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**Lived experiences and quality of life among mothers of children
with autism spectrum disorder: A mixed-method quasi-
experimental Study in the West Bank, Palestine**

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Lived experiences and quality of life among mothers of children with autism spectrum disorder: A mixed-method quasi-experimental study in the West Bank, Palestine

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Al-Quds University

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Dissertation Approval

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Jerusalem- Palestine

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Dedication

To my mother, for her endless prayers that guided my path.

To my father and my family, for their steadfast foundation.

To my beloved husband, Dr. Motee Ashhab—my supporter and my companion at every step.

To my children, my heartbeats and my strength: Lina, Yara, and Nabil.

To the mothers of children with autism in Palestine, whose profound strength and daily resilience are my deepest inspiration. May this work contribute in some way to their well-being and recognition.

With deepest love, this work is dedicated to all of you
Bashaer Al-Natsheh

Declaration

I Certify that this dissertation submitted for the degree of Doctor of Philosophy in Public Health is the result of my own research, except where otherwise acknowledged, and that this Dissertation (or any part of the same material) has not been submitted for a higher degree to any other university or institution.

Signature:

A handwritten signature in blue ink, appearing to be 'B. N.' followed by a long horizontal stroke.

Bashaer “Mohammad Nathmi” Musa Al-Natsheh

Date: 19/1/2026

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Lived experiences and quality of life among mothers of children with autism spectrum disorder: A mixed-method quasi- experimental Study in the West Bank, Palestine

Prepared by: Bashaer “Mohammad Nathmi” Musa Al-Natsheh

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Abstract

Background: Autism Spectrum Disorder (ASD) presents severe challenges for caregivers, profoundly impacting mothers' quality of life (QoL). While this global impact is established, research on the lived experiences and QoL of mothers in the Palestinian context remains limited. A critical gap also exists in evaluating the effectiveness of support programs designed to improve maternal QoL within this unique sociocultural setting.

Aim: This study aimed to: 1) explore the lived experiences of mothers raising children with ASD in the West Bank, Palestine; 2) assess their QoL and associated factors; and 3) evaluate the effectiveness of the 'Mindful Motherhood' support program in improving maternal QoL.

Methodology: A mixed-methods design was employed. The qualitative phase used a phenomenological hermeneutic approach, conducting in-depth interviews with mothers of children (aged 4-12) with ASD to interpret their lived experiences. The quantitative phase began with a cross-sectional study (n=119) using the WHOQOL-BREF tool to assess QoL across physical, psychological, social, and environmental domains and identify associated factors. Subsequently, based on initial findings and expert consultation, a 12-week group-based 'Mindful Motherhood' intervention was developed. A quasi-experimental design was employed to evaluate the intervention's effectiveness. Fifty-six mothers were assigned to either the experimental group (n = 28) or the control group (n = 28). QoL was measured at baseline, post-intervention, and at a six-month follow-up.

Results: Qualitative analysis identified ten subthemes within the mothers' experiences, synthesized into three core themes: difficult and overwhelming experiences; caregiving challenges and burden; and building resilience. The cross-sectional study indicated a moderate overall QoL (M=2.85). The environmental domain scored lowest, followed by psychological and social domains, while the physical dimension was highest. Significant factors associated with QoL included mother's age, education, family income, and sleep duration. The intervention study demonstrated significant improvements in all QoL domains for the experimental group compared to controls, with the largest effect sizes in psychological ($|\delta| = 0.70$) and overall QoL ($|\delta| = 0.68$). At the six-month follow-up, overall quality of life gains were largely maintained, though a slight attenuation of benefits was noted, most distinctly in the environmental and social domains.

Conclusion: The findings highlight the difficult experiences and moderate QoL of Palestinian mothers of children with ASD, pinpointing environmental and psychological areas of greatest need. The 'Mindful Motherhood' program proved effective in enhancing QoL. The study underscores an urgent need for comprehensive, family-centered healthcare

policies and sustainable support systems—including mental health services, socioeconomic aid, and tailored interventions—to improve the QoL of these mothers in Palestine.

