duda *et al.*, 2017).

They can still need a lot of assistance in some aspects of their lives. The spectrum approach suggests that autism can manifest itself in a variety of ways

in each person, rather than on a continuum ranging from moderate to severe. Depending on the situation, a person's presentation style may change over time (Huang *et al.*, 2020).

Autism spectrum disorder is characterized by a range of constrained, repetitive, and rigid patterns of behavior, interests, or activities that are obviously abnormal or excessive for the person's age and sociocultural context. It is also characterized by persistent deficits in the ability to initiate and sustain reciprocal social interaction and social communication (Suthar *et al.*, 2020).

Early childhood is often when the illness first manifests, but symptoms may not fully materialize until later, when social demands outweigh the individual's capacity for them (Barton & Chen, 2018).

Deficits are severe enough to impair personal, family, social, academic, occupational, or other key areas of functioning. They are typically a pervasive aspect of an individual's functioning that can be seen in all contexts, though they may change depending on the social, educational, or other circumstances. People on the spectrum display the whole spectrum of cognitive and linguistic talents (Perrotta, 2019).

2.1.3. Features and Characteristics

Many autistic people typically exhibit symptoms throughout infancy or childhood, and they typically progress steadily without remission (various developmental timeframes are discussed in more detail below). In some ways, autistic people may be severely handicapped, while in others, they may be ordinary or even outstanding (Bizzell *et al.*, 2020).

Vogindroukas (2022) claims that when a patient exhibits signs of ASD, physicians will consider assessing them:

1. Regular difficulties in social interaction or communication.

2. Restricted or repetitive behaviors (often called stimming).
3. Resistance to changes or restricted interests.

Alqaysi *et al.* (2022) state that the following criteria are frequently used to evaluate the features when necessary:

1. Issues in finding or keeping a job or staying in school.
2. Difficulties forming or maintaining social connections.
3. Connections to learning disability or mental health services.
4. A background of mental health issues or neurodevelopmental problems, such as learning impairments or ADHD.

The following are typical symptoms of autism spectrum disorder (Parmeggiani *et al.*, 2019):

1. Not making eye contact
2. A baby who didn't babble much as a baby
3. Not demonstrating interest in the objects mentioned
4. Delay in language development (e.g., vocabulary that is lower than peers' or trouble verbally expressing oneself)
5. Loss of interest in other kids or caregivers, potentially replaced by increased interest in items
6. Having trouble with cooperative games (like peek-a-boo)
7. An abnormal or increased sensitivity to the way things taste, feel, sound, or seem.
8. Resistance to routine adjustments
9. Repeated, restricted, or other atypical toy use
10. Repeating phrases or words (echolalia)
11. Repeated movements or motions, such as stimming
12. Self-harming.

A diagnosis can be made without atypical eating, which is quite common. Some autistic individuals may have great talent, such as in the arts, music, or mathematics; this is known as savant syndrome in rare circumstances. The 'spiky skills profile' is a term used to describe how autistic persons typically have excellent abilities in some areas and relatively lesser abilities in others (Hughes *et al.*, 2018).

2.1.4. Causes

The social and non-social aspects of ASD's symptoms, referred to as a trio in the traditional autism criteria, had largely long been assumed to have a shared genetic, cognitive, and neurological origin (Getahun *et al.*, 2017).

However, there is rising concern that autism is actually a complex illness with various basic symptoms that frequently co-occur. While a single cause of ASD is unlikely to exist, a number of risk factors that have been discovered in the scientific literature may help ASD develop (Hisle-Gorman *et al.*, 2018).

Genetics, prenatal and perinatal variables (i.e., factors during pregnancy or very early infancy), neuroanatomical abnormalities, and environmental factors are some of these risk factors. It is possible to recognize basic causes, but it is far more challenging to isolate individual causes. Prediction can only be of a global character given the existing state of knowledge, necessitating the employment of broad markers (Strasser *et al.*, 2018).

2.1.5. Pathophysiology

The symptoms of autism are brought on by alterations in several brain systems brought on by maturation. Autism's causes are still poorly understood. Its mechanism can be broken down into two categories: the neuropsychological connections between brain structures and behaviors, and the pathophysiology of

the brain processes and structures linked to autism. There appear to be several pathophysiologicals for the behaviors (Yenkoyan *et al.*, 2017).

There is a proof that anomalies in the gut-brain axis may be at play. According to a review published in 2015 (Wasilewska & Klukowski), immunological, gastrointestinal, autonomic nervous system, gut flora, and dietary metabolites may all contribute to brain neuroinflammation and dysfunction. According to a 2016 analysis, anomalies in the gastrointestinal nervous system may contribute to neurological conditions like autism. Diseases that began in the intestine may move to the brain via neural connections and the immune system (Rao & Gershon, 2016).

Synaptic malfunction is suggested as the root cause of autism by a number of lines of research. By interfering with certain synaptic pathways, such as those involved in cell adhesion, some uncommon mutations may cause autism. Although this does not rule out the possibility that autism can start or be affected later in development, there is strong evidence that autism arises very early in the course of development. All known teratogens (agents that cause birth defects) related to the risk of autism appear to act during the first eight weeks from conception (Wilson *et al.*, 2021).

2.1.6. Diagnosis

A doctor will often diagnose autism spectrum disorder based on the patient's behavior as reported by them and as personally witnessed by them. The DSM-5-TR's updated diagnostic criteria state that individuals must exhibit chronic difficulties in social communication and social interaction as well as constrained, repetitive patterns of behavior, interests, or activities in order to be diagnosed with autism spectrum disorder (Duvekot *et al.*, 2017).

These actions must start in early childhood and impair an individual's capacity to carry out daily responsibilities. Additionally, neither a global

developmental delay nor an intellectual developmental abnormality must entirely explain the symptoms (Whitehouse *et al.*, 2018).

It might be challenging to diagnose autism spectrum disorder due to a number of causes. First off, there are currently no approved genetic, molecular, or imaging testing for the diagnosis of ASD. Furthermore, there is a wide range in how ASD affects people. The behavioral signs of ASD are influenced by the individual's developmental stage, age at presentation, level of assistance, and variability. Last but not least, a number of illnesses, such as intellectual disability, hearing loss, and a particular language impairment like Landau-Kleffner syndrome, may manifest similarly to autism spectrum disorder. Psychotic disorders, ADHD, and anxiety disorders. Additionally, the presence of autism can make it more difficult to identify concurrent psychiatric problems like depression (Nogay & Adeli, 2020).

2.1.7. Screening

By 18 months, about half of parents of children with ASD are aware of their child's abnormal behaviors, and by 24 months, about 45% are. Any of the following developmental milestones that a kid does not reach is a clear sign that more evaluations should be conducted. Delays in referral may prevent early diagnosis and treatment, which could have an impact on the child's long-term outcome (Chesnut *et al.*, 2017).

1. By six months, there was no reaction to the name or direct eye contact.
2. By age 12, there is no babbling.
3. By age 12, there is no gesturing (pointing, waving, etc.).
4. By age of sixteen no single words.
5. By 24 months, there will be no two-word (spontaneous, not merely echolalic) sentences.
6. By age loss of social or language abilities (Sanchez-Garcia *et al.*, 2019).

2.1.8. Management

Although there is no specific treatment for autism, many experts advise against trying to treat co-occurring disorders, which is still a crucial objective. As of 2022, there is no known treatment that will dramatically minimize the brain abnormalities that cause autism. However, people who require little to no help are more likely to notice a gradual improvement in their symptoms (Aishworiya *et al.*, 2022).

Children with autism can benefit from a variety of approaches, and while no single treatment is perfect, it is usually adapted to the child's needs. Although methodological issues in intervention studies limit conclusive statements regarding their efficacy, the development of evidence-based interventions has improved (Jiménez-Muñoz *et al.*, 2022).

The major objectives of treatment are to improve quality of life and functional independence while reducing associated impairments and family stress. Higher IQs are generally associated with better treatment results and increased responsiveness to treatment (Doyle & McDougle, 2022).

It is possible to help autistic people acquire the social, communication, and linguistic abilities they need to live independently through behavioral, psychological, educational, and/or skill-building therapies. In addition, therapy tries to strengthen positive habits and lessen problematic ones (Lerner *et al.*, 2022).

Early behavior therapy and intensive special education programs can aid youngsters in developing self-care, language, and employment skills. Numerous evidence-based therapies for autistic children use a psychoeducational strategy to improve problem behaviors while improving cognitive, communicative, and social abilities. Medication may be used to treat related symptoms including

irritation, inattention, or repetitive behavior patterns even though it has not been discovered that drugs can help with the core symptoms (Kohli *et al.*, 2022).

2.1.9. Prognosis

Autism is a widespread illness that can severely impair daily functioning and activities. The result for these people can be poor if they don't get the right care, direction, or support due to the deficits across numerous domains and the protracted nature of this condition (Higgins *et al.*, 2021).

There is currently no proof that autism can be cured. Sometimes, after receiving thorough treatment, and sometimes not, the severity of symptoms might lessen to the point that a person's diagnosis of ASD is lost. This event has been reported to occur between 3% and 25% of the time in unselected samples, although the frequency of this outcome is unknown (Bacon *et al.*, 2020).

Although fundamental problems frequently endure, symptoms frequently get better as people age. Better prospects are predicted by learning language before the age of six, having an IQ over 50, and having a marketable ability; independent living is unlikely for those with severe autism (Malviya & Chandra, 2022).

Many autistic individuals encounter considerable challenges as they enter adulthood. Autistic people are more likely to be unemployed and to have never had a job than the general population. Nearly half of autistic adults in their 20s are unemployed. Some adults with autism are unable to live on their own (Usta *et al.*, 2019).

2.2. Impact of Autism upon Family

Autism parents may get so overwhelmed by the pressures of raising their child that this has a considerable negative impact on other family members. According to a family systems paradigm, autism affects not only parents but

also every member of the family, including the sibling, extended family, and marriage subsystems (Critchley *et al.*, 2021).

A comprehensive picture of the life of the autistic child and their family is created by understanding the interactions of the family as a whole as well as through various subsystems. This family systems framework takes into account not only the effects of the autistic child on the family but also the effects of the family on the autistic child (Begum & Mamin, 2019).

This helps dispel any guilt that can be associated to the child for creating stress in the home while highlighting the occasions in which the child positively affects many family subsystems. This is vital to take into account in the event that resilience plays a role in lowering familial stress (Sim *et al.*, 2018).

Autism has a "detectable overall negative impact on marital adjustment" in the marital subsystem of the family. Compared to parents of children with other special needs, these parents report the least amount of family harmony, which is understandable given the high level of stress that parents of these children experience (Nilsson, 2015).

Parents often use dichotomous language to explain their marriage, portraying parenting an autistic child as a stressful experience that strains their union. Make it or break it and sink or swim were phrases used to define the marital union, implying that the parents believe they can either collaborate to raise their child or separate as a result. Following an autism diagnosis, the marital subsystem experiences the most stress (Chu *et al.*, 2020).

Autism spectrum disorder (ASD) can have a significant impact on the entire family, as it is a complex neurological condition that affects social communication and behavior. The challenges posed by autism can vary widely, depending on the severity of the individual's symptoms. According to Hickey *et*

al. (2019), there are some of the common ways in which autism can impact a family:

1. **Emotional Stress:** Caring for a child with autism can be emotionally taxing for parents and other family members. The continuous need for support, behavioral challenges, and uncertainty about the future can lead to feelings of frustration, guilt, and helplessness.
2. **Financial Strain:** Autism-related therapies, educational programs, medical expenses, and specialized treatments can be expensive. Families may face financial strain due to the high costs associated with providing necessary support and interventions for their child with autism.
3. **Time Commitment:** The care and support required for individuals with autism can be time-consuming. Parents and caregivers may need to dedicate substantial time to attend therapy sessions, medical appointments, and school meetings.
4. **Sibling Relationships:** Siblings of individuals with autism may experience mixed emotions. While some siblings develop strong bonds and become compassionate advocates, others may feel neglected due to the additional attention given to the child with autism.
5. **Social Isolation:** Families may experience social isolation due to the challenges of participating in typical social activities. Children with autism might have difficulties in social settings, leading to limited family outings and interactions.
6. **Changes in Family Dynamics:** The presence of autism can significantly alter family dynamics. Roles and responsibilities may shift, and family members may need to adapt their communication styles and expectations.

7. Educational Challenges: Navigating the educational system can be challenging for families with a child with autism. Ensuring the child receives appropriate educational services and accommodations can be a time-consuming and sometimes contentious process.
8. Parental Relationships: The stress and demands of caring for a child with autism can sometimes strain parental relationships. Communication and coping strategies are crucial to maintain a strong partnership in the face of these challenges.
9. Future Planning: Families may experience concerns about the long-term future of their child with autism, particularly regarding independent living, employment, and financial security.

2.3. Psychological Aspects (DAS)(Depression,Anxiety,Stress)

According to earlier research from many different countries, having a kid with special needs, such as autism spectrum disorder (ASD), in the home is likely to cause psychological burden on close family and friends (Al-Farsi *et al.*, 2016).

Psychological stress frequently shows up as worried and pessimistic thoughts, as well as a variety of physical problems such trouble breathing, pounding in the chest, and sweaty hands. These problems have been classified as signs of mental health conditions (Althiabi, 2021).

Compared to fathers and parents of children with other disabilities like Down syndrome and generally developing children, mothers of children with autism spectrum disorder (ASD) report higher levels of stress, anxiety, and depression (Padden & James, 2017).

Maternal depression in a family with a child with ASD involves all family members, and research and care should be done with a family focus

because women typically shoulder the majority of the burden for childcare tasks and healthcare decisions (Telman *et al.*, 2017).

Typically, mothers are the ones who look after children the most. Fathers and their spouses now alternate taking care of the children. It is important to remember that paternal involvement significantly improves mother wellbeing and reduces psychological anguish. Therefore, greater research that includes fathers is required to provide a comprehensive picture of parental mental health. Recently, research comparing psychological distresses including sadness, anxiety, and stress between both parents in households with an ASD kid also included fathers (Pisula & Porębowicz-Dörsmann, 2017).

2.3.1. Depression (D)

The majority of childcare tasks and healthcare decisions are typically made by women, and ASD and maternal depression affect the entire family. Lower family functioning is linked to maternal depression, which can affect children's physical, behavioral, and emotional outcomes and increase costs to the healthcare system (Singh *et al.*, 2017).

There is strong evidence that carers of children with ASD (CASD) frequently exhibit depressive symptoms such as pessimism, anhedonia, and a tendency to lack initiative. Such distresses frequently fall within the category of depressive disorder in psychiatric diagnosis (Scherer *et al.*, 2019).

Additionally, the mother's depressive symptoms may even work against the benefits of home-based ASD interventions, resulting in poor child outcomes, an increased need for treatment, and higher costs. The mother's depressive symptoms may also interfere with parent-child interactions and the consistency of behavioral interventions for the child (Jose *et al.*, 2017).

Despite the serious risks, maternal depression frequently goes unidentified and untreated. Only 1-3% of autistic mothers' medical records list a depression diagnosis, indicating that few mothers are able to access or actively seek out mental health care (Hagberg *et al.*, 2018).

For the purpose of detecting and treating depression in this population, it will be helpful to understand the risk factors for depression. Maternal self-efficacy, or the degree of confidence in carrying out a task in the face of difficulty, is one element that may be crucial in the association between maternal depression and child behavior (Chen *et al.*, 2020).

Providers treat maternal depressive symptoms using child-focused behavioral therapies since mothers frequently say that raising a child with ASD is most stressful because of the kid's behavior issues (Estes *et al.*, 2019).

However, mother melancholy symptoms and low maternal self-efficacy may reduce the effectiveness of child-focused interventions for reducing inappropriate child behavior. This suggests that depressive symptoms and low maternal self-efficacy need to be addressed directly. It is uncertain whether self-efficacy plays a role as a mediator between maternal depression and parent-reported child behavior due to the limitations of prior studies with mothers of children with ASD (Jackson *et al.*, 2022).

Parental depression can result in family discord, child maltreatment and neglect, negative impacts on a kid's brain development due to poor attachment, increased medical costs associated with problems managing chronic health disorders, and an excessive reliance on emergency facilities (Cook *et al.*, 2019).

The presence of at least five of the following symptoms on a nearly daily basis and a decline in baseline mood lasting more than two weeks are requirements for diagnosing depression. depression or irritability, loss of interest or enjoyment in activities, major change in weight or appetite, change in sleep,

change in activity level, exhaustion or loss of energy, feelings of guilt or worthlessness, trouble focusing, anxiety symptoms, and suicidal thinking are some of the symptoms that might be present (Earls *et al.*, 2019).

Stress and depression are reported and experienced differently by mothers and fathers of children with ASD. Although both mothers and fathers of children with ASD go through a great deal of pain, mothers typically report having higher levels of sadness than fathers (Rodriguez *et al.*, 2019).

An important factor in the epigenetic genesis of ASD may be maternal depression. A 10% of ASD cases have a known etiology and are a sign of another genetic condition such tuberous sclerosis or fragile X syndrome (Han *et al.*, 2021).

Since the majority of mothers who experience depressive symptoms indicate that their symptoms started before the birth of their child, researchers have looked into the genetic and environmental risk factors connected with maternal depression in an effort to understand the etiology of these remaining cases. Researchers have investigated the link between prenatal antidepressant usage and risk for ASD in the child due to the greater rate of antidepressant use among mothers of children with ASD (Zhou *et al.*, 2018).

Researchers believe that, despite conflicting results, the underlying sadness may really be linked to an increased incidence of ASD. Antidepressant usage for mental illnesses other than depression has not been linked to an increased risk of autism spectrum disorder, and correlations change when prenatal psychotherapy and pre-pregnancy antidepressant use are taken into account (Muscatelli *et al.*, 2017).