Keywords: Mothers, children, Autism spectrum disorder (ASD), phenomenological hermeneutics, qualitative, Quality of life, intervention, support program, Palestine

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List of Abbreviations

ASD	Autism spectrum disorder
ANOVA	Analysis of variance
ACA	Acceptance and commitment approach
CBT	Cognitive-behavioral therapy
DSM-5-TR	Diagnostic and statistical manual 5 text revision
MMM	Meaning making model
MBI	Mindfulness-based intervention
NGOs	Non-governmental organizations
PA	Palestinian authority
PCBS	Palestinian central bureau of statistics
SPSS	Statistical package for the social sciences
QoL	Quality of life
UNRWA	United nations relief and work agency
WHO	World health organization
WHOQoL	World health organization quality of life

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Chapter One

Introduction

1.1 Background

Autism spectrum disorders (ASD) are a group of life long neurodevelopmental conditions characterized by significant deficits in the social and communication domains and by restrictive, repetitive, and ritualistic patterns of behavior, interests, or activities (American Psychiatric Association (APA, 2013). The diagnosis of a child with ASD represents a profound turning point for a family, often requiring a comprehensive reorganization of lives, priorities, and resources to meet the child's needs.

Parenting a child with ASD is widely recognized as a multifaceted challenge, encompassing physical, emotional, social, and financial dimensions, especially for mothers who serve as primary caregivers. Several research studies across diverse cultural settings have revealed that mothers experience increased psychological distress, social isolation, and caregiving burdens, compounded by systemic and financial obstacles that restrict access to services (Acharya & Sharma, 2021; Gobrial, 2018; Shattnawi et al., 2021). These combined demands can substantially degrade their overall quality of life.

The Quality of Life (QoL) has been recently noted as one of the major health concerns for parents following a lifelong complex experience such as raising a child with a disability, that provides a multidimensional useful way to comprehensively assess parents' health and adaptation (Raju et al., 2023). According to the World Health Organization (WHO), QOL is defined as an "individual's perception of their position in life in the context of the culture and value systems in which they live, and in relation to their goals, expectations, standards and concerns", covering several dimensions, including physical health, psychological well-being, autonomy, social ties, personal opinions, and environmental interactions (WHO, 1996). Studies reveal that parents of children with ASD have a lower quality of life than parents of typically growing children and those with other disabilities (Dey et al., 2019). However, empirical evidence highlights that mothers of children with ASD require ongoing support in various domains, including physical, psychological, social, and environmental health, to effectively respond to their children's demands. Thus,

mothers of children with ASD require knowledge, skills, trust, social networks, and material assistance (Marino et al., 2021; Catalano et al., 2018).

In Palestine, mothers encounter additional challenges stemming from the absence of evidence-based services, a shortage of diagnosing professionals, and instances of missed or delayed diagnoses, which contribute to parental confusion and dissatisfaction (Shawahna et al., 2017, 2021; Shawahneh, 2021). The broader context of political instability and economic fragility further compounds these difficulties. Regardless of the substantial obstacles confronting Palestinian mothers of children with ASD, little is known about their unique experiences, and there is limited research in Palestine that has explored their unique experiences and focused on their QoL, and developing interventions to improve it is critically lacking.

The current study explores the lived experiences of mothers raising a child with ASD and specifically examines their needs within the Palestinian context, aiming to identify their requirements and develop specialized programs to enhance their QoL.