2.3.2. Anxiety (A)

Caregivers of children with ASD may experience anxiety that affects their adrenal and cardiovascular systems, which in turn reflect the health of the hypothalamic-pituitary-adrenal axis. It is abundantly obvious that carers with CASD exhibit higher anxiety indices than do those in the control group (Pandey & Sharma, 2018).

Other research found that these distresses are more prevalent in CASD (Chan *et al.*, 2021). These studies used a variety of symptom checklists suitable for soliciting the existence of anxiety, as well as biochemical markers of anxiety. In fact, it appears from the literature that 15% to 54% of CASD sufferers may also have anxiety symptoms (Xiong *et al.*, 2022).

A high level of "parenting anxiety" was found when the anxiety levels of CASD were evaluated. There are compelling arguments that parenting-specific anxiety is substantially correlated with the level of impairment (Al-Dujaili & Al-Mossawy, 2017). Such parental anxiety is not ineffective; research suggest that it affects people's quality of life (Alnazly & Abojedi, 2019). According to several studies, CASD are more susceptible than the general community to succumb to the urge of mental disease (Lovell *et al.*, 2016; Baykal *et al.*, 2019).

Additionally, it seems that caring for a child with ASD has other drawbacks. According to reports, people with CASD not only experience higher levels of anxiety, but they are also more prone to experience rigidity, incapacitating diseases like cancer, and a rising propensity for early mortality. Given that ASD appears to be a global issue, this decade would call for additional research on the psychosocial component for CASD in different regions of the world (Ault *et al.*, 2021).

2.3.3. Stress (S)

Despite greater understanding and public awareness of the illness, mothers' stress in families of children with ASD has remained a clinical topic of concern (Miranda *et al.*, 2019). Years of studies using multiple stress measures have shown that parenting an ASD child is associated with higher levels of stress than parenting a normally developing child or a child with another disability (Zaidman-Zait *et al.*, 2017).

In addition, there is evidence to suggest that more parents of children with ASD not only cross the threshold for clinically significant stress, but that the level of stress they experience is also higher than that of parents of other groups of children (Shepherd *et al.*, 2018).

One study looked at factors that could predict maternal stress in a group of 75 mothers of kids with autism and other intellectual disabilities who were aged 3 to 19. 75% of mothers of children with ASD had stress levels that were higher than the clinical cut-off, compared to 56% of mothers of children with other intellectual disabilities (Cohn *et al.*, 2020). The fact that most of the mothers of children with ASD reported experiencing higher levels of stress is even more apparent, as shown by higher mean scores on the Parenting Stress Index-Short Form (PSI-SF) (Zaidman-Zait *et al.*, 2017).

According to their stress profiles, mothers of children with ASD report higher and more frequent clinical levels of stress than the mothers of children with other disorders. The fact that this stress persisted over a 2-year period and that results have do since been reproduced emphasizes the significance of understanding the factors that contribute to stress in families of children with ASD (Miranda *et al.*, 2019).

Although it is obvious that parents of children with ASD are under a lot of stress, there are conflicting results when it comes to how much stress mothers

and fathers are under. According to certain studies, stress levels are comparable for mothers and fathers (Lin *et al.*, 2018). While more recent research suggests that mothers experience much higher levels of stress (DesChamps *et al.*, 2020). Both mothers and fathers may experience stress for different reasons. For instance, the stress that dads experience is related, at least in part, to the stress that their spouses suffer; however, the opposite is not true, as mothers' stress is not related to fathers' stress (Iadarola *et al.*, 2019).

Mothers' reported stress is more frequently caused by children's externalizing behaviors, whereas fathers' reported stress is more frequently caused by children's regulatory issues, such as eating, sleeping, or emotional control. These various associations may be related to the fact that mothers are frequently designated as the primary caregivers and as a result, engage in a greater degree in the daily obligations related to providing care for an ASD child, such as behavior management, accessing intervention, more frequently experiencing social stigma in the community, and role restriction (Catalano *et al.*, 2018).

Stress can have a negative impact on the mental health of mothers, interpersonal connections, and social adjustment when raising children with ASD. According to the child's symptoms, the frequency of problematic behaviors, and the child's ongoing developmental progress, the effects of stress related to parenting children with developmental disorders can also differ. It's also important to note that this stress is persistent, as it is with lifelong developmental problems (Schnabel *et al.*, 2020).

2.4. Quality of Life (QoL)

A family's ability to provide for its members' necessities and to enjoy life is referred to as having a high quality of life. It refers to the physical, psychological, emotional, and social well-being of people with disabilities and

incorporates the psychological, social, emotional, and health concepts (Van der Boor *et al.*, 2022).

In The 1946 WHO Constitution's definition of quality of life, which is described as a condition of whole physical, mental, and social well-being rather than only the absence of disease or infirmity, has historical roots in this term. Due to their parental responsibilities, mothers of children with ASD may face negative effects on their quality of life. Mothers of ASD patients, the majority of whom were male and had mean ages of 11 years, reported a greater incidence of mental health issues (Pisula & Porębowicz-Dörsmann, 2017).

The awareness of one's circumstances in life in respect to his values and cultural system of residence as well as his relationships with his objectives, expectations, standards, and hobbies make up one's quality of life. His current circumstances, including his family and social support, his health, the availability of educational and community services, and the interactions between his personality, family, and social doubts, have an impact on his well-being and sense of pleasure with life (Johs-Artisensi & Hansen, 2022).

According to Göttgens *et al.* (2022), there are various aspects of quality of life, some of which are subjective and others which depend on values. They can generally be classified into the three main dimensions listed below:

1. Physical functions include those that are connected to impairment, irregularities in physical state, physical pain, sensory disturbances, synergy, and visual issues.
2. Knowledge-related, anxiety- and depression-related, sleep-related, fatigue- and self-esteem-related psychological processes.
3. Role performance, recreational activities, job, social standing, and unfulfilled needs are all examples of social function, which is connected to social and family support and interpersonal communication.

According to multiple regression analysis, these mothers also experienced more time pressure. Mothers who experienced more social support reported less issues with their mental health. Less social support and more behavioral issues in children were linked to higher mother sadness (Kousha *et al.*, 2016). When assessing a parent's well-being, it is important to take into account their feelings of optimism and despair for their child with ASD. This is because these parents are dealing with extraordinarily difficult parenting situations and stressors (Alhazmi *et al.*, 2018).

Children's behavioral issues and other health issues may be related to the mother's quality of life. Younger and less educated mothers of children with oppositional defiant symptoms (ODS) score lower on four dimensions of the Taiwanese WHOQOL-BREF than mothers of children without ODS. On three areas of the WHOQOL-BREF, the children's ODS were a significant predictor of the mother's QOL (Mason *et al.*, 2018).

Parents with autistic children had poorer WHOQOL-BREF scores on three dimensions when their income was lower, compared to parents in the control group who had lower QOL on two domains. Compared to mothers of children with higher education levels, mothers of autistic children showed poorer QOL in two areas (Barros *et al.*, 2019).

The WHOQOL-BREF Italian version revealed poorer QOL domain scores in parents of kids with PDD. Mothers' Physical Health, Psychological, and Social Relationships domain scores were lower than those of fathers', who also had lower scores in these areas. Mothers of children with high-functioning autism/Asperger's syndrome scored considerably worse in the Physical Health and Social Relationships domains compared to controls, according to an analysis of differences within PDD groups (Dey *et al.*, 2019).

Numerous research show that mothers of children with ASD have reduced QOL (Pisula & Porbowicz, 2017). Compared to mothers of children without ASD, mothers of children with ASD have worse physical and emotional health (Ylmaz *et al.*, 2021). Conflicting relationships were discovered between the associated child-specific developmental delays and behaviors, formal assistance, and maternal psychological wellness in a structured interview research of biological mothers of children with ASD (Zhang *et al.*, 2015). However, this same study did discover a link between maternal psychological distress, poor levels of informal family support, and child behavior issues (Shilubane & Mazibuko, 2020).

The impact of providing care for a child with ASD on maternal QOL was evaluated using the WHOQOL-BREF Taiwan version. Participants in the study had to have been the primary caregiver for more than five years and be between the ages of 25 and 45. Participants were chosen from a volunteer support group. Maternal characteristics included age, education, marital status, occupation, religion, history of chronic illness, and attitudes toward raising a child with ASD. The physical health, psychological, and social relationships QOL dimensions were found to be predictive of, and positively associated with, the mother's evaluated feeling (poor, fair, or good) of providing care (Leite, 2017).

2.5. Relationship between QoL and DAS

In families with children who have ASD, both the mother-child relationship and the father-child relationship are impacted by the psychological health of the parents; however, actor effects are larger for mothers and partner effects were only discovered for fathers (Hickey *et al.*, 2020).

Parenting stress is often referred to as distress or discomfort that is related to the demands of parenting. Depression, anxiety, or marital discord are

negative effects of parenting stress. Because they may frequently confront their child's symptom profile, particularly socially inappropriate conduct, anger, stereotyped gestures, communication, speech, and language impairment, parents of children with ASD are more likely to experience psychological issues (Naheed *et al.*, 2020).

According to the reports, 40% of fathers and 70% of mothers with severely challenged children experience distress (Foody *et al.*, 2015). In addition, mothers and fathers handle emotional distress in different ways. Typically, fathers suppress their feelings, often at the expense of their anger, whereas mothers tend to express their feelings and have a wider range of emotions, including sadness and sorrow in addition to anger and crying (Naheed *et al.*, 2020).

Mothers are therefore more likely to display emotional reactions and to experience higher levels of stress, depression, and anxiety disorders. The mother's quality of life is impacted by maternal mental disorder (Zhou *et al.*, 2019). An individual's impression of their health and function are strongly correlated with their overall sense of well-being, or QOL. Depression and trait anxiety scores have been found to significantly correlate with one another (Oz *et al.*, 2020).

Given that they are the ones who care for their children the most, mothers of children with ASD and intellectual disabilities are more likely to experience mental health problems. Additionally, they must deal with issues like debt, prejudice, and stigma. Due to these characteristics, mothers are more likely to have emotional outbursts, increased levels of stress, depression, and anxiety disorders, as well as parenting difficulties and a general decline in quality of life (Naheed *et al.*, 2022).

2.6. Theoretical Framework

1. Stress and Coping Theory:

The Stress and Coping Theory by Lazarus and Folkman (1984) can be used to understand the psychological aspects experienced by mothers of autistic children and their impact on the quality of life. According to this theory, mothers may experience various stressors related to caring for their autistic children, such as daily challenges, financial burdens, social isolation, and emotional strain. Their coping strategies, such as problem-solving, seeking social support, or employing avoidance techniques, may mediate the relationship between stress and their quality of life.

2. Parenting Stress Model:

The Parenting Stress Model (Abidin, 1992) can provide insights into the psychological aspects experienced by mothers of autistic children. It emphasizes that parents, especially mothers, face unique stressors specific to their role as caregivers to children with special needs. The model suggests that maternal stress levels impact parenting behaviors and, subsequently, the child's well-being and development. A higher level of maternal stress may lead to a diminished quality of life for both the mother and her autistic child.

3. Attachment Theory:

Attachment theory, developed by Bowlby (1969), can help explain the emotional bond between mothers and their autistic children. Mothers' attachment styles and their child's attachment styles may influence each other and play a significant role in determining the emotional well-being and quality of life of both parties. For example, a secure attachment between a mother and her autistic child might positively influence the mother's psychological well-being and satisfaction with her quality of life.

4. Resilience Theory:

Resilience theory focuses on understanding how individuals cope with adversity and bounce back from challenging life situations. Mothers of autistic children may experience various difficulties, but some demonstrate remarkable resilience in the face of these challenges. This theory can provide insights into factors that contribute to mothers' ability to maintain a good quality of life despite the stressors they encounter (Hawley & DeHaan, 1996).

5. Social Support Theory:

The Social Support Theory emphasizes the significance of social networks and emotional support in buffering against stress and improving well-being. For mothers of autistic children, the presence of a strong support system, including family, friends, and support groups, can positively influence their psychological well-being and overall quality of life (Alloway & Bebbington, 1987).

6. Psychological Capital (PsyCap) Theory:

PsyCap theory focuses on the positive psychological resources of individuals, such as hope, self-efficacy, resilience, and optimism. Applying this theory, researchers can examine how mothers' levels of hope, self-efficacy, resilience, and optimism influence their ability to cope with the challenges of raising an autistic child and maintain a higher quality of life (Avey *et al.*, 2010).

2.7. Previous Studies

2.7.1. Psychological Aspects among Mothers of Autistic Children

Al-Dujaili and Al-Mossawy (2017)

Psychosocial burden among caregivers of children with autism spectrum disorder in Najaf province. *Current Pediatric Research*. There were notable distinctions in the psychological and emotional burdens experienced by caregivers of children with autism, as well as the influence of socio-

demographic factors like gender, monthly income, and general health on this burden. Caregivers of children with ASD require additional family assistance, particularly in the form of psychological support, knowledge about early detection of ASD behaviors, and Family to Family knowledge Programs. These services are needed in conjunction with the existing community mental health programs.

Picardi *et al.* (2018)

Parental burden and its correlates in families of children with autism spectrum disorder: a multicentre study with two comparison groups.

Parents of children with ASD reported higher objective and subjective burdens, frequent psychological distress, and limited social support. Mothers tended to experience more subjective burden compared to fathers. According to structural equation modeling, the severity of ASD symptoms and social support were the most reliable predictors of objective and subjective burden, respectively. Other contributing factors included coping mechanisms, intellectual disability, and adaptive functioning. However, spiritual health and toughness were found to have negative impacts. Coping mechanisms and social support played a role in mitigating some of these burdens.

Zhou *et al.* (2019)

Emotional problems in mothers of autistic children and their correlation with socioeconomic status and the children's core symptoms.

Revealed that mothers of autistic children often suffer from severe anxiety and depression symptoms, and these symptoms were closely linked to the primary symptoms exhibited by their children with ASD. As the core symptoms of children with ASD improve, there might be some reduction in the anxiety and depression symptoms experienced by their mothers.

Malla and Taha (2022)

Psychological burden, hope, and resilience among mothers of autistic spectrum children; comparative study Found that mothers of autistic children experience significantly more psychological stress and less hope and resilience compared to mothers of typically developing children. These findings are particularly important for mothers of autistic children who are concerned about their mental health.

Mumtaz *et al.* (2022)

Perception of Burden and Stress among Mothers of Autistic Children in Pakistani Cultural Backdrop.

Significant correlations were observed between maternal stress and the child's age, medication, and autism severity. Mothers of children with ASD reported feeling a considerable amount of worry and strain, with the child's age, severity level, and medication use being associated factors.

Li *et al.* (2022)

Psychological distress in parents of children with autism spectrum disorder: A cross-sectional study based on 683 mother-father dyads.

Discovered that parental psychological distress varies based on the severity of their children's autism symptoms. Social impairment in children significantly impacts mothers' psychological well-being, and stress at home increases anxiety and sadness in both parents. The relationship between child social impairment and maternal psychological distress is moderated by fathers' psychological well-being.

2.7.2.QoL of Mothers of Autistic Children**Vasilopoulou and Nisbet (2016).**

The quality of life of parents of children with autism spectrum disorder: A systematic review.

The quality of life (QoL) of parents with children who have Autism Spectrum Disorder (ASD) is reported to be lower compared to parents of typically

developing children or the general population. Factors such as child behavioral issues, unemployment, being a woman, and lack of social support are linked to this lower parental quality of life.

Saleh *et al.* (2017)

Quality of life of mothers of children with autism spectrum disorders and its relationship with severity of disorder and child's occupational performance.

The quality of life of mothers of autistic children is strongly related to the severity of the disorder and the children's occupational performance. However, the correlation with disorder severity is more substantial than with occupational performance. Therefore, improving the child's occupational performance and reducing the intensity of ASD symptoms are crucial for enhancing the mother's quality of life.

Bazarfeshan *et al.* (2019)

Quality of life of the mothers of children with autism.

Found that mothers of autistic children had significantly lower quality of life compared to mothers of typically developing children. The group of women with autistic children also reported inferior overall health, social function, and role limitation due to psychological, emotional, and physical functioning compared to mothers with healthy children. Developing appropriate programs to enhance health status and quality of life should be a priority in healthcare planning.

Alenazi *et al.* (2020)

Effect of autism on parental quality of life in Arar city, Saudi Arabia.

A 63.1% of caregivers had impaired quality of life. Main areas impacted were energy/fatigue and role restrictions due to emotional issues. Caregivers' gender, employment status, income, and various factors related to the children's condition influenced poor quality of life. Social and emotional support is necessary for caregivers of autistic children to cope with this challenge.

Al-Jabri et al. (2022) found that caregivers of children with ASD had poorer quality of life scores in most dimensions compared to caregivers of children without ASD. Other factors, such as caregivers' age, relationship to the child, province of residency, and availability of medical services, were also considered.

Parents of autistic children demonstrated a poor overall quality of life, with moderate levels in the physical and psychological domains and lower levels in the social connection and environment domains (Abd-Alnabi & Sachet, 2022). More extensive research with a larger population is required for the results to be widely applicable.

Parents of children with chronic conditions, including ASD, have a poorer perception of individual and family quality of life, which is linked to self-esteem, chronic stress, anxiety, and depression. Interventions should address both parents and children with chronic conditions. (Ljubičić et al., 2022).

Comparatively, parents of children with ASD experience lower quality of life in physical, psychological, social, and spiritual well-being compared to adults without ASD-affected children. The severity of the ASD diagnosis is the most significant risk factor for parental quality of life. However, parental education levels and child's ASD severity levels act as protective factors. Nurses can support affected families through early diagnosis and intervention tools, policies for low-income families, and increased understanding of severe ASD's impact on the child and family. (Turnage & Conner, 2022).

2.7.3. Psychological Aspects and QoL of Mothers of Autistic Children

Both parents rated the quality of life (QOL) as mild. However, mothers scored lower in environmental comfort, physical comfort, and psychological well-being compared to fathers. Notably, there were significant differences between mothers and fathers in the psychological and physical dimensions of QOL. This indicates a need for more care and support, especially for mothers of autistic

children, in various aspects of their lives that influence their QOL (Dawood & Khudhair, 2016).

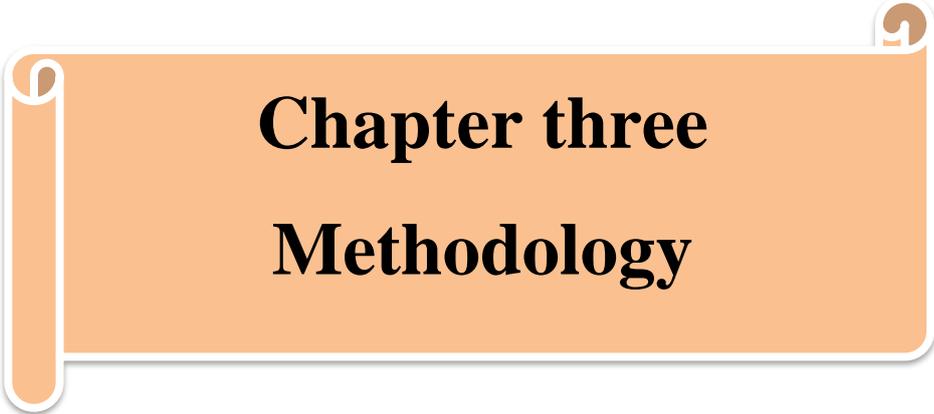
In Tabuk, parents and caregivers of autistic children generally reported a decent overall quality of life. The psychological and environmental dimensions were the most affected. The majority considered their quality of life as neutral and rated their general health as satisfactory (Alamri *et al.*, 2020).

Due to inadequate diagnosis and care for ASD children in certain regions and the lack of state-level assistance for their parents, mothers of ASD children in East Europe face significant risks of stress, burnout, and poor quality of life. Policymakers and public health authorities need to develop a better understanding of this situation to implement effective support measures (Tzivian *et al.*, 2021).

The presence of certain variables was found to increase the likelihood of other variables among mothers of autistic children. These include higher burden and stigma, poorer quality of life, and parental mental health issues (Gabra *et al.*, 2021).

The physical, psychological, and social domains of quality of life were strongly negatively correlated with psychological burden, but not with the environmental domain. Although subjective burden and overall caregiver load were not associated with every category of quality of life for children of mothers with autism spectrum disorders, they were linked to factors that significantly impacted all categories of quality of life (Fithriyah *et al.*, 2020).

Parents of autistic children experience a considerable reduction in their quality of life due to psychological factors. To enhance caregiver coping mechanisms and manage the demands of caring for individuals with ASD over time, leading to reduced stress, better mental health, and improved QOL, seeking guidance from healthcare professionals is essential (Naheed *et al.*, 2020).

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Chapter three
Methodology

Chapter Three

Methodology

3.1. Design of The Study

This study utilizes the non-experimental study design to investigate a phenomenon and its components without direct intervention by the researcher. The approach aims to accurately describe and analyze the relationships between variables, particularly focusing on treatment psychological aspects and quality of life. The study's main goal is to understand the correlation between psychological aspects and quality of life. The researcher believes that the correlational approach is the most suitable method for achieving accurate and objective results. The research will involve direct interrogation of study participants to gather information and describe the phenomenon's characteristics and size. The study was conducted for the period between 19th of september 2022 and 1st of july 2023.

3.2. Administrative Arrangements

Before collecting the study data, the following official clearances were sought from appropriate authorities:

1. Approval from the University of Babylon/College of Nursing Council for the study: This clearance indicates that the study has been reviewed and approved by the relevant academic authority at the University of Babylon College of Nursing. This approval is likely to be necessary to conduct research within the university's jurisdiction.
2. Official permission obtained from Babylon Health Directorate to access the Autistic Center: Babylon Health Directorate is likely a governmental or administrative body responsible for healthcare in the region. The permission obtained from them would indicate that they have authorized access to the Autistic Center for research purposes.

3. Official permission obtained from Autistic Center in Marjan Teaching Hospital and Imam Sadiq Teaching Hospital : This indicates that the study has been granted official permission by the relevant authorities at Morgan Teaching Hospital and Imam Sadiq Teaching Hospital to conduct research at their Autistic Center. This permission is crucial to ensure the research is conducted in an appropriate setting.
4. Consent of the participants: Before conducting the study, the researchers obtained informed consent from the participants. This means that the individuals who will be part of the study were fully informed about the objectives and potential implications of the research. They voluntarily agreed to participate, knowing that their information will be kept confidential and used solely for scientific and research purposes. This consent is essential to protect the autonomy and privacy of the participants.

3.3.Setting of the Study

The study was conducted in Marjan Teaching Hospital and Imam Al-Sadiq Teaching Hospital, both of which have a department that specifically deals with reviews of mental illnesses related to autism. These hospitals are government institutions and serve as the primary centers for receiving cases of autism in the region. Private institutions, on the other hand, do not handle cases of autism, and individuals seeking treatment for autism-related mental illnesses are directed to these government hospitals. As a result, the study focused on collecting data and conducting research on autism cases primarily from these two government hospitals.

3.4.Sample of the Study

A convenience sampling (non probability sampling) is a technique where the study select participants based on specific criteria relevant to the research objectives. In this case, the criteria for selecting the sample of 100 mothers from

Marjan Teaching Hospital and Imam Al-Sadiq Teaching Hospital in Babylon Province are as follows:

1. Mothers of Autistic Children: The study includes only mothers who have at least one child diagnosed with autism. This ensures that the participants have first hand experience with raising an autistic child.
2. Attendance at Specified Hospitals: The sample is drawn from mothers who have sought medical services for their autistic children at Marjan Teaching Hospital and Imam Al-Sadiq Teaching Hospital in Babylon Province. This criterion ensures that the sample is drawn from a specific population with access to these healthcare facilities.

3.4.1. Inclusions criteria:

Inclusion criteria are specific criteria or characteristics that individuals must meet in order to be eligible for inclusion in a research study or a particular sample. Based on your description, here are the inclusion criteria for the study:

1. Mothers who had a child with autism: Participants must have at least one child diagnosed with autism spectrum disorder (ASD).
2. Mothers who are from different age groups: The study includes mothers from various age ranges, encompassing a wide spectrum of age groups.
3. Mothers with different education levels: The study includes mothers with varying levels of education, representing a diverse range of educational backgrounds.
4. Mothers who agree to be included in the study sample: Participants must provide informed consent to participate in the research. They need to explicitly express their willingness to be part of the study sample.

3.4.2. Exclusion Criteria:

Exclusion criteria are specific characteristics or conditions that disqualify individuals from participating in a research study. Based on the information you provided, the exclusion criteria for the pilot study on mothers would be as follows:

1. Mothers who are already chosen for the pilot study: This criterion suggests that if a mother has already been selected to participate in the pilot study, she should be excluded from further consideration to avoid duplication.
2. Mothers who disagree to take part or refuse to participate in the present study: This criterion means that mothers who do not wish to be part of the pilot study or explicitly refuse to participate will be excluded from the study.

3.5.Study Instruments

The questionnaire is one of the means to help collect data that contribute to achieving the results expected by the study, so the researcher designed this questionnaire, which aims to clarify the study objectives and significance by obtaining answers to the study's questions. The questionnaire include the following parts :

3.5.1. Socio-Demographic Characteristics

Mothers characteristics include age, education level, occupation social status and monthly income; and child characteristics include age, gender, living arrangement, duration of autism and living status.

3.5.2. Psychological Aspects (DAS)(Depression,Anxiety,Stress)

This scale used for assessing patients with chronic disease treatment adherence adopted and developed by Antony et al. (1998). Some modifications have been made to the scale and it is composed as follows:

1. *(D)*depression which composed of 12-items.
2. *(A)*anxiety which composed of 11-items.
3. *(S)*stress which composed of 11-items.

A total of (34) items of psychological aspects measured on 3-level type of Likert Scale (*3=Always, 2=Sometime, 1=Never*). Accordingly, points can be taken range from 34-102. The higher average defined as high level psychological aspects (Negative Outcome).

3.5.3. Quality of Life

Quality of life among mothers of autistic children was constructed according to the previous studies and literature review. A total of (30) items measured on 3-level type of Likert Scale ($3=Always$, $2=Sometime$, $1=Never$). Accordingly, points can be taken range from 30-90. The higher average defined as good quality of life.

It is commendable that the researcher took the rules of writing a questionnaire seriously, especially considering the importance of gathering sufficient and comprehensive information for all aspects of the problem. By ensuring the questions are reliable and clear, the researcher increases the likelihood of obtaining accurate and valuable data.

By avoiding vague and complex questions, the researcher likely created a more user-friendly questionnaire, making it easier for respondents to understand and answer the questions accurately. Clear and concise questions can minimize confusion and ambiguity, leading to more consistent and valid responses.

Furthermore, using closed-type questions (those that offer specific response options) can facilitate data analysis and make it easier to compare responses across participants. By requiring respondents to provide answers with reference to what is relevant, the researcher ensures that the data collected directly addresses the research objectives and allows for more focused analysis.

3.7. Validity of the Questionnaire

The modification made to the study instrument was based on the recommendations provided by the 10 experts from different scientific branches. The experts, each with over ten years of experience in their respective fields, reviewed the instrument for several aspects:

1. Content: Experts assessed whether the study instrument included all the necessary information and variables relevant to the research objectives.

2. **Simplicity:** The experts evaluated the clarity and simplicity of the instrument's language and structure to ensure it could be easily understood by participants.
3. **Relevance:** The experts verified that the questions and components of the instrument were relevant to the research topic and objectives.
4. **Style:** The instrument's format and presentation were scrutinized to ensure they were appropriate and consistent with the research standards.
5. **Suitability:** Experts assessed whether the study instrument was suitable for the intended population and could effectively collect the required data.

Based on the experts' recommendations, the researcher made a series of revisions and modifications to the study instrument. These modifications likely involved rephrasing questions, adding or removing content, rearranging the sequence of information, and addressing any concerns raised by the experts.

Content validity is an important aspect of research and assessment that refers to the degree to which a measurement instrument, such as a questionnaire or test, adequately represents the content domain it is supposed to measure. In this case, content validity is being determined through the use of a panel of 10 experts from different universities and faculties, specifically:

1. three faculty members from the College of Nursing at the University of Baghdad.
2. Five faculty members from the College of Nursing at the University of Babylon.
3. Two faculty members from the College of Nursing at the University of Kufa.

3.8.Pilot Study

This preliminary study was carried out on two hospitals (Marjan and Al-imam Alsadiq teaching hospital)in Al Hilla city in Babylon province from The period 1-5 February 2023.(10%) of target population(100)mothers of autistic children to determine the study tool's stability and credibility, as well as its

clarity and efficiency, as well as the standard time required to collect data for each subject, which can be estimated during the interview procedures, and to identify any difficulties that may arise.

The pilot study aimed to achieve the following objectives.

1. Adequacy of research tools development and testing
2. Evaluation of the instrument's viability.
3. Identifying any logistical issues that may arise as a result of the proposed methods.
4. Assessment of proposed data analysis approaches for the detection of potential issues.
5. The researcher's time estimate during data collecting.

3.8.1. Results of pilot study

1. The questionnaire is reliable.
2. The time required for answering the questionnaire ranged from (20-25) minutes.
3. The instrument items were clarify and understood the phenomenon underlying of the study (Table 3-1).

The accepted coefficients reliability of the used study questionnaire regarding internal consistency (Alpha Cronbach) is 0.70 (as shows in table 3-1) by findings calculation in which the instrument was effective, significant, and valid to the research topic of (psychological aspects and quality of life among mothers of autistic children).

3.8.3. Reliability of the Questionnaire:

The involving 10 mothers to assess their psychological aspects and quality of life. Here's a breakdown of the information:

1. Participants: The study involved a total of 100 mothers as participants.

2. Recruitment: The researcher introduced the study to the participants and asked them to participate in conducting the research. Presumably, they agreed to take part voluntarily.
3. Data Collection: The researcher conducted individual interviews with each participant. During the interviews, the participants were asked to express their opinions about their psychological aspects and quality of life. Additionally, the participants were given a questionnaire to answer, which was designed to assess the simplicity and understanding of the study tool, as well as estimate the time needed to fill it out.
4. Interview Duration: The researcher remained with each participant during the interview until the allotted time for the interview was up.
5. Estimated Time to Fill Out Questionnaire: The questionnaire was estimated to take approximately 20-25 minutes to complete by each participant.
6. Data Analysis: The data obtained from the pilot study (presumably the initial study with the 10 mothers) were analyzed. No adjustments were made based on the pilot study results.
7. Exclusion of Experimental Study: It is mentioned that the experimental study was excluded from the original sample. The reason for this exclusion is not provided in the given information.
8. Reliability: The Cronbach's alpha value was used to assess the reliability of the study tool. The reported range of Cronbach's alpha was 0.70 and above, indicating a high degree of reliability for the study tool.

Overall, it appears that the researcher used a qualitative approach to gather data from the participants through individual interviews and a questionnaire to assess psychological aspects and quality of life. The results from the pilot study were satisfactory, given the high reliability of the study tool, and the experimental study was excluded, though the reason for this exclusion is not specified (Table 3-1).

Table3-1:Reliability of the Studied Questionnaire (n=10)

<i>Reliability Statistics</i>			
Variables	N of Items	Cronbach's Alpha	Ass.
DAS	34	.89	Acceptable
QOL	30	.78	Acceptable

This table is statistically formed to show the reliability coefficient for the study instrument. The calculated result shows that the questionnaire is reliable measure to study the phenomenon of health behaviours and psychological aspects and quality of life among mothers of autistic children on the same population at any time in the future.

3.9.Ethical Considerations

Ethical obligations are one of the most important things that the researcher must follow and abide it when doing the study. Before the starting of collect the data from the community that has been identified for the study, the researcher should clarify the main purpose and desired goal of conducting this study for the sample to be including in the study, as well as adhere to the strict confidentiality of the data taken from the study sample and pledge to use it for scientific purposes related to the study only.

Before the starting of gathering the data from the sample who are participating in the study, the researcher given a brief explanation about the scientific background of the research and the purpose of conducting. Mothers were verbally informed about the study aims and were asked to participate and this participation were voluntary. After they consented to take part in the study, they were given an anonymous questionnaire to complete in order to protect the participants' privacy.

3.10. Data Collection

The questionnaire has been interviewed with study participants. After obtaining the approval of the Babylon Health Directorate and verifying the validity and reliability of the study instruments.

The researcher interview the participants (Mothers), explained the instructions, answered their questions regarding the form, urged them to participate and thanked them for the cooperation. The interview techniques was used on individual bases, and each interview (20-25) minutes after taking the important steps that must be included in the study design. the data collected from the date [7th february to 15th April (2023)].

3.11. Statistics Data Analysis

The data collected from the study sample was statistically analyzed by the researcher using the *SPSS-20* programs in order to arrive at the results, establish the relationships between the variables, and produce the research's concluding findings based on a series of statistical tests.

3.11.1. Descriptive approach

Descriptive statistics use a range of mathematical and statistical methods to statistically describe a dataset using tables and charts. Descriptive statistics are used to present and describe data that needs to be sorted, summarized, and classified while also making it simpler for the recipient to identify and understand the information's core concepts. the study done utilizing:

- A. Statistics charts Averages of the M.s. scores and the overall average score are given in terms of number (No.) and percentage (%).
- B. Test for standard deviation.
- C. It uses the Cronbach alpha correlational coefficient to determine the research tool's internal consistency.

3.11.2. Inferential approach

1. Analysis of Variance (ANOVA)

This test used to determine the differences in dependent variables with regards to independent variables such as differences in psychological aspects with different socio-demographic characteristics (only with more than two class variables). At significant level (*Sig.*) 0.05 indicated the statistical differences.

2. Independent Sample t-test

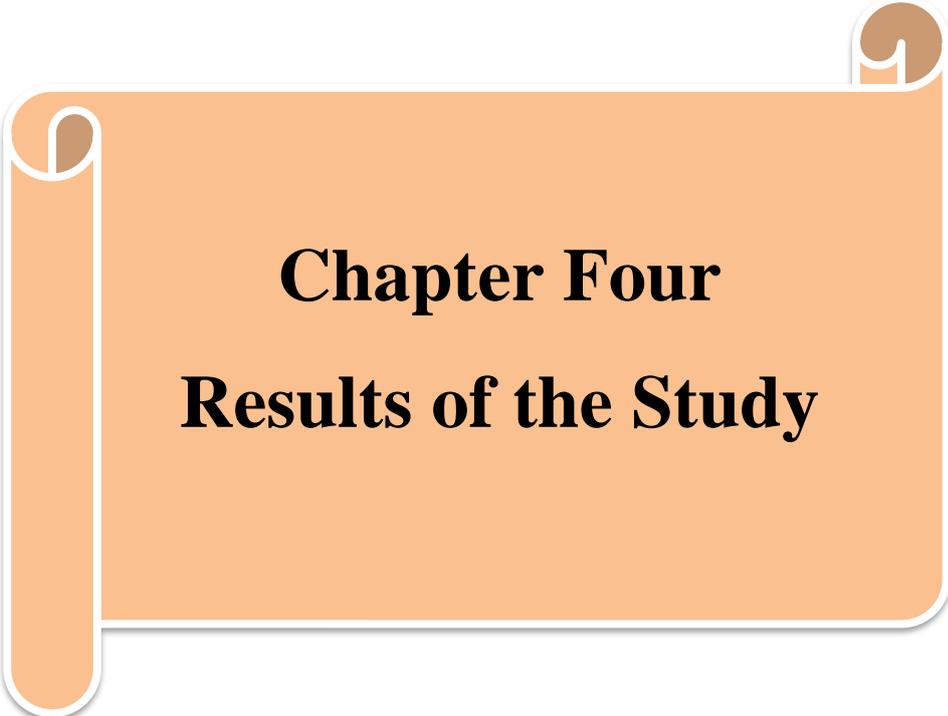
This test used to determine the differences in dependent variables with regards to independent variables such as differences in psychological aspects with different socio-demographic characteristics (only with two class variables). At significant level (*Sig.*) 0.05 indicated the statistical differences.