1.2 Problem Statement

Having children with ASD poses significant stress and challenges for caregivers, particularly for mothers who typically assume the primary caregiving role. Studies indicate that mothers of children with ASD encounter heightened difficulties after their child's diagnosis, leading to increased responsibilities and altered life priorities (Acharya & Sharma, 2021; Papadopoulos, 2021). The specific challenges faced at home and in the community can be multifaceted, encompassing physical, emotional, social, and financial issues (Demšar & Bakracevic, 2023; Hosseinpour et al., 2022). Mothers of children with ASD often report heightened levels of stress, anxiety, depression, frustration, and guilt (Cheng & Lai, n.d.; El-Monshed & Amr, 2021; Malallah Al Ansari et al., 2018; Zahid, 2025). In the Palestinian context, these challenges are further intensified by limited access to medical, developmental, and educational services, coupled with financial hardship and social stigma. Furthermore, systemic barriers such as delayed diagnoses, a lack of qualified professionals, and inadequate evidence-based services exacerbate mothers' feelings of confusion, helplessness, and dissatisfaction (Dardas & Ahmad, 2014a, 2015). Despite the growing prevalence of ASD, research exploring the lived experiences and QoL of mothers caring for children with ASD in Palestine remains scarce. Moreover, while international evidence highlights the positive impact of support programs on maternal well-being and child development (Alkhateeb et al., 2022), such interventions have not been adequately studied or implemented within the Palestinian context. Therefore, this study seeks to address this gap by evaluating the effectiveness of a comprehensive support program (Mindful Motherhood) in enhancing the QoL of mothers raising children with ASD in the West Bank.

1.3 Aim of the Study

The study aims to comprehensively investigate the QoL of mothers of children with ASD in the West Bank, Palestine. This will be achieved by gaining an in-depth understanding of

their lived experiences and challenges, assessing their quality of life and its determinants, and evaluating the effectiveness of support programs designed to enhance their well-being.

1.4 Objectives of the Study:

1. To explore the lived experiences of mothers raising children with ASD in the WB, Palestine.
2. To assess the quality of life among mothers of children with ASD and its associated factors.
3. To evaluate the effectiveness of a support intervention, Mindful Motherhood, in improving the overall QoL of mothers raising children with ASD.

1.5 Hypotheses

In the intervention phase, It is hypothesized that participants in the intervention group will exhibit statistically significant improvements across all QoL domains compared to a non-intervention control group, with these gains maintained at the six-month follow-up assessment.

1.6 The Justification of the Study

In Palestine, there is a lack of studies that explored the experience of mothers raising children with ASD using qualitative methodology, and there are limited studies focusing on assessing mothers' QoL. In addition, there is limited research focusing on applying support programs to improve the QoL for mothers of children with ASD. Addressing this gap is critical, as improving maternal well-being directly influences both mothers' mental health and their children's developmental outcomes.

Identifying the needs, challenges, and coping mechanisms of mothers is essential for developing contextually appropriate support programs that foster resilience and improve QoL. This study aims to provide empirical evidence to guide policymakers, practitioners, and service providers in designing and integrating effective family-centered support systems for mothers and children affected by ASD in Palestine.

1.7 Context of the Study

The study was conducted mainly in the West Bank of Palestine. It covered different regions, including the north, the middle, and the south. It is important to look at the context where mothers of children with ASD live in order to comprehend their experiences.

1.7.1 Political and Socioeconomic Context of Palestine

Palestine, an Arab state located in the Middle East, has been subject to Israeli control since 1948. Currently, it is geopolitically divided into the Gaza Strip and the West Bank,

including East Jerusalem. The study focuses on the West Bank. The West Bank's total area is reported as approximately 5,655 km² (PCBS, 2022).

Based on population estimates prepared by PCBS, there are about 14.3 million Palestinians in the world in mid-2022, of whom about 5.35 million in the State of Palestine; 2.72 million males and 2.63 million females. The estimated population of the West Bank was 3.19 million (1.62 million males and 1.57 million females). While the estimated population of Gaza Strip was 2.17 million in the same year (1.10 million males and 1.07 million females)(Palestinian Central Bureau of Statistics, 2022)

The continued and prolonged military occupation of the West Bank and Gaza Strip since 1967 has resulted in dispossession, displacement, land confiscation, the building of illegal Israel settlements on Palestinian land, imprisonment, siege, and generations of Palestinians exposed to long-term political violence by the Israeli army as well as Israeli illegal settlers on Palestinian land, and violations of human rights. With about 60% of West Bank land (Area C), controlled fully by Israel, and around 10% controlled by the Palestinian Authority (PA), and the remaining 30% controlled by both the Palestinian Authority and Israel, a key feature has been the continued expropriation and fragmentation of Palestinian land through various means, including bureaucratic and administrative control of land, water, resources, population and localities (Giacaman & Mitwalli, 2021).