3. Spearman's Correlation Coefficient (r)

This test used to correlate between study variables such as in psychological aspects and quality of life. In which ($-r_s$) means negative correlation and ($+r_s$) means positive correlation at significant level 0.01** and 0.05*.

4. Simple Liner Regression

To test which psychological aspects and quality of life. In which, ($-\beta$) means negative prediction and ($+\beta$) positive predication).

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Chapter Four
Results of the Study

Chapter Four

Results of the Study

The finding of data analysis systematically in following figures and tables based on stated objectives:

4-1. Characteristics of Study Sample

Table 4-1.1. Socio-demographic Characteristics of the Mothers

Variables	Classification	No.	%
Age	20-25 years old	13	13.0
	26-30 years old	34	34.0
	31-35 years old	25	25.0
	36-40 years old	15	15.0
	40 and older	13	13.0
	Total	100	100
	23.86 ± 5.79		
Education Level	Read and write	2	2.0
	Elementary school	2	2.0
	Middle school	32	32.0
	High school	26	26.0
	College	38	38.0
	Total	100	100
Occupation	Government employ	36	36.0
	Free-business	2	2.0
	Housewife	62	62.0
	Total	100	100

Parents marital status	Live together	96	96.0
	Separated	4	4.0
	Total	100	100
Monthly income	<300 thousand Iraqi dinars	32	32.0
	300-600 thousand Iraqi dinars	35	35.0
	601-900 thousand Iraqi dinars	23	23.0
	>900 thousand Iraqi dinars	10	10.0
	Total	100	100

No.= Number; %= Percentage

This table show participants characteristics, the mean age is 23.86 (SD=5.79), the age group 26-30 years old were records the highest (34%). In regards with education level, most of participants were college graduated (38%). Occupation related findings, more than half (62%) of mothers were housewife. In terms of parent marital status, the majority of (96%) were live together. Lastly, one-third (35%) of study sample expressed 300-600 thousand Iraqi dinars

Table 4-1.2. Characteristics of the Autistic Children

Variables	Classification	No.	%
Child age	<5 years old	70	70.0
	5-10 years old	28	28.0
	<10 years old	2	2.0
	Total	100	100
	4.89 ± 1.63		
Sex	Male	72	72.0
	Female	28	28.0
	Total	100	100
Living arrangement	1 st	52	52.0
	2 nd	30	30.0

	3 rd	10	10.0
	4 th	8	8.0
	Total	100	100
Duration of autism	1-2 years	31	31.0
	3-4 years	39	39.0
	5 and more	30	30.0
	Total	100	100
Child Living Status	Yes	94	94.0
	No	6	6.0
	Total	100	100

No.= Number; %= Percentage

4-1.2 show autistic children characteristics, the mean age is 4.89 (SD=1.63), the age group <5 years old were most common (70%). Regarding gender, the autism were common among male (72%). More than half of children were first arranged (52%) and diagnosed with autism since 3-4 years. Finally, the majority of (94%) of autistic children live with their parents.

4-2. Psychological Aspects among Mothers of Autistic Children

Table 4-2.1. Psychological Aspects related to Depression

List	Depression Items	Responses	No.	%	M.s	Ass.
1	I don't seem to feel any positive feelings at all	Never	21	21.0	2.09	Moderate
		Sometime	49	49.0		
		Always	30	30.0		
2	It never seemed to me that I could begin to do my business	Never	14	14.0	2.21	Moderate
		Sometime	51	51.0		
		Always	35	35.0		
3	I felt like I had nothing to look forward to	Never	23	23.0	2.10	Moderate
		Sometime	44	44.0		
		Always	33	33.0		
4	I felt sad and depressed	Never	11	11.0	2.14	Moderate
		Sometime	64	64.0		
		Always	25	25.0		
5	I felt like I had lost interest in	Never	28	28.0	2.06	Moderate
		Sometime	38	38.0		

	almost everything	Always	34	34.0		
6	I felt of little value as a person	Never	9	9.0	2.32	Moderate
		Sometime	50	50.0		
		Always	41	41.0		
7	I couldn't get any pleasure from the things I did	Never	27	27.0	2.02	Moderate
		Sometime	44	44.0		
		Always	29	29.0		
8	I felt sad, depressed	Never	12	12.0	2.13	Moderate
		Sometime	63	63.0		
		Always	25	25.0		
9	I couldn't get excited about anything	Never	35	35.0	1.94	Moderate
		Sometime	36	36.0		
		Always	29	29.0		
10	I could not take any goal as a hope for the future	Never	26	26.0	2.10	Moderate
		Sometime	38	38.0		
		Always	36	36.0		
11	I felt that life was worthless	Never	16	16.0	2.17	Moderate
		Sometime	51	51.0		
		Always	33	33.0		
12	I found it difficult to work up the initiative to do things	Never	40	40.0	2.7	Moderate
		Sometime	50	50.0		
		Always	10	10.0		

Level of Assessment (Low= 1-1.66; Moderate=1.67-2.33; High=2.34-3)

In terms of statistical mean, 4-2.1 table demonstrated that the participants expressed a moderate response to psychological aspects in terms of depression ($M. s=1.67-2.33$) at all studied items of the scale.

Table 4-2.2. Psychological Aspects related to Anxiety

List	Anxiety Items	Responses	No.	%	M.s	Ass.
1	My throat felt dry	Never	14	14.0	2.49	High
		Sometime	23	23.0		
		Always	63	63.0		
2	Have difficulty breathing (eg, rapid breathing, shortness of breath in the absence of physical exertion)	Never	7	7.0	2.59	High
		Sometime	27	27.0		
		Always	66	66.0		
3	I found myself in situations that made me so anxious that I felt so relieved that they were gone	Never	17	17.0	2.31	Moderate
		Sometime	35	35.0		
		Always	48	48.0		
4	You sweat significantly (eg, hands sweat) in the absence of high temperatures or physical exertion	Never	5	5.0	2.75	High
		Sometime	15	15.0		
		Always	80	80.0		
5	I had a feeling of weakness	Never	12	12.0	2.52	High

		Sometime	24	24.0		
		Always	64	64.0		
6	I got scared and panicked without any valid reason	Never	9	9.0	2.50	High
		Sometime	32	32.0		
		Always	59	59.0		
7	I was having difficulty swallowing	Never	9	9.0	2.59	High
		Sometime	23	23.0		
		Always	68	68.0		
8	You are aware of an irregular heartbeat	Never	8	8.0	2.68	High
		Sometime	16	16.0		
		Always	76	76.0		
9	I felt like I used up a lot of nervous energy	Never	21	21.0	2.22	Moderate
		Sometime	36	36.0		
		Always	43	43.0		
10	I found myself getting agitated and easily upset	Never	17	17.0	2.26	Moderate
		Sometime	40	40.0		
		Always	43	43.0		
11	You have experienced tremors (eg in the hands)	Never	8	8.0	2.58	High
		Sometime	26	26.0		
		Always	66	66.0		

Level of Assessment (Low= 1-1.66; Moderate=1.67-2.33; High=2.34-3)

In terms of statistical mean, 4-2.2 table demonstrated that the participants expressed a high responses to psychological aspects in terms of anxiety as indicated by high mean scores ($M.s \geq 2.34$) at all studied items of the scale except, the items number (3, 9 and 10) the responses were moderate ($M.s = 1.67-2.33$).

Table 4-2.3. Psychological Aspects related to Stress

List	Stress Items	Responses	No.	%	M.s	Ass.
1	I found myself getting annoyed about very trivial things	Never	24	24.0	2.41	High
		Sometime	11	11.0		
		Always	65	65.0		
2	I tended to overreact to situations	Never	21	21.0	2.47	High
		Sometime	11	11.0		
		Always	68	68.0		
3	I found it difficult to relax	Never	14	14.0	2.55	High
		Sometime	17	17.0		
		Always	69	69.0		
4	I found myself getting upset fairly easily	Never	11	11.0	2.59	High
		Sometime	19	19.0		
		Always	70	70.0		
5	I found myself becoming impatient whenever something delayed me (eg elevators, traffic lights, waiting)	Never	16	16.0	2.49	High
		Sometime	19	19.0		
		Always	65	65.0		

6	I feel somewhat sensitive	Never	22	22.0	2.45	High
		Sometime	11	11.0		
		Always	67	67.0		
7	I found I was very irritable	Never	14	14.0	2.52	High
		Sometime	20	20.0		
		Always	66	66.0		
8	I found it difficult to calm down after something upset me	Never	15	15.0	2.52	High
		Sometime	18	18.0		
		Always	67	67.0		
9	I was nervous	Never	13	13.0	2.60	High
		Sometime	14	14.0		
		Always	73	73.0		
10	I was intolerant of anything preventing me from pursuing what I was going to do	Never	12	12.0	2.62	High
		Sometime	14	14.0		
		Always	74	74.0		
11	I found myself troubled	Never	12	12.0	2.66	High
		Sometime	10	10.0		
		Always	78	78.0		

Level of Assessment (Low= 1-1.66; Moderate=1.67-2.33; High=2.34-3)

In terms of statistical mean, 4-2.3 table demonstrated that the participants expressed a high responses to psychological aspects in terms of stress as indicated by high mean scores ($M.s \geq 2.34$) at all studied items of the scale.

Table 4-2.4. Psychological Aspects among Mothers of Autistic Children by Overall Domains

Psychological Aspects	Level	No.	%	M (\pm SD)	Ass.
Depression	Mild (12-20)	22	22.0	24.98 \pm 6.21	Moderate
	Moderate (20.1-28)	50	50.0		
	Sever (28.1-36)	28	28.0		
	Total	100	100.0		
Anxiety	Mild (11-18.33)	5	5.0	27.49 \pm 5.75	Severe
	Moderate (18.34-25.66)	34	34.0		

	Sever (25.67-33)	61	61.0		
	Total	100	100.0		
Stress	Mild (11-18.33)	18	18.0	27.88 ± 7.67	Severe
	Moderate (18.34-25.66)	14	14.0		
	Sever (25.67-33)	68	68.0		
	Total	100	100.0		

M: Mean for total score, SD=Standard Deviation for total score

This table shows the psychological aspects among mothers of autistic children and include the following findings: Psychological aspects in terms of depression, (50%) of mothers expressed a moderate level (*Mean=24.98; SD=6.21*). Psychological aspects in terms of anxiety, (61%) of mothers expressed a sever level (*Mean=27.49; SD=5.75*). And psychological aspects in terms of stress, (68%) of mothers expressed a sever level (*Mean=27.88; SD=7.67*)

Table 4-2.5. Overall Psychological Aspects among Mothers of Autistic Children

Psychological Aspects	No.	%	<i>M (±SD)</i>	Ass.
Low	6	6.0	80.35 ± 15.36	High
Moderate	40	40.0		
High	54	54.0		
Total	100	100.0		

M: Mean for total score, SD=Standard Deviation for total score

[low= 34-56.66; Moderate= 56.67-79.33; High= 79.34-102]

The results of table 4-2.5 showed that (54%) of the mothers with autistic children expressed a high level of psychological aspects ($Mean=80.35$; $SD=15.36$).

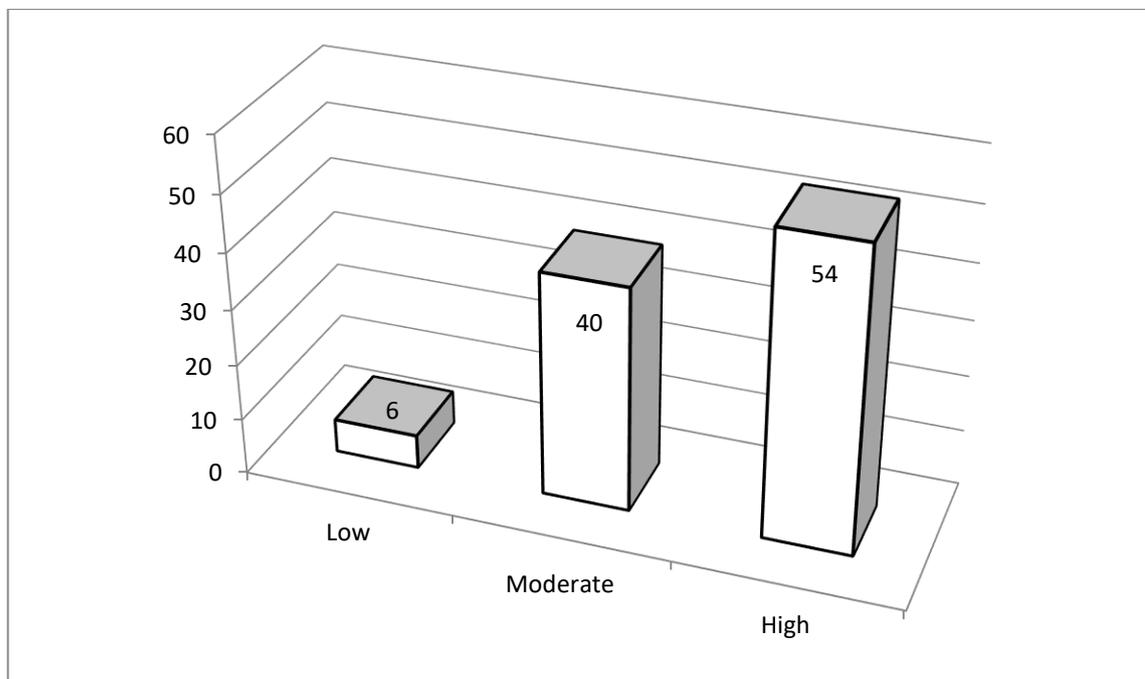


Fig. 4-1. Overall Psychological Aspects among Mothers of Autistic Children

Table 4-3.1. Quality of Life among Mothers of Autistic Children

List	QOL Items	Never	Sometime	Always	M.s	Ass.
		No.(%)	No.(%)	No.(%)		
1	I have enough time to spend with my family	31 (31.0)	30 (30.0)	39 (39.0)	2.08	Moderate
2	My family and I talk frankly among ourselves about the affairs of our lives	31 (31.0)	21 (21.0)	48 (48.0)	2.17	Moderate
3	We solve our family problems together	29 (29.0)	15 (15.0)	56 (56.0)	2.27	Moderate
4	My family members support each other to achieve their goals	30 (30.0)	17 (17.0)	53 (53.0)	2.23	Moderate
5	We show our love and concern for each other	31 (31.0)	11 (11.0)	58 (58.0)	2.27	Moderate

6	I have the ability to deal with the changes that occur in life	33 (33.0)	38 (38.0)	29 (29.0)	1.96	Moderate
7	My family helps me take care of my children	38 (38.0)	42 (42.0)	20 (20.0)	1.82	Moderate
8	Family members help children with schoolwork and activities	35 (35.0)	45 (45.0)	20 (20.0)	1.85	Moderate
9	Family members teach the child how to get along with others	33 (33.0)	44 (44.0)	23 (23.0)	1.90	Moderate
10	I feel energetic and energetic	44 (44.0)	45 (45.0)	11 (11.0)	1.67	Moderate
11	I'm having a hard time dealing with my kids	43 (43.0)	48 (48.0)	9 (9.0)	1.66	Poor
12	I feel separated from my children	60 (60.0)	33 (33.0)	7 (7.0)	1.47	Poor
13	Family members have friends and others who support them	66(66.0)	28 (28.0)	6 (6.0)	1.40	Poor
14	My family members have enough support they need to relieve stress	28 (28.0)	38 (38.0)	34 (34.0)	2.06	Moderate
15	My family members have enough time to pursue their own interests	28 (28.0)	46 (46.0)	26 (26.0)	1.98	Moderate
16	My family members have the means of transportation that allow them to move wherever they want	35 (35.0)	10 (10.0)	55 (55.0)	2.20	Moderate
17	My family takes care of their teeth every day	28 (28.0)	22 (22.0)	50 (50.0)	2.22	Moderate
18	My family members receive medical care when needed	28 (28.0)	6 (6.0)	66 (66.0)	2.38	Good
19	My family feels safe at home and at school	28 (28.0)	10 (10.0)	62 (62.0)	2.34	Good
20	My family receives support to progress in school or work	28 (28.0)	32 (32.0)	40 (40.0)	2.12	Moderate
21	My family's relationship with health care providers is good	28 (28.0)	21 (21.0)	51 (51.0)	2.23	Moderate
22	I feel that I have value and benefit in life	32 (32.0)	45 (45.0)	23 (23.0)	1.91	Moderate
23	I feel safe and stable in my social life	31 (31.0)	37 (37.0)	32 (32.0)	2.01	Moderate
24	I love to live with people and deal with them	34 (34.0)	47 (47.0)	19 (19.0)	1.85	Moderate

25	Be sure to exchange visits with friends	48 (48.0)	36 (36.0)	16 (16.0)	1.68	Moderate
26	I can live and work in harmony with others	38 (38.0)	42 (42.0)	20 (20.0)	1.82	Moderate
27	I feel psychological comfort when I stay away from people	31 (31.0)	37 (37.0)	32 (32.0)	2.01	Moderate
28	My friends are few because of my circumstances	34 (34.0)	20 (20.0)	46 (46.0)	2.12	Moderate
29	I feel some pain in my body	50 (50.0)	30 (30.0)	20 (20.0)	1.70	Moderate
30	I am in good health	35 (35.0)	55 (55.0)	10 (10.0)	1.75	Moderate

Level of Assessment (Poor= 1-1.66; Moderate=1.67-2.33; Good=2.34-3)

In terms of statistical mean, 4-3.1 table demonstrated that the study participants expressed a moderate responses to quality of life ($M.s=1.67-2.33$) at all studied items of the scale except, the items number (11, 12 and 13) the responses were poor ($M.s. \leq 1.66$) and items number (18 and 19) the responses were good ($M.s \geq 2.34$).

Table 4-3.2. Overall Quality of Life among Mothers of Autistic Children

QOL	No.	%	$M (\pm SD)$	Ass.
Poor	28	28.0	59.13 ± 19.31	Moderate
Moderate	43	43.0		
Good	29	29.0		
Total	100	100.0		

M: Mean for total score, SD=Standard Deviation for total score

[Poor= 30-50; Moderate= 50.1-70; Good= 70.1-90]

The results of the table 4-3.2 showed that (43%) of the mothers with autistic children expressed a moderate quality of life ($Mean=59.13$; $SD=19.31$).

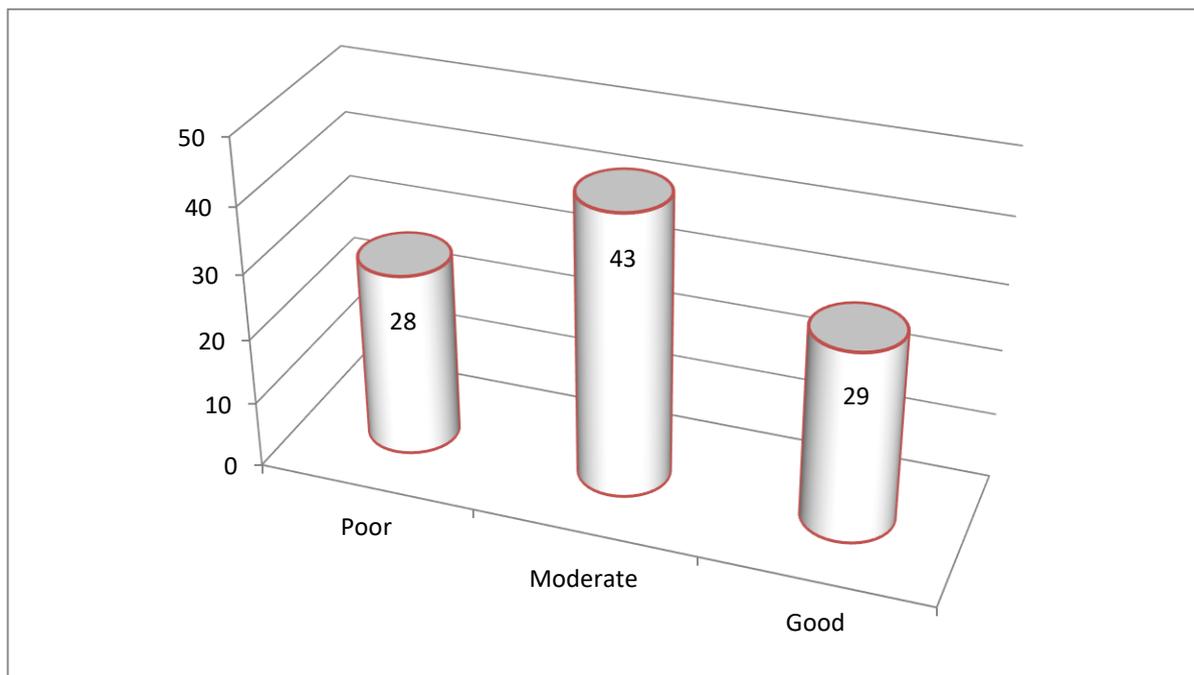


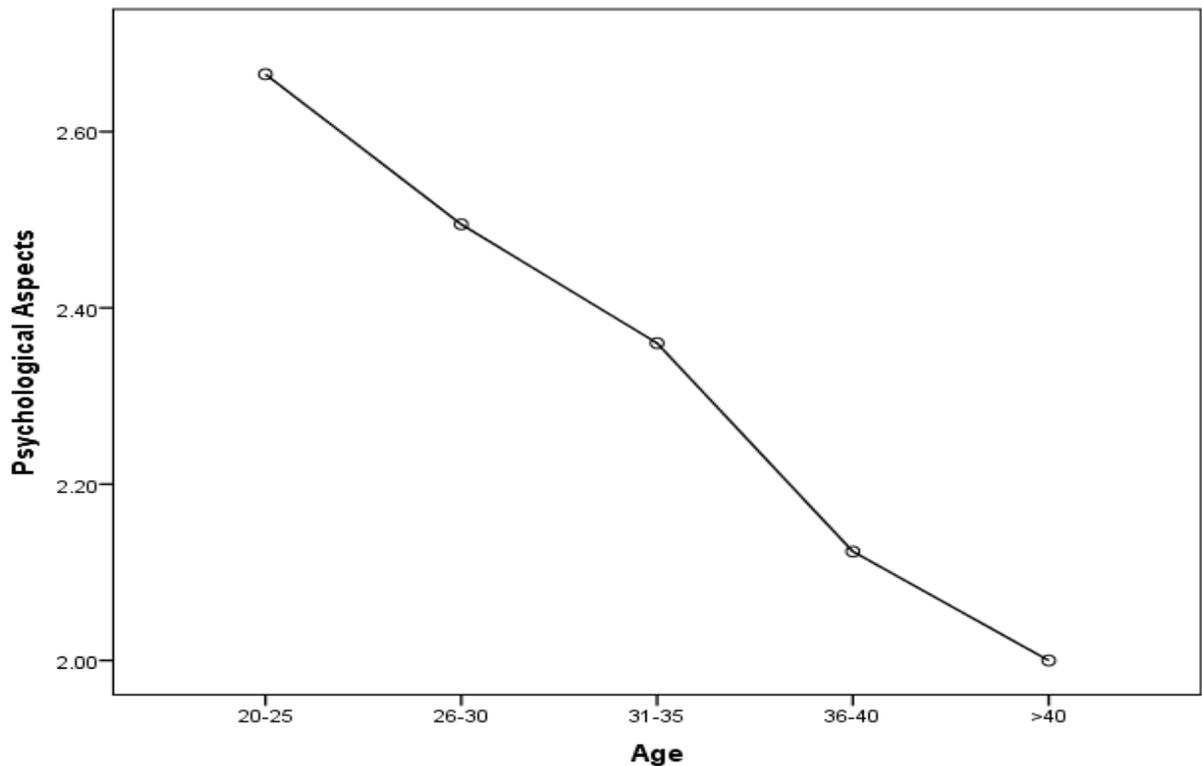
Fig. 4-2. Overall Quality of Life among Mothers of Autistic Children

4.4. Statistical Differences in Psychological Aspects among Mothers with respect their Socio-Demographic Variables

Table 4-4.1. Psychological Aspects between Groups of Age

Age	Source of variance	Sum of Squares	d.f	Mean Square	F-statistic	Sig.
Psychological Aspects	Between Groups	4.351	4	1.088	6.511	.000
	Within Groups	15.871	95	.167		
	Total	20.222	99			

The analysis of variance showed that there were statistically significant differences in psychological aspects between mothers with respect to their age groups (F=6.511 ;P=.000)



($F=6.511$; $p=.000$).

Fig. 4-3. Psychological Aspects between Groups of Age

Table 4-4.2. Psychological Aspects between Groups of Education Level

Education Level	Source of variance	Sum of Squares	d.f	Mean Square	<i>F</i> -statistic	<i>Sig.</i>
Psychological Aspects	Between Groups	1.109	4	.277	1.378	.247
	Within Groups	19.113	95	.201		
	Total	20.222	99			

The analysis of variance in table 4-4.2 showed that there were no statistically significant differences in psychological aspects between mothers with respect to their education level ($F=1.378$; $p=.247$).

Table 4-4.3. Psychological Aspects between Groups of Occupation

Occupation	Source of variance	Sum of Squares	d.f	Mean Square	<i>F-statistic</i>	<i>Sig.</i>
Psychological Aspects	Between Groups	.882	2	.441	2.212	.115
	Within Groups	19.340	97	.199		
	Total	20.222	99			

The analysis of variance in table 4-4.3 showed that there were no statistically significant differences in psychological aspects between mothers with respect to their occupation ($F=2.212$; $p=.115$).

Table 4-4.4. Psychological Aspects between Groups of Social Status

	Parent	M	SD	Std. Error	t-value	d.f	<i>Sig.</i>
Psychological Aspects	Together	2.37	.450	.04601	1.077	98	.284
	Separated	2.12	.476	.23815			

The independent sample t-test showed that there were no statistically significant differences in psychological aspects between mothers with respect to their social status ($t=1.077$; $p=.284$).as shown in table 4-4.4

Table 4-4.5. Psychological Aspects between Groups of Monthly Income

Monthly Income	Source of variance	Sum of Squares	d.f	Mean Square	<i>F-statistic</i>	<i>Sig.</i>
Psychological Aspects	Between Groups	13.239	3	4.413	60.666	.000
	Within Groups	6.983	96	.073		
	Total	20.222	99			

The analysis of variance showed that there were statistically significant differences in psychological aspects between mothers with respect to their monthly income ($F=60.666$; $p=.000$).as shown in table 4-4.5

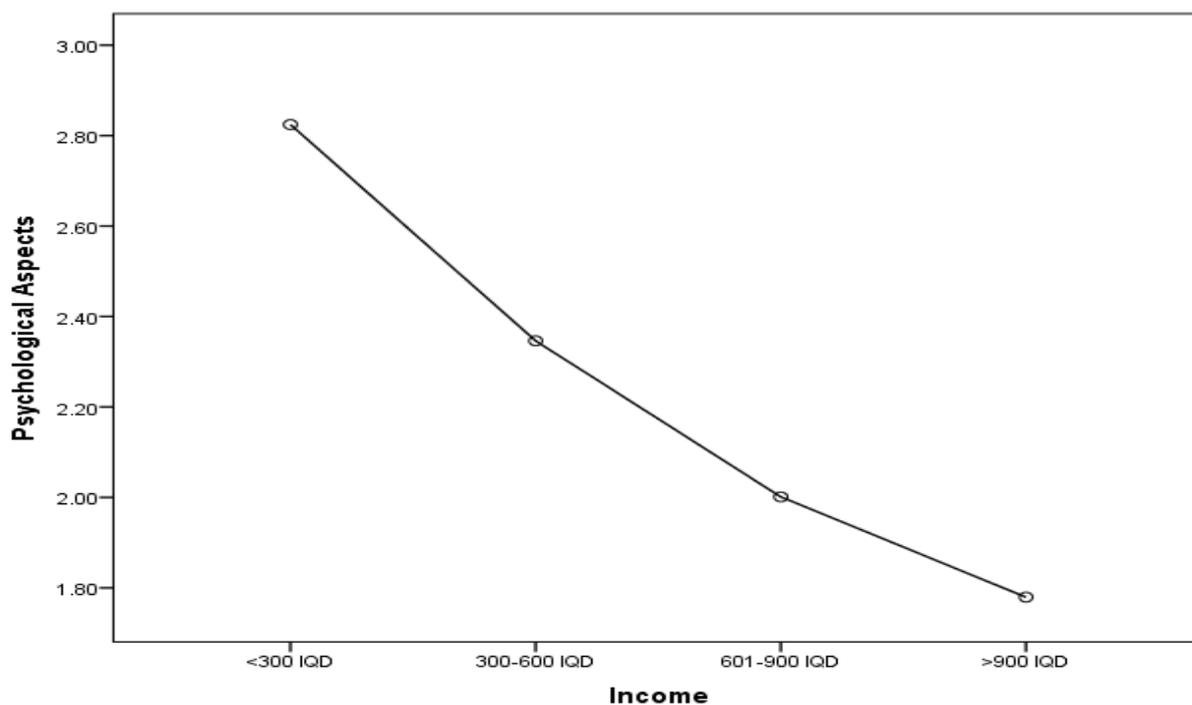


Fig. 4-4. Psychological Aspects between Groups of Monthly Income

Table 4-5. Liner Regression among the Study Variables in Predict the Quality of Life

Variables	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	P	Std. Error	Beta		
Child age	.138	.039	.093	3.583	.001
Gender	.030	.044	.018	.688	.493

Living arrangement	.024	.021	.029	1.106	.272
Duration of autism	-.929-	.023	-.961-	-39.921-	.000
Child Living Status	.067	.078	.021	.855	.394

Dependent Variable: QOL

Simple linear regression test indicates that the child age ($\beta=.039$; $p=.001$) and duration of autism ($\beta= -.961$; $p= .000$) are predicted quality of life among mothers of autistic children.as shown in table 4-5

Table 4-6. Relationship between Psychological Aspects and Quality of Life among Mothers of Autistic Children

Correlation Statistics(sperman)	Psychological Aspects	Quality of Life
Psychological Aspects	1	-.523-**
Quality of Life	-.523-**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Findings indicate that the negative correlation between psychological aspects among mothers of autistic children and their quality of life ($r_s= -.523$; $p= .000$).as shown in table 4-6

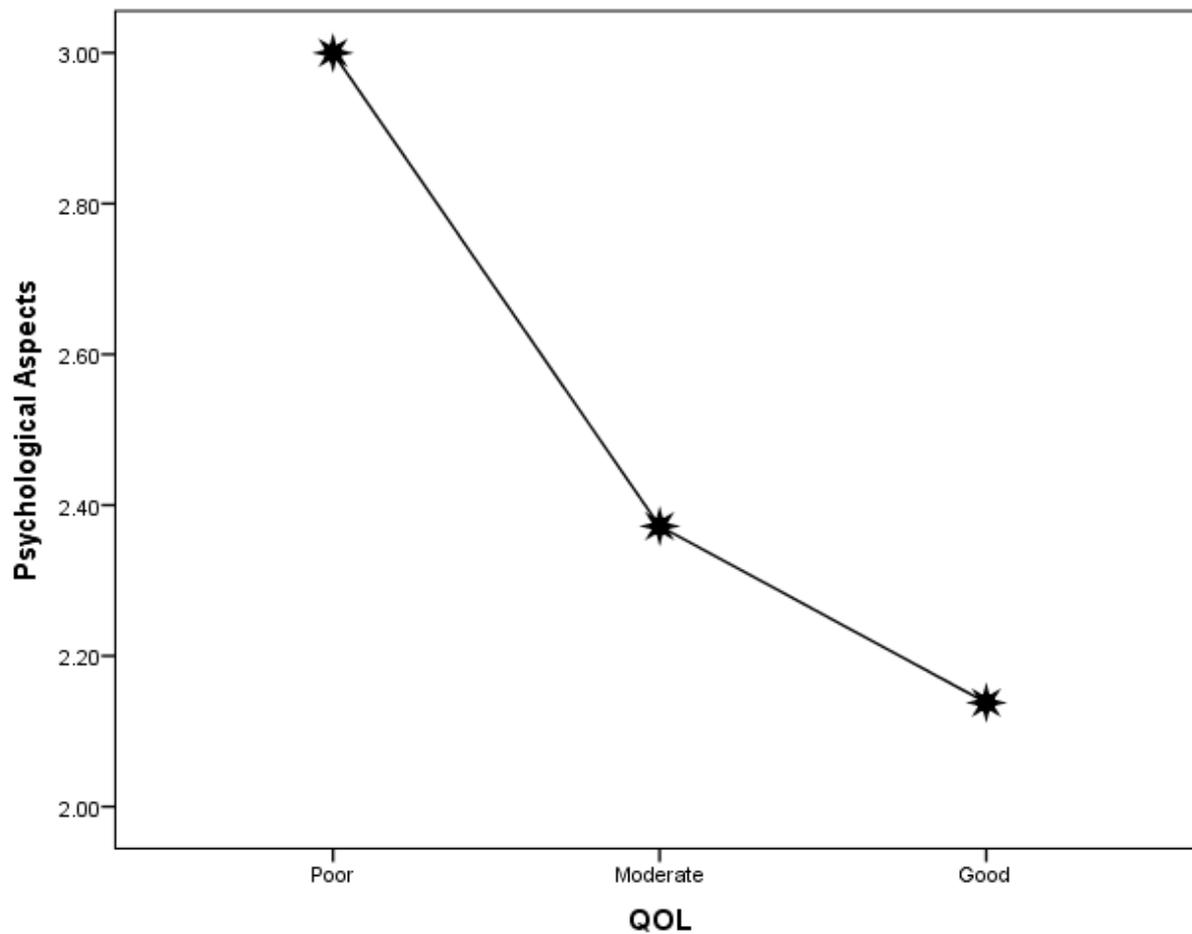
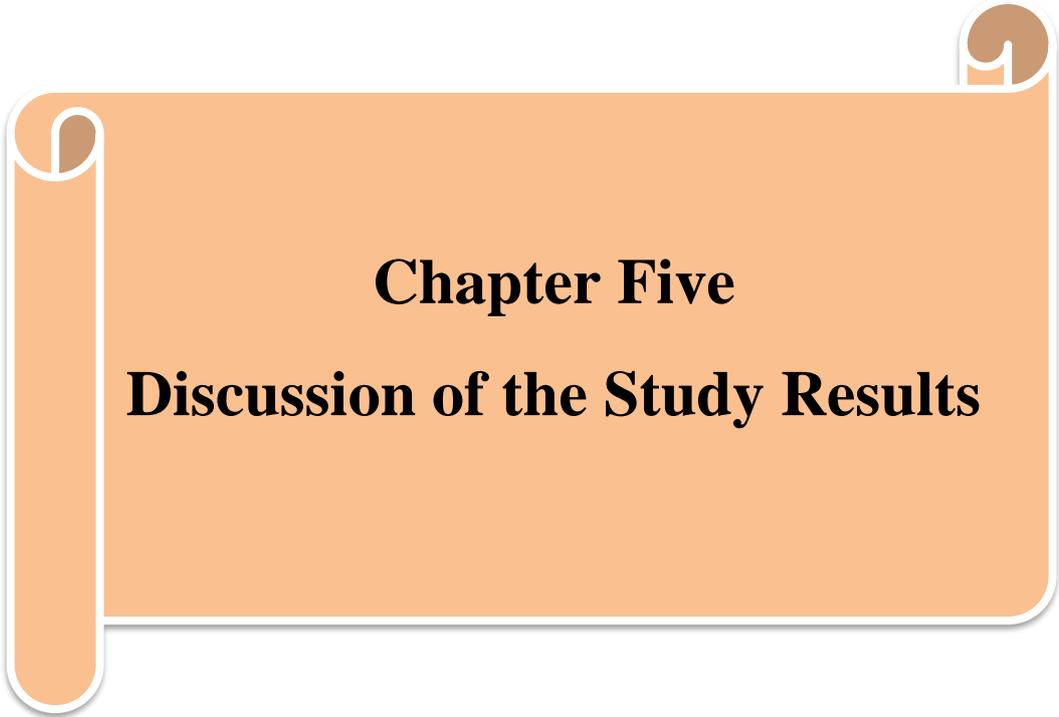


Fig. 4-5. Psychological Aspects and Quality of Life

An orange scroll graphic with a white border and a white shadow. The scroll is unrolled in the middle, with the top and bottom edges curled up. The text is centered on the unrolled portion.