The erection of the Separation Wall separating East Jerusalem and its surrounding villages from the rest of the West Bank compounded the problem of this access regime by reducing the West Bank into enclaves or social and economic islands cut off from each other with dramatic effects on the economy and society. It has also resulted in crowding Palestinians into several segregated political enclaves covering around 40% of the West Bank where 2 million Palestinians live. Thus, the development of all of the West Bank has been impeded (Giacaman & Mitwalli, 2021).

In addition, this occupation fundamentally shapes daily life through a system of checkpoints, the separation barrier, and settlements, which restrict freedom of movement and access to resources. These conditions have resulted in significant socioeconomic challenges, including high unemployment and poverty rates. Results also showed that more than one-fourth of the participants in the labour force were unemployed in 2021, where the percentage reached 26% (16% in the West Bank and 47% in Gaza Strip). Accordingly, unemployment rate reached 43% among females compared to 22% among males (PCBS, 2022).

The longtime Israeli-Palestinian conflict presents a serious threat to the lives of Palestinians, despite the establishment of the Palestinian Authority (PA) following the 1994 Oslo Peace Accords. The PA has encountered substantial challenges, including economic instability and political pressure, hindering its ability to govern effectively, control borders, manage natural resources, and ensure public health and education. These factors have severely impacted the civilian population's human rights and basic living conditions.

Furthermore, the unstable political and economic conditions deteriorate the population's health, and compromise the organization of the Palestinians health care system and the quality of health services provided in Palestine (Giacaman et al., 2009) For mothers of children with autism, this political reality translates into practical barriers to accessing

specialized care, economic precarity that exacerbates the cost of therapy, and a constant backdrop of psychological stress.

1.7.2 Cultural and Family Context

The family is recognized as the fundamental social unit in both traditional and contemporary Arab society, particularly in Palestine. Arab culture and Islamic faith significantly influence family dynamics, emphasizing values like loyalty and solidarity, which provide support for all members, especially mothers and children. While contemporary Palestinian families have shifted towards a more nuclear model in urban areas due to political and economic changes, the ties with extended families remain robust. In this patriarchal society, Palestinian women are crucial as caregivers, primarily handling domestic responsibilities and child-rearing (UN Women, 2018). However, their roles are challenged by ongoing conflicts and socio-economic difficulties, which increase the strain on their well-being and their children's development. This burden is further heightened for mothers raising children with autism, adding emotional and physical stress to their caregiving responsibilities (Abu-Ras, W., Saleh, M., & Birani, 2018). For mothers of children with autism, this culturally prescribed caregiving role is intensified, often without a corresponding increase in support, placing their well-being and that of their children at risk.

1.7.3 The Reality of Autism in Palestine

Attention to autism spectrum disorders (ASDs) in Palestine has increased recently. This could be attributed to the increasing exposure to mass media, in part, and to the disseminated research carried out in the region and elsewhere around the world (Ashbee, 2015b; Dababnah, S., & Parish, 2013; Dababnah & Bulson, 2015). Probably, light was shed on ASDs when the Palestinian Bureau of Statistics (PCBS) has conducted its first specialized national disability survey in 2011, categorizing ASDs under "learning difficulties" (Palestinian Central Bureau of Statistics, 2011). This marked a significant acknowledgment of ASDs, as previous surveys had omitted this category entirely. The following year, the Child Statistics survey began to reference ASDs, again within the "learning disability/difficulty" category (Ashbee, 2015a; PCBS, 2011).

In Palestine, there isn't enough accurate data, services are broken up, and there are big systemic problems that make it hard to be diagnosed, treated, and supported. Unofficial estimates say that thousands of children are impacted, but the lack of accurate epidemiological data makes it hard to see how big the demand really is and makes it hard to prepare for public health. This ambiguity occurs in a global setting where ASD is known to impact around 1 in 100 children (Zeidan et al., 2022). This shows that there is a big gap in local knowledge and resource allocation.