Chapter Five
Discussion of the Study Results

Chapter Five

Discussion of the Study Results

The mother has a fundamental and important influence on the child's growth and development in various developmental, emotional and mental aspects, and this influence increases if the child suffers from a disability such as autism, as the period of his dependence on his parents is prolonged, and thus problems arise that require special needs and psychological pressures increase and thus affect the quality of life. therefore study aimed to assess the psychological aspects and its relationship to quality of life among mothers of autistic children. This chapter deals with discussion the results of the research in tables and these refer to the objectives of this report, which are as follows:

5.1.Socio-Demographic Characteristics of the Study Sample

The findings from the study on mothers of autistic children reveal several interesting characteristics. Firstly, the mean age of the mothers in the study was 23.86 years, with a standard deviation of 5.79, indicating that the majority of participants were in their early to mid-twenties.

When looking at the distribution of ages, the age group 26-30 years old recorded the highest representation at 34%. This suggests that a significant portion of the mothers with autistic children falls within this age range. This findings is supported by findings from Chain, the most common mothers with autistic children at the young age <30 years (Zhou et al., 2019).

Regarding education levels, the majority of participants were college graduates, comprising 38% of the study sample. This finding may indicate a positive correlation between higher education and having a child with autism. This findings from Saudi Arabia, the majority of mothers with autistic children were Bachelors graduated (Al-Jabri et al., 2022). Higher educational level is an important factor in coping with stressful aspects (Radhi et al., 2022).

Occupation-related findings show that more than half (62%) of the mothers in the study were housewives. This suggests that a considerable number of mothers were primarily dedicated to caregiving roles at home, which may have implications for the available support and resources for their children with autism. This findings in agreement with findings from Jordan, most of women were housewife (Dardas & Ahmad, 2014). Such a job does not meet the needs of people with disabilities (Yasir et al., 2018).

In terms of parent marital status, an overwhelming majority (96%) of the participants were living together. This finding indicates that the vast majority of the mothers had a partner or spouse present in their lives, which could potentially influence the support system available to them in raising their autistic children.

Lastly, one-third (35%) of the study sample expressed an income range of 300,000 to 600,000 Iraqi dinars. This finding provides insights into the socio-economic background of the participants and may be relevant in understanding the accessibility of resources and services for their children's needs.

According to a previous qualitative study, the mothers (5 out of 14) stated that they had to leave their careers due to financial issues since the day-care center are expensive and sometimes not available for their children (Plant & Sanders, 2007). This findings is supported by findings from Australia, most of children with autism were live with both mothers and fathers (Bohadana et al., 2019). These results are in agreement with the results of a study conducted in Brazil, emphasized that the most important factors affecting the quality of life and psychological burdens among mothers of autistic children is the economic factor (Braga dos Anjos, & Araújo de Moraes, 2021).

The findings presented provide valuable insights into the characteristics of autistic children, offering a snapshot of their demographic and diagnostic profiles. The study sample's mean age of 4.89 years with a standard deviation of 1.63 indicates that the children included were generally around 4 to 6 years old.

It is worth noting that the most common age group was under 5 years old (70%), highlighting the importance of early identification and intervention.

Regarding gender distribution, the results indicate that autism is more prevalent among males (72%). This finding aligns with existing research that suggests a higher incidence of autism in males compared to females. However, it is essential to recognize that autism affects individuals of all genders, and further research may be needed to understand any underlying factors contributing to the observed gender disparity.

The study also sheds light on the diagnostic timeline for autistic children. More than half of the children were first diagnosed with autism between the ages of 3 and 4 years, implying that diagnosis typically occurs during early childhood. Early diagnosis is crucial for accessing early interventions, therapies, and support, which can significantly improve long-term outcomes for autistic individuals.

Furthermore, the majority of autistic children (94%) were found to live with their parents. This finding underscores the vital role of parental support and involvement in the lives of children with autism. Supportive home environments can positively impact a child's development, well-being, and access to appropriate interventions and resources.

5.2. Psychological Aspects among Mothers of Autistic Children

The study's results indicate that a significant proportion of mothers with autistic children, specifically 54%, experienced a high level of psychological aspects. These aspects likely refer to emotional and mental factors such as stress, anxiety, depression, and overall psychological well-being. The researchers used a mean score of 80.35 and a standard deviation of 15.36 to quantify the level of psychological aspects reported by the mothers.

The mean score of 80.35 suggests that, on average, these mothers faced a considerable impact on their psychological state. The standard deviation of 15.36 implies some variability in responses, indicating that while many mothers

experienced a high level of psychological aspects, some might have reported even higher scores, while others might have reported lower scores.

It is crucial to interpret these findings with caution and consider potential limitations of the study, such as the sample size, the representativeness of the participants, and the research methods employed. Additionally, the study's design may not establish causation between having an autistic child and experiencing high levels of psychological aspects, as there could be other confounding factors at play.

Nevertheless, these results shed light on the potential challenges and emotional strain that mothers of autistic children may face. Understanding the psychological impact on parents is essential for providing appropriate support and interventions to help them cope with the demands of raising a child with autism effectively. Further research and support programs can be developed based on these findings to enhance the well-being of both parents and their autistic children.

5.2.1. Depression:

One crucial finding from the study indicates that approximately 50% of mothers of autistic children reported experiencing a moderate level of depression. The mean score of 24.98, with a standard deviation of 6.21, suggests that while the majority did not experience severe depression, a significant proportion faced considerable emotional distress. This finding highlights the need for mental health support and interventions to address the emotional well-being of these mothers.

5.2.2. Anxiety:

Another prominent aspect identified in the study is the high prevalence of anxiety among mothers of autistic children. Approximately 61% of mothers reported experiencing severe levels of anxiety. The mean anxiety score of 27.49, with a standard deviation of 5.75, emphasizes the severity of anxiety experienced by a substantial portion of these mothers. This heightened anxiety

may be attributed to the daily challenges associated with caregiving, the uncertainty of managing the child's needs, and concerns about their child's future.

5.2.3. Stress:

The study further revealed that a significant 68% of mothers expressed severe levels of stress. The mean stress score of 27.88, with a standard deviation of 7.67, underscores the considerable burden faced by these mothers in managing the demands of raising a child with autism. Constantly navigating therapies, schooling, and societal expectations can contribute to elevated stress levels, potentially leading to long-term health consequences if not addressed.

Mothers of children with autism face unique psychological challenges that can significantly impact their mental well-being. The study's findings reveal concerning levels of depression, anxiety, and stress among these mothers, underscoring the importance of providing adequate psychological support and interventions. Understanding the psychological aspects experienced by mothers of autistic children can help inform tailored support programs, reduce stigma, and promote better overall well-being for these vital caregivers. Ensuring the mental health of these mothers is crucial not only for their own sake but also for the well-being of the entire family unit and the child with autism.

The normal child simply, while the child with autism fails to achieve them, which makes the burdens of independent functions a source of anxiety and inconvenience for the mother, who does these things herself. All these problems make her in a state of confusion, as she cannot make plans for the future, especially since her son cannot face life with his limited capabilities, so she lives in a state of tension, trying to get out of it through an outlet outside the family's surroundings, so she collides with society that considers a child's autism to be a disgrace to the family, and to the mother in particular, so the mother bears feelings of guilt and conceals them, which causes physical symptoms to appear on her, It may become an organic disease (Malla & Taha, 2022).

This findings in agreement with the findings from Malaysia, the mothers expressed significant psychological aspects in anxiety and stress. The results of this study agreed with the study conducted in China (Zhou et al., 2019) and Saudi Arabia (Alghamdi et al., 2022). That the parents of autistic children show a higher degree of stress compared to the parents of children who have any kind of other developmental disorders, as a result of the difficulties that the child faces in communication and the stereotypical behavioral problems that he shows, social isolation and difficulty in self-care, as well lack of information about autism and understanding of its nature by community members.

5.3. Quality of Life among Mothers of Autistic Children

The results indicate that 43% of mothers with autistic children reported experiencing a moderate quality of life. The mean quality of life score for these mothers was 59.13, with a standard deviation of 19.31 (table 4-3-2).

The finding of 43% of mothers expressing a moderate quality of life suggests that raising a child with autism can present significant challenges and stressors. It's important to note that this is just a snapshot of the population studied and may not represent the experiences of all mothers with autistic children.

The mean quality of life score of 59.13 reflects the average level of well-being reported by these mothers. A score around 60 indicates a moderate quality of life, which could suggest that while they are facing challenges, they also find moments of satisfaction and contentment.

The standard deviation of 19.31 indicates the degree of variability in the quality of life scores within the group of mothers. A higher standard deviation suggests that there is considerable diversity in their experiences, with some mothers reporting much higher or lower quality of life compared to the mean.

Overall, this study highlights the importance of providing adequate support and resources to mothers raising autistic children, as they may face

unique challenges that can impact their quality of life. Further research and interventions can be developed based on these findings to improve the well-being of both the mothers and their children with autism. Similarly, findings from Riyadh, showed that the level of quality of life among the participants was medium, and the results showed statistically significant differences in the level of quality of life among the participants due to the impact of the relationship with autistic children, where differences were in favor of the parents, and the variable of gender of the autistic child, where differences were in favor of the males, and severity of the disability, where the differences were in favor of the mild group. The study recommended the need to draw the attention of officials in the care and service centers for children with autism spectrum to provide training programs and activities for parents of autistic children to raise the level of quality of life, especially mothers (Asi, 2016).

The lower in parents of children with ASD in physical, psychological, and social health and in spirituality, as compared with adults who were not parents of children with ASD. The strongest risk factor for parental QOL was the severity of the diagnosis of ASD (Turnage et al., 2022). Additionally, findings from Iran emphasized, the results show that quality of life of mothers of autistic children is significantly associated with severity of disorder and occupational performance of children, but its relationship with severity of disorder is more pronounced than occupational performance. Therefore, in order to improve mother's quality of life, the severity of symptoms of ASD should be decreased and child's occupational performance increased (Salehi et al., 2017).

From the above studies, the impact of ASD condition on parents of affected children with ASDs is varied and substantial. This has important implications for (1) health care providers to not only help better coordinate care for affected children but also to observe and maintain parents' health and wellness, (2) policy makers to consider providing better social support for the

parents and families of children with ASDs, and (3) researchers to consider including family spillover effects in economic evaluation of.

5.4. Psychological Aspects in the Light of Socio-demographic Characteristics

5.4.1. Mothers Age

The study examined the psychological aspects of mothers with autistic children, comparing the differences between different age groups. The findings revealed that there were statistically significant variations in psychological aspects among the mothers based on their age groups, as indicated in Table 4-4-1.

Interestingly, the results showed that the older age group of mothers displayed more favorable psychological outcomes compared to the younger age group. This implies that the psychological well-being of mothers tends to improve with age when raising autistic children.

In contrast, the younger age group exhibited very high levels of psychological distress, as depicted in Figure 4-3. This suggests that younger mothers may experience greater challenges in coping with the demands and stress associated with raising an autistic child, which could potentially impact their psychological well-being negatively. This findings come in the same line with findings from Egypt, young mothers expressed more challenges by the autistic children due to inability to cope with stressors (Omar et al., 2017).

5.4.2. Monthly Income

The study investigated the psychological aspects experienced by mothers of autistic children in relation to their monthly income. The researchers used statistical analysis and presented their findings in Table 4-4-5, which revealed statistically significant differences between the psychological states of mothers based on their income levels. Additionally, the study included a graph, labeled Fig. 4-4, that depicted a clear trend: as monthly income decreased, the psychological stress experienced by mothers increased.

These results indicate that there is a significant association between financial status and psychological well-being in mothers of autistic children. Mothers with lower monthly incomes reported higher levels of stress, likely due to the increased financial burden associated with caring for a child with autism. Autism is a complex developmental disorder that often requires various forms of specialized care, therapies, and interventions, which can be costly and place a strain on family finances.

The findings highlight the importance of providing adequate support and resources to families with autistic children, particularly those with lower incomes. Access to financial assistance, affordable healthcare services, and community-based support systems can play a crucial role in alleviating the psychological stress experienced by these mothers and promoting their well-being. Additionally, interventions that address the financial challenges associated with autism care could potentially improve the overall quality of life for both mothers and their children with autism.

Concurrent results were found in the studies West Bank and Jordan, who also reported that financial incompetencies prevented families from seeking care for their children. The absence of publicly funded schemes and programs for autistic children in our country further adds to the finance load (Dababnah & Parish, 2013; Al Jabery et al., 2014). Mental stress was another factor perceived greatly by the parents. Studies from Columbia support this finding (Hock et al., 2012). It was also noted that the coping skills of these parents were less adaptive as compared to the normal child's parents. Lack of social and emotional support for families appears to be a common problem. It has been noted that even in industrialised countries, parents of children with ASD are dissatisfied with or disappointed with the level of assistance provided to their children (Kuhaneck et al., 2010).

5.5. Quality of Life among Mothers in the Light of Autistic Children Characteristics

The findings from the study indicate that both the child's age and the duration of autism significantly predict the quality of life among mothers of autistic children.

Firstly, the regression coefficient (β) for the child's age is 0.039 with a p-value of 0.001. This means that for every one-unit increase in the child's age, the mother's quality of life score increases by 0.039 units. The low p-value ($p=0.001$) suggests that this relationship is statistically significant, indicating that the child's age is an important predictor of the mother's quality of life.

Secondly, the duration of autism has a regression coefficient (β) of -0.961 with a p-value of 0.000. This indicates that for every one-unit increase in the duration of autism (e.g., number of years since the child was diagnosed with autism), the mother's quality of life score decreases by 0.961 units. The very low p-value ($p=0.000$) suggests a highly significant negative relationship between the duration of autism and the mother's quality of life.

Overall, these findings suggest that as the child gets older, mothers tend to experience an improvement in their quality of life. On the other hand, the longer the duration of autism, the lower the quality of life for mothers of autistic children. The study highlights the importance of considering these factors when understanding and addressing the well-being and support needs of mothers raising autistic children. It could also have implications for developing interventions and support programs that cater to the specific challenges faced by mothers at different stages of their child's autism journey. However, it is essential to consider that this is just one study, and further research would be needed to confirm and generalize these findings to a broader population.

This findings disagree with findings from urban Bangladesh, there were negative correlation between mothers quality of life and their child age, that is,

the child age predicts quality of life (Naheed et al., 2020). A cross-sectional study conducted in Malaysia support this findings (Asahar et al., 2021). Mothers' quality of life was negatively associated with the autism period, as the longer it was, the poorer the quality of life. Those who care for autistic patients should draw attention to mothers who live with autistic children for long periods.

5.6. Association between Psychological Aspects and Quality of Life among Mothers of Autistic Children

The given results present an interesting study examining the psychological aspects and quality of life among mothers of autistic children. The study found that, on average, the respondents scored 80.35 in psychological aspects, indicating a higher level of psychological well-being. Additionally, their quality of life scored 59.13, suggesting an average level of well-being.

The key finding of the study is the negative association between psychological aspects and the quality of life of these mothers. The correlation coefficient (r_s) of -0.523 indicates a moderate to strong negative relationship between the two variables. In simpler terms, as the psychological aspects of the mothers increase, their overall quality of life tends to decrease, and vice versa. This finding is essential as it sheds light on the potential challenges and burdens that mothers of autistic children may face in their daily lives.

It is important to note that while the results suggest a negative association, the study cannot establish a cause-and-effect relationship. Other factors not examined in this study could also influence the quality of life and psychological well-being of these mothers. Nevertheless, the findings emphasize the importance of addressing the psychological well-being of mothers of autistic children, as it can have a significant impact on their overall quality of life.