Furthermore, the process of treating children with autism according to a scientific approach in advanced centers in the Palestinian territories remains limited and requires significant financial costs. This cost is beyond the means of poor and middle-income families. Additionally, in some centers, the staff may not be adequately qualified to deal with

children with autism, leading to poor treatment (Assaf, & Al-Hayeh, 2024). However, the family serves as the first line of defense in treating ASD, being the most important and primary institution in diagnosis and treatment.

Gap in Health and Education Systems Toward Autism

Health care services in the West Bank are usually provided by four main sectors: public health sectors by the Palestinian Ministry of Health, the private sector, non-governmental organizations (NGOs), and health care provided by the United Nations Relief and Work Agency (UNRWA). There is a critical gap in the public sector's capacity to provide services specific to autism spectrum disorders. As a result, diagnostic, rehabilitation, and psychological support services are largely provided by the private sector and NGOs, creating a heavy reliance on private services that are often cost-prohibitive (Shawahna et al., 2017). Therefore, treatment and rehabilitation for autism leave a high economic burden on families due to the high cost of therapy and limited financial assistance for children with Autism and their families. Financial restraints related to caring for children with ASDs in regard to treatment, vitamins, tests, costly specialty items, and speech therapy were reported by parents. There is a demand from families for better governmental services for their children with ASDs (Shawahna et al., 2021). Financial assistance to individuals with ASDs and their families is limited. In Palestine, any person with disability is eligible to apply for support from the Ministry of Social Affairs. Eligibility for financial support is decided following an extensive scrutiny. Support consists of an amount equivalent to about \$215 every 3 months. This amount is hardly enough to cover the cost of diagnosis of ASDs. Financial restraints related to caring for children with ASDs in regard to treatment, vitamins, tests, diapers, costly specialty items, speech therapy were reported by parents (Dababnah & Bulson, 2015).

This systemic fragmentation is exacerbated by a critical shortage of specialists in the field of childhood developmental disorders. Also, centers and services often misdiagnose the symptoms, letting parents float for long periods of time from place to place, waiting for the right diagnosis and the consequent rehabilitation plan, leading to significant delays in diagnosis and intervention. These delays intensify parental stress and compound the existing socio-economic challenges faced by many families.

Beyond systemic gap, families navigate a complex web of socio-cultural and financial burdens. The diagnostic journey is often prolonged and frustrating, frequently overshadowed by societal stigma and cultural misconceptions about disability. Furthermore, social stigma is common in Palestinian culture related to individuals with disabilities in general. Most parents tend to hide their children with ASD and prefer social isolation for fear of not being accepted by society (Taslaq et al., 2017a). Many parents, particularly mothers, experience initial denial of their children's ASD diagnoses, poor coping skills, increased burden on siblings, social isolation, and financial strain (Dababnah, & Parish, 2013).

There is an additional challenge related to integration of children with ASD into education. Despite the progressive initiatives in the Palestinian education system, including the Right to Education for All law of 1998, significant barriers persist regarding inclusivity for students with ASD. Key challenges involve insufficient resources and inadequate

collaboration among various stakeholders such as teachers, parents, governmental departments, and the community. Specific needs, like environmental adaptations (e.g., quiet spaces), remain unmet, with proposed solutions like resource rooms proving ineffective and risking exclusion. The situation is further complicated by the ongoing occupation that hampers inclusive education efforts. Though changes in attitudes and training projects have been facilitated through the law, many children with disabilities remain unserved. Statistics indicate that over one-third of children aged 15 and older have never attended school, while nearly one-fifth of those who did enrolled only to drop out due to their disabilities (Ashbee, 2015; Nasir-Tucktuck, Baker, & Love, 2017).

The overarching political and economic context profoundly exacerbates these challenges. The chronic occupation and political instability disrupt the development of essential infrastructure for inclusive education and support services. Widespread economic hardship restricts access to the limited available care, while the ongoing climate of conflict cultivates instability and psychological distress. Consequently, the financial burden of therapies, medical supplies, and private care pushes many families into precarious situations (Assaf, & Al-Hayeh, 2024).

In summary, the confluence of unreliable data, a fragmented healthcare system, lack/inadequate diagnosis and treatment services, social stigma, and the debilitating effects of the political and economic situation create a perfect storm of adversity for Palestinian families affected by ASD. This underscores a pressing and unmet demand for enhanced, culturally sensitive, and coordinated governmental and community support systems.

Chapter Two

Literature Review

2.1 Introduction

This chapter presents an overview of ASD, including its definition, diagnosis, and prevalence. Furthermore, the global burden of caregiving for children with ASD, particularly the caregiving burden in Palestine will be discussed. In addition, research on the QoL of mothers with children diagnosed with ASD and its associated factors will be synthesized. Furthermore, the chapter explores pathways for supporting parents by reviewing current interventions and programs designed to improve mothers' QoL. The chapter concludes by identifying persistent research gaps and providing a summary of the discussed topics.

2.2 An Overview of ASD: Definition, Diagnosis, and Prevalence

Autism Spectrum Disorder (ASD) is defined in the DSM-5-TR as a neurodevelopmental condition characterized by enduring impairments in two core areas, with symptoms emerging in early childhood and causing significant functional limitations.

The diagnosis requires persistent deficits in social communication and social interaction across multiple contexts. These must be present in all of the following sub-domains: social-emotional reciprocity (e.g., challenges with back-and-forth conversation and sharing emotions), nonverbal communicative behaviors (e.g., abnormal eye contact, body language, and facial expressions), and skills for developing, maintaining, and understanding relationships (e.g., difficulty adjusting behavior in different social contexts and making friends). A key update in the DSM-5-TR is the explicit requirement that all these social-communication deficits be present, raising the diagnostic threshold for this criterion. Additionally, the diagnosis requires the presence of at least two types of restricted, repetitive patterns of behavior, interests, or activities. These include stereotyped movements or speech, an inflexible insistence on sameness and routines, highly restricted and fixated interests of abnormal intensity, and hyperactivity to sensory input (APA, 2022).

Autism can be diagnosed as early as 18 to 24 months, as its symptoms often become distinguishable from typical development and other developmental delays during this period. Changes in diagnostic criteria have contributed to an increase in reported cases, along with enhanced public awareness and understanding of ASD (Okoye et al., 2023). Its global prevalence had risen dramatically in recent decades (Chiarotti & Venerosi, 2020), with estimates indicating that approximately 1 in 100 children are affected (Zeidan et al., 2022). The prevalence of ASD has varied widely among different sociodemographic groups (Silenzio & Zahorodny, 2023). Despite the increasing awareness and diagnoses of ASD in Arab countries, a significant gap persists in precisely determining its prevalence (Alkhateeb et al., 2022). In Palestine, despite an increasing number of diagnoses among children, the exact incidence and prevalence rates remain undetermined due to few epidemiological studies and reliable data (Shawahna et al., 2017, 2021).

2.3 Global Caregiving Burden

Parenting a child with ASD was widely recognized as a significant challenge in physical, emotional, social, and financial dimensions, particularly for mothers who serve as primary caregivers. Qualitative studies across diverse cultural contexts documented mothers' heightened psychological distress, social isolation, and caregiving burden, alongside systemic and financial barriers that limit access to services (Acharya & Sharma, 2021; Gobrial, 2018; Shattnawi et al., 2021).

2.3.1 Physical and Psychological Challenges

Mothers of children with ASD were found to be exhausted as they dedicated substantial time to caring for their children and teaching them various life skills to support their independence and quality of life. The heavy caring responsibilities contribute to sleep disturbances, fatigue, headache, anorexia, and palpitations among these mothers (Chowdhury et al., 2020). It also impacts their emotional well-being throughout their parenting journey (DesChamps et al., 2020).

Stress can lead to many physical ailments, including headaches, backaches, muscle strain and stiffness, constipation, nausea, dizziness, insomnia, chest pain, rapid heartbeat, weight gain, decreased libido, compromised immunity, and other health difficulties. Lee et al., (2018) demonstrated through a multivariable logistic regression model that mothers' sleep quality