This study provides valuable insights into the psychological well-being and quality of life of mothers with autistic children. The negative association between psychological aspects and quality of life highlights the need for further

research and support services to address the emotional needs and challenges faced by these mothers. By understanding and addressing these issues, we can improve the overall well-being and quality of life of families dealing with autism.

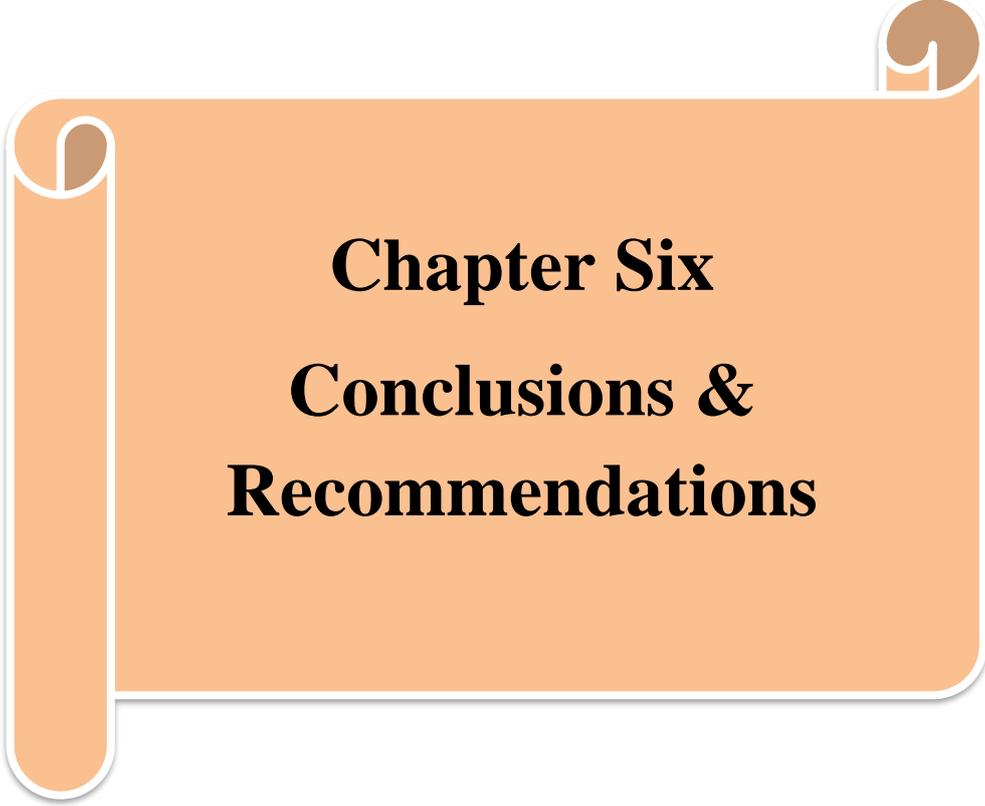
The negative correlation indicates that the greater the psychological aspects, the worse the maternal quality of life outcome. Similarly, mothers of ASD children in East Europe are in high risk of stress, burnout and bad QOL, as the diagnostics and care for ASD children in these countries is insufficient, and support for their parents is not provided at the state level. Raising awareness of policy makers and public health authorities may help to improve this situation (Tzivian et al., 2021).

Additionally, findings from Selangor emphasized majority of mothers have high level of anxiety (85.6%), depression (85.6%), and moderate QOL. Significant relationship between anxiety with demographic characteristics among mothers of ASD children, which are child independence levels in ADL ($p=0.01$) (Mohamad et al., 2022).

On other hand, the results of a study from Nasiriyah, southern Iraq confirmed that there is a highly significant relationship (Strong positive) between psychological adjustment and quality of life at $p\text{-value}= 0.001$ which reflects the quality of life improves with increasing psychological adjustment (Abdul-Nabi & Sachit, 2022).

The implications of this study for health care providers are to determine how a caregiver's coping skills to manage the needs and care of an individual with autism can be improved over time to reduce stress, improve mental health status, and improve quality of life.

Besides, mothers play an important role as primary caregivers to their children; they take the responsibility of supporting and raising them. From the finding of the study, the result also can be used to create awareness about the importance of mental health and good quality of life among mothers by planning and implement interventions such as collaborate with the teachers and other staff to raise awareness of the performance challenges that are related to illness.

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Chapter Six
Conclusions &
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Chapter Six

Conclusions and Recommendations

6.1. Conclusion:

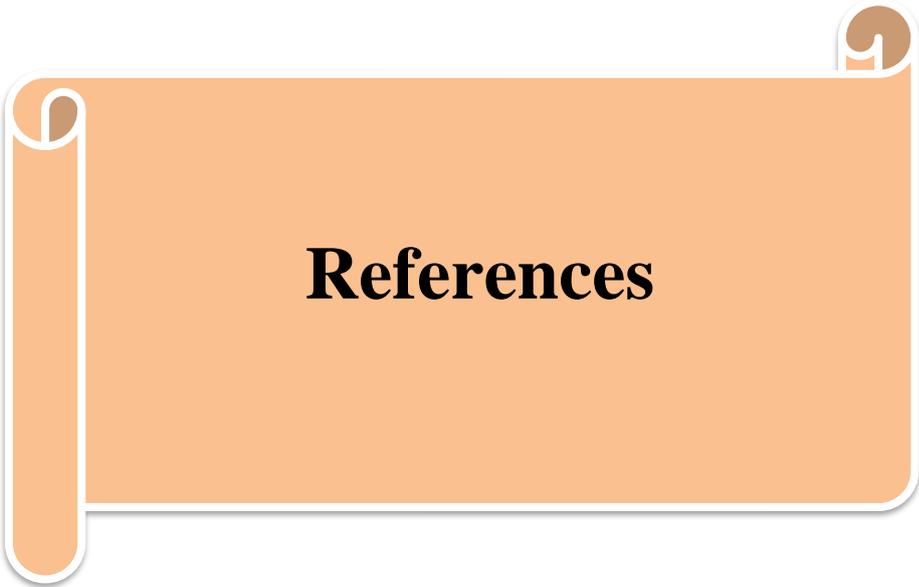
In light of the results interpretations and its discussion, the study concludes that:

- 6.1.1.** Psychological aspects in terms of anxiety and stress, mothers expressed a severe level.
- 6.1.2.** Psychological aspects in terms of depression, mothers expressed a average level.
- 6.1.3.** Quality of life among mothers of autistic children are within moderate level.
- 6.1.4.** Psychological aspects are differs according to mothers age, as young mothers are significant psychological aspects.
- 6.1.5.** The psychological aspects depend on the monthly income, the lower income expressed significant psychological aspects.
- 6.1.6.** Quality of life among mothers of autistic children are predicted by their children age and duration of autism.
- 6.1.7.** Psychological aspects negatively affect the quality of life of mothers of autistic children.

6.2. Recommendations:

In the light of the results of this study, some recommendations and proposals were made in the following:

- 6.2.1.** Increasing financial support from the state for families of children with autism who are unable to bear the exorbitant and continuous expenses of caring for their children, whether in terms of medical, educational, rehabilitative or supportive services.
- 6.2.2.** The Ministries of Health and Social Welfare must work to increase specialized centers that care for children with autism.
- 6.2.3.** The media should adopt topics concerned with educating parents of autistic children on how to develop different methods and strategies to cope with psychological stress.
- 6.2.4.** Providing counseling programs for mothers of autistic children based on the results of such studies, taking into account the needs of mothers of children with autism in their design, in order to be effective in mitigating the impact of psychological stress on them.
- 6.2.5.** Increasing the interest of community institutions in the families of children with autism and work to provide support and support in all its forms to achieve a better quality of life and satisfaction with it.
- 6.2.6.** Decision makers must activate the role of ministries and social institutions towards securing job opportunities for families with autistic children in order to secure the most basic necessities of life.
- 6.2.7.** More studies should be conducted to assess the quality of rehabilitation services provided in autism centers.

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Appendices

Appendices

University of Babylon
College of Nursing
Research Ethics Committee



جامعة بابل
كلية التمريض
لجنة اخلاقيات البحث العلمي

Issue No:

Date: 26 / 1 /2023

Approval Letter

To,

رسل اسماعيل حسين

The Research Ethics committee at the **University of Babylon, College of Nursing** has reviewed and discussed your application to conduct the research study entitled " **Psychological aspects and its relationship to quality of life among mothers of autistic children**"

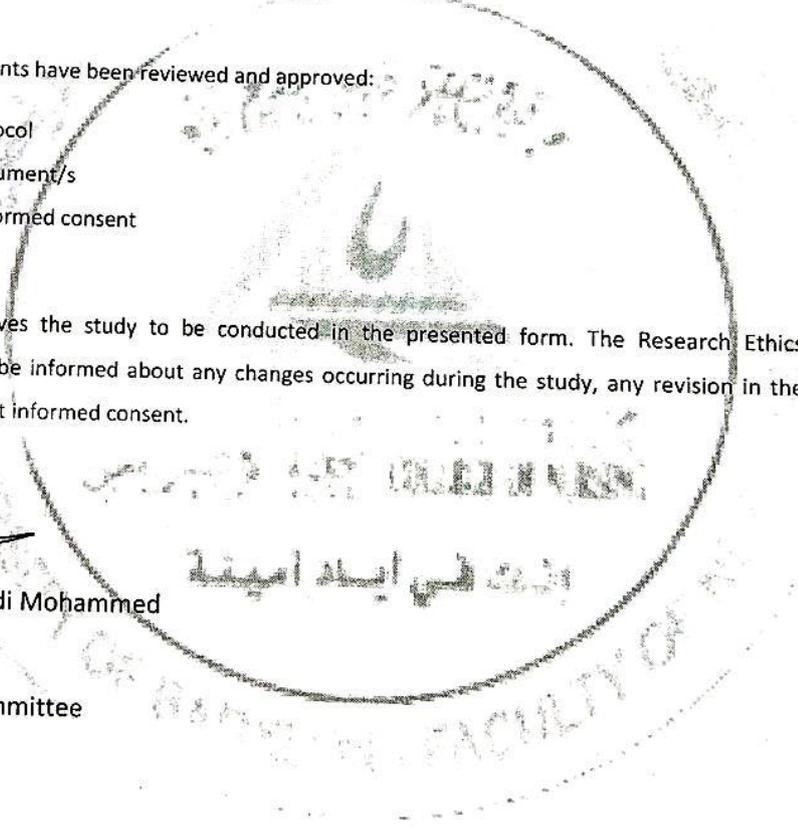
The Following documents have been reviewed and approved:

1. Research protocol
2. Research instrument/s
3. Participant informed consent

Committee Decision:

The committee approves the study to be conducted in the presented form. The Research Ethics committee expects to be informed about any changes occurring during the study, any revision in the protocol and participant informed consent.


Prof. Dr. Shatha Saadi Mohammed
Chair Committee
College of Nursing
Research Ethical Committee
26/ 1 /2023



Appendices

Ministry of Higher Education and Scientific Research

وزارة التعليم العالي والبحث العلمي

جامعة بابل

UNIVERSITY OF BABYLON

جامعة بابل

كلية التمريض
شعبة الدراسات العليا

Ref. No. :

Date: / /

العدد : ٤٥٠
التاريخ : ٢٠٢٣ / ٢ / ٤



الى / دائرة صحة بابل / مركز التدريب والتطوير

م/ تسهيل مهمة

تحية طيبة :

يطيب لنا حسن التواصل معكم ويرجى تفضلكم بتسهيل مهمة طالبة الماجستير (رسل اسماعيل حسين) لغرض جمع عينة دراسة الماجستير والخاصة بالبحث الموسوم :

الجوانب النفسية وعلاقتها بجودة الحياة بين امهات الاطفال المصابين بالتوحد .

Psychological Aspect and its Relationship to quality of life among Mothers of Autistic Children

مع الاحترام ...

المرفقات //

- بروتوكول.
- استبانة.



ا.د. نهاد محمد فاضل
معاون العميد للشؤون العلمية والدراسات العليا

٢٠٢٣/٢/٤

صورة عنه الى //

- مكتب السيد العميد للتفضل بالاطلاع مع الاحترام .
- شعبة الدراسات العليا
- الصادرة .

E-mail:nursing@uobabylon.edu.iq



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009647711632208

وطني
المكتب

<p>Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com Tel:282628 or 282621</p>	<p>جمهورية العراق</p> 	<p>وزارة الصحة والبيئة دائرة صحة محافظة بابل المدير العام مركز التدريب والتنمية البشرية لجنة البحوث</p>
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استمارة رقم :- ٢٠٢٢/٠٣

رقم القرار :- ٢٢٢

تاريخ القرار :- ٢٠٢٣/ ٢/ ٢٠

قرار لجنة البحوث

تحية طبية ...

درست لجنة البحوث في دائرة صحة بابل مشروع البحث ذي الرقم (٢٠٢٣/٠٢٤ / بابل) المعنون (الجوانب النفسية وعلاقتها بجودة الحياة بين أمهات الأطفال المصابين بالتوحد) والمقدم من الباحثة (رسل إسماعيل حسين) إلى وحدة إدارة البحوث والمعرفي مركز التدريب والتنمية البشرية في دائرة صحة بابل بتاريخ ٢٠٢٣/٢/١٣ وقررت :

قبول مشروع البحث أعلاه كونه مستوفيا للمعايير المعتمدة في وزارة الصحة والخاصة بتنفيذ البحوث ولا مانع من تنفيذه في مؤسسات الدائرة .

مع الاحترام



الدكتور
محمد عبد الله عجرش
رئيس لجنة البحوث
٢٠٢٣ / /

نسخة منه إلى :
● مكتب المدير العام / مركز التدريب والتنمية البشرية / وحدة إدارة البحوث ... مع الأوليات.

سوزان

دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babiltraining@gmail.com

Appendices

جمهورية العراق		
<p>Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com</p> <p>لأجل عراق اخضر مستدام ..منعزل معا لترشيد استهلاك الطاقة الكهربائية والمحافظة على البيئة من التلوث</p>		<p>وزارة الصحة دائرة صحة محافظة بابل المدير العام مركز التدريب والتنمية البشرية وحدة إدارة البحوث</p> <p>العدد : ٢٤٥ التاريخ: ٢٠٢٣ / ٢ / ٢</p>

إلى / مستشفى الإمام الصادق (ع)
مستشفى مرجان التعليمي

م // تسهيل مهمة

تحية طيبة ...
أشارة إلى كتاب جامعة بابل / كلية التمريض / الدراسات العليا ذي العدد ٤٥٠ في
٢٠٢٣/٢/٢
نرفق لكم ربطا استمارات الموافقة المبديية لمشروع البحث العائد للباحثة طالبة الدراسات
العليا/ ماجستير(رسل إسماعيل حسين).

للتفضل بالاطلاع وتسهيل مهمة الموما إليه من خلال توقيع وختم استمارات إجراء البحث
المرفقة في مؤسساتكم وحسب الضوابط والإمكانات لاستحصال الموافقة المبديية ليتسنى لنا
إجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية مع الاحترام

المرفقات :
استمارة عدد ٢/

وزارة الصحة
دائرة صحة بابل
مركز التدريب والتنمية البشرية

الدكتور
محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
٢٠٢٣ / ١

عبد الجبار العلي الحسيني
أحمد السليمان
مستشار جاسم حسين
٢٠٢٣

نسخة منه إلى :
• مركز التدريب والتنمية البشرية / وحدة إدارة البحوث مع الأوليات ...

سوزان ٢/٢

دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babiltraining@gmail.com

Appendices

جمهورية العراق		
Ministry Of Health Babylon Health Directorate Email:- Babel_Healthmoh@yahoo.com		وزارة الصحة دائرة صحة محافظة بابل المدير العام مركز التدريب والتنمية البشرية وحدة إدارة البحوث
لأجل عراق اخضر مستدام ..سنعمل معا لترشيد استهلاك الطاقة الكهربائية والمحافظة على البيئة من التلوث		العدد : ٢٤٥ التاريخ: ٢٠٢٣ / ٢ / ٢

إلى / مستشفى الأمام الصادق (ع)
مستشفى مرجان التعليمي

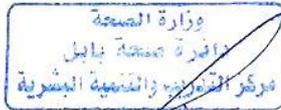
م // تسهيل مهمة

تحية طيبة ...
أشارة إلى كتاب جامعة بابل/ كلية التمريض / الدراسات العليا ذي العدد ٤٥٠ في
٢٠٢٣/٢/٢
نرفق لكم ربطا استمارات الموافقة الميدنية لمشروع البحث العائد للباحثة طالبة الدراسات
العليا/ ماجستير (رسل إسماعيل حسين) .

لنتفضل بالاطلاع وتسهيل مهمة الموما إليه من خلال توقيع وختم استمارات إجراء البحث
المرفقة في مؤسساتكم وحسب الضوابط والإمكانات لاستحصال الموافقة الميدنية ليتسنى لنا
إجراء اللازم على أن لا تتحمل مؤسساتكم أية تبعات مادية وقانونية مع الاحترام

المرفقات :

استمارة عدد ٢ /



الدكتور

٤ / محمد عبد الله عجرش
مدير مركز التدريب والتنمية البشرية
٢٠٢٣ / ١



الدكتور / د. لسان العطار
المستشارية النفسية

نسخة منه إلى :

• مركز التدريب والتنمية البشرية / وحدة إدارة البحوث مع الأوليات ...

سوزان ٢/٢

دائرة صحة محافظة بابل / مركز التدريب والتنمية البشرية // ايميل المركز babiltraining@gmail.com

Appendices

Ministry of Higher Education
and Scientific Research
University of Babylon
College of Basic Education

جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة بابل
كلية التربية الاساسية

العدد: ٩٥٨
التاريخ: ٢٠٢٣/٦/١١
السوارة
العدد: ١٦٩٧
التاريخ: ٢٠٢٣/٦/١١

I. No.:
e: / /

٢٠٢٣/٦/١١
أ. سامي الرشيدي
Amman
كلية التربية الاساسية
شعبة الموارد البشرية
الصادرة

الى/ جامعة بابل/ كلية التمريض

م/ تقويم لغوي

نهدىكم اطيب التحيات ...
كتابكم ذو العدد ٢٦٧ في ٢٠٢٣/٦/١١ نعيد اليكم رسالة الماجستير للطالبة (رسل
اسماعيل حسين) الموسومة بـ (الجوانب النفسية وعلاقتها بجودة الحياة بين امهات الاطفال
المصابين بالتوحد)) بعد تقويمها لغوياً واسلوبياً من قبل (م. حياة حسن كاظم) وهي صالحه
للمناقشة بعد الاخذ بالملاحظات المثبتة على متنها .

... مع الاحترام...

المرفقات //

- رسالة الماجستير
- اقرار المقوم اللغوي

الدكتور / سامي الرشيدي
المدير / كلية التربية الاساسية
جامعة بابل

أ. هادي فراس سليم جياوي
معاون العميد للشؤون العلمية
٢٠٢٣/٦/١١

نسخة منه الى //

مكتب السيد العميد المحترم... للفضل بالاطلاع مع الاحترام.
م. حياة حسن كاظم المحترمة. للعلم لطفاً.
الشؤون العلمية
الصادرة

نادية

STARS
TO FOR EXCELLENCE

عراق - بابل - جامعة بابل
لجامعة ٠٠٩٦٤٧٢٣٠٠٣٥٧٤٤
المعاون العلمي ١١٨٨
مكتب العميد ١١٨٤
المعاون الاداري ١١٨٩
وطني ٠٧٢٣٠٠٣٥٧٤٤
امنية ٠٧٦٠١٢٨٨٥٦٦
basic@uobabylon.edu.iq



Questionnaire

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عزني المراجع /

إن المعلومات التي تصدر عنك ستكون في غاية السرية ولن تستخدم إلا لغرض البحث العلمي

فقط.. لذا يمكنك الإدلاء برأيك بكل جدية ومصداقية

الجزء الاول: المعلومات الديموغرافية:

اولا: المعلومات الشخصية للام :

العمر: سنة

المستوى التعليمي :

لا يقرأ ولا يكتب

يقرأ ويكتب

خريج الابتدائية

خريج متوسطة

خريج إعدادية

خريج معهد او كلية

المهنة

موظفة حكومية مال حرة ربة بيت

الدخل الشهري :

أقل من 300 ألف دينار عراقي 300 ألف و600 ألف دينار عراقي

بين 060 ألف و900 ألف دينار عراقي أكثر من 900 ألف دينار عراقي

الحالة الاجتماعية للوالدين:

يعيشان معا فصلان

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ثانيا : المعلومات الشخصية للطفل :

1-العمر: سن

2-الجنس: ذكر أنثى

3- تسلسل الطفل بين إخوته:

الاول الثاني الثالث

4- كم مضي على تشخيص طفلك بالتوحد ؟

1-2 سنة 3-4 سنة 5 سنة فأكثر

5-هل يوجد في العائلة اطفال مصابين باضطراب طيف التوحد قبل هذا الطفل :

نعم لا

6- هل الطفل يعيش مع أبوية

نعم لا

Appendices

الجزء الثاني: الجوانب النفسية لدى أمهات الأطفال المصابين بالتوحد

اولا: الاكتئاب

ت	الفقرات	دائما	أحيانا	أبدا
		1	2	3
1	لا يبدو أنني أشعر بأي شعور إيجابي على الإطلاق			
2	لم يبدو لي ان بإمكانني ان ابدأ في القيام بأعمالي			
3	شعرت أنه ليس لدي ما أتطلع إليه			
4	شعرت بالحزن والاكتئاب			
5	شعرت أنني فقدت الاهتمام بكل شيء تقريباً			
6	شعرت بان قيمتي قليلة كشخص			
7	لم أستطع الحصول على أي متعة من الأشياء التي فعلتها			
8	شعرت بالحزن والاكتئاب			
9	لم أستطع أن أصبح متحمساً لأي شيء			
10	لم يكن بإمكانني اتخاذ أي هدف كامل بالمستقبل			
11	شعرت أن الحياة لا قيمة لها			
12	لقد وجدت صعوبة في العمل على المبادرة لفعل الأشياء			

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ثانياً: القلق

ت	الفقرات	دائماً	أحياناً	أبداً
1	2	1	2	3
1	شعرت بجفاف في حلقي			
2	شعرت بصعوبة في التنفس (على سبيل المثال، التنفس السريع ، وضيق التنفس في حالة عدم وجود مجهود بدني)			
3	وجدت نفسي في مواقف جعلتني قلقاً للغاية وشعرت بالارتياح الشديد بزوالها			
4	تعرقت بشكل ملحوظ (على سبيل المثال، تعرق اليدين) في حالة عدم وجود درجات حرارة عالية أو مجهود بدني			
5	كان لدي شعور بالضعف			
6	شعرت بالخوف والذعر دون أي سبب وجيه			
7	كنت أجد صعوبة في البلع			
8	كنت على دراية باضطراب في ضربات القلب			
9	شعرت بانني استهلك الكثير من الطاقة العصبية			
10	وجدت نفسي اميل الى الاضطراب والانزعاج بسهولة			
11	عانيت من الارتعاش (على سبيل المثال في اليدين)			

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ثالثاً: الإجهاد

ت	الفقرات	دائماً	أحياناً	أبداً
1	2	3	1	3
1	وجدت نفسي منزوعاً من أشياء تافهة جداً			
2	كنت أميل إلى المبالغة في رد الفعل على المواقف			
3	وجدت صعوبة في الاسترخاء			
4	وجدت نفسي أشعر بالضيق بسهولة إلى حد ما			
5	وجدت أنني قليل الصبر كلما اخرنى شيء (على سبيل المثال، المصاعد وإشارات المرور والانتظار)			
6	شعرت أنني كنت حساسة نوعاً ما			
7	لقد وجدت أنني كنت سريع الانفعال للغاية			
8	لقد وجدت صعوبة في الهدوء بعد أن أزعجني شيء ما			
9	كنت في حالة توتر عصبي			
10	كنت غير متسامح مع أي شيء يمنعني من متابعة ما كنت سأفعله			
11	وجدت نفسي مضطرباً			

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الجزء الثالث: جودة حياة أمهات الأطفال المصابين بالتوحد

ت	الفقرات	دائما	أحيانا	أبدا
1	لدي الوقت الكافي لأقضيه مع أفراد أسرتي			
2	نتحدث إنا وإفراد أسرتي بصراحة فيما بيننا عن ما يخص أمور حياتنا			
3	نقوم بحل مشاكلنا الأسرية معا			
4	يدعم أفراد أسرتي بعضهم البعض لتحقيق أهدافهم			
5	نظهر محبتنا واهتمامنا ببعضنا البعض			
6	لدي القدرة على التعامل مع التغيرات التي تحدث في الحياة			
7	يساعدني أفراد أسرتي في رعاية أبنائي			
8	يساعد أفراد الأسرة الأطفال في الأعمال والأنشطة المدرسية			
9	يعلم أفراد الأسرة الطفل كيف يتفق مع الآخرين			
10	لدي الشعور بالحيوية والنشاط			
11	أواجه صعوبة بالتعامل مع أبنائي			
12	اشعر بالتباعد بيني وبين أبنائي			
13	أفراد الأسرة لديهم أصدقاء وغيرهم ممن يقدمون لهم الدعم			
14	يملك أفراد أسرتي الدعم الكافي التي تحتاجه لتخفيف الضغوط عنها			
15	يملك أفراد أسرتي الوقت الكافي لتحقيق مصالحهم الخاصة			
16	يملك أفراد أسرتي وسائل المواصلات التي تسمح لهم بالتنقل حيث يريدون			
17	يقوم أفراد أسرتي بالعناية بأسنانهم كل يوم			
18	يتلقى أفراد أسرتي الرعاية الطبية عند الحاجة			
19	يشعر أفراد أسرتي بالأمن في المنزل والمدرسة			
20	يتلقى أفراد أسرتي دعما لإحراز تقدم في			

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			المدرسة او العمل	
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Appendices

1st : Socio-demographic Characteristics

A: Mothers Sociodemographic Data

1. Age year

2. Educational level

Not read or write

Elementary School

Secondary School
above

Intermediate school Institute and

3. Occupation

Government Employee Free business

Housewife Unemployment

4. +Monthly Income

Less than 300,000 Iraqi dinars

Between 301 thousand and 600 thousand Iraqi dinars

Between 601 thousand and 900 thousand Iraqi dinars

More than 900 thousand Iraqi dinars

5. Parents' marital status:

Live together

Separated

B: Autistic Children Characteristics

1. Age year

2. Gender Male Female

3. The sequence of the child among his siblings:

1st 2nd 3rd above 3rd

4. How long has your child been diagnosed with autism?

1-2 years 3-4 years 5 years and over

5. Were there children in the family with autism spectrum disorder before this child: Yes No

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6. Does the child live with a parent?

Yes No

2nd : Psychological Aspects among Mothers of Autistic Children

First: Depression

List	Depression items	Always	Sometime	Never
1	I couldn't seem to experience any positive feeling at all			
2	I just couldn't seem to get going			
3	I felt that I had nothing to look forward to			
4	I felt sad and depressed			
5	I felt that I had lost interest in just about everything			
6	I felt I wasn't worth much as a person			
7	I felt that life wasn't worthwhile			
8	I couldn't seem to get any enjoyment out of the things I did			
9	I felt down-hearted and blue			
10	I was unable to become enthusiastic about anything			
11	I felt I was pretty worthless			
12	I could see nothing in the future to be hopeful about			
13	I felt that life was meaningless			
14	I found it difficult to work up the initiative to do things			

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Second: Anxiety

List	Anxiety items	Always	Sometime	Never
1	I was aware of dryness of my mouth			
2	I experienced breathing difficulty (e.g., excessively rapid breathing, breathlessness in the absence of physical exertion)			
3	I found myself in situations that made me so anxious			
4	I was most relieved when they ended			
5	I had a feeling of faintness			
6	I perspired noticeably (e.g., hands sweaty) in the absence of high temperatures or physical exertion			
7	I felt scared without any good reason			
8	I had difficulty in swallowing			
9	I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat)			
10	I felt I was close to panic			
11	I feared that I would be 'thrown' by some trivial but unfamiliar task			
12	I was intolerant of anything that kept me from getting on with what I was doing			
13	I was worried about situations in which I might panic and make a fool of myself			
14	I experienced trembling (e.g., in the hands)			

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Third: Stress

List	Stress items	Always	Sometime	Never
1	I found myself getting upset by quite trivial things			
2	I tended to over-react to situations			
3	I found it difficult to relax			
4	I found myself getting upset rather easily			
5	I felt that I was using a lot of nervous energy			
6	I found myself getting impatient when I was delayed in any way (e.g., lifts, traffic lights, being kept waiting)			
7	I felt that I was rather touchy			
8	I found it hard to wind down			
9	I found that I was very irritable			
10	I found it hard to calm down after something upset me			
11	I found it difficult to tolerate interruptions to what I was doing			
12	I was in a state of nervous tension			
13	I was intolerant of anything that kept me from getting on with what I was doing			
14	I found myself getting agitated			

**DASS-42*

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3rd : Quality of Life among Mothers Of Autistic Children

1st	QoL items	Always	Sometime	Never
1	I have enough time to spend with my family			
2	My family and I talk frankly among ourselves about the affairs of our lives			
3	We solve our family problems together			
4	My family members support each other to achieve their goals			
5	We show our love and concern for each other			
6	I have the ability to deal with the changes that occur in life			
7	My family helps me take care of my children			
8	Family members help children with schoolwork and activities			
9	Family members teach the child how to get along with others			
10	I feel energetic and energetic			
11	I'm having a hard time dealing with my kids			
12	I feel separated from my children			
13	Family members have friends and others who support them			
14	My family members have enough support they need to relieve stress			
15	My family members have enough time to pursue their own interests			
16	My family members have the means of transportation that allow them to move wherever they want			
17	My family takes care of their teeth every day			
18	My family members receive medical care when needed			
19	My family feels safe at home and at school			
20	My family receives support to progress in school or work			
21	My family's relationship with health care providers is good			
22	I feel that I have value and benefit in life			
23	I feel safe and stable in my social life			
24	I love to live with people and deal with them			
25	Be sure to exchange visits with friends			
26	I can live and work in harmony with others			
27	I feel psychological comfort when I stay away from people			
28	My friends are few because of my circumstances			
29	I feel some pain in my body			
30	I am in good health			

List of Experts

خبراء تحكيم استمارة الاستبانة

ت	اسم الخبير	اللقب العلمي	مكان العمل	الاختصاص	سنوات الخبرة
1	د. سجاد محمد هاشم	استاذ متمرس	جامعة بابل/كلية التمريض	تمريض الصحة النفسية والعقلية	40
2	د. سلمى كاظم جهاد	أستاذ	جامعه بابل اكلية التمريض	تمريض صحة الأسرة والمجتمع	36
3	د. عبد المهدي عبد الرضا حسن	أستاذ متمرس	جامعة بابل اكلية التمريض	تمريض الصحة النفسية والعقلية	41
4	د. وسام جبار قاسم	أستاذ	كلية التمريض ا جامعه بغداد	تمريض صحة الأسرة والمجتمع	32
5	نهاد محمد الدوري	أستاذ	كلية التمريض ا بابل	تمريض أطفال	34
6	د. ناجي ياسر سعدون	أستاذ	جامعة بابل/كلية التمريض	تمريض صحة الأسرة والمجتمع	28
7	د. حيدر الحدراوي	استاذ مساعد	جامعة الكوفة اكلية التمريض	تمريض الصحة النفسية والعقلية	13
8	د. قحطان قاسم محمد	أستاذ مساعد	جامعة بغداد/كلية التمريض	تمريض الصحة النفسية والعقلية	14
9	د. حسام مطشر زان	أستاذ مساعد	جامعة الكوفة/كلية التمريض	تمريض الصحة النفسية والعقلية	18
10	د. كريم رشك ساجت	أستاذ مساعد	جامعة بغداد/كلية التمريض	تمريض الصحة النفسية والعقلية	20

الخلاصة

الخلفية العلمية: للألم تأثير أساسي ومهم على نمو الطفل وتطوره في مختلف النواحي النمائية والعاطفية والعقلية، ويزداد هذا التأثير إذا كان الطفل يعاني من إعاقة مثل التوحد. التوحد هو مجموعة من حالات النمو العصبي التي تتميز بتحديات التفاعل الاجتماعي، والتواصل اللفظي وغير اللفظي، ووجود سلوك متكرر، والاهتمامات الضيقة. ومن المؤشرات البارزة الأخرى صعوبة تكوين صداقات وردود أفعال غريبة على المدخلات الحسية مع طول فترة اعتماده على والديه، وبالتالي تظهر مشاكل تتطلب احتياجات خاصة وتزداد الضغوط النفسية وبالتالي تؤثر على نوعية الحياة. **هدفت الدراسة** إلى تقييم العلاقة بين الجوانب النفسية وجودة الحياة لدى أمهات الأطفال المصابين بالتوحد.

المنهجية: دراسة غير تجريبية أجريت في مدينة الحلة خلال الفترة من 19 سبتمبر 2022 إلى 1 يوليو 2023. تكونت عينة الدراسة من 100 أم لأطفال مصابين بالتوحد تم اختيارهم وفق أسلوب العينة غير الاحتمالية (الملاءمة). تم التحقق من صحة الاستبيان من قبل الخبراء وتم التحقق من ثباته من خلال دراسة تجريبية. تم جمع البيانات من خلال المقابلة وتحليلها من خلال تطبيق التحليل الإحصائي الوصفي والاستنتاجي.

النتائج: وأشارت النتائج إلى أن متوسط عمر المستجوبين 23.86 سنة من خريجي الكلية وربة منزل. وجد أن أكثر من نصف المشاركين في الدراسة (54% و43%) يعانون من جوانب نفسية عالية ومتوسط جودة الحياة. تختلف الجوانب النفسية باختلاف عمر الأم ودخلها الشهري. يشير الانحدار الخطي البسيط إلى أن الأطفال المصابين بالتوحد في العمر ومدة التوحد يتوقعون جودة حياة الأمهات ($p = .000$) ترتبط جودة الحياة ارتباطاً سلبياً بالجوانب النفسية ($p=.000$)

الاستنتاج: ولخصت الدراسة إلى أن متوسط الجوانب النفسية للمبحوثين كان ضمن المستوى العالي، وأن نوعية الحياة كانت ضمن المستوى المتوسط. تم العثور على ارتباط سلبي بين الجوانب النفسية لأمهات الأطفال المصابين بالتوحد ونوعية حياتهم.

التوصيات: يجب على مؤسسات الرعاية الاجتماعية والقائمة على التوحد دعم أسر الأطفال المصابين بالتوحد ولفت الانتباه إلى تلبية احتياجاتهم وحل مشاكلهم من أجل تحسين نوعية حياتهم.



جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة بابل
كلية التمريض

الجوانب النفسية وعلاقتها بجودة الحياة اتجاه أمهات

الأطفال المصابين بالتوحد

رسالة مقدمة

من قبل

رسل إسماعيل حسين

الى

مجلس كلية التمريض جامعة بابل

كجزء من متطلبات نيل درجة الماجستير في علوم التمريض

بإشراف

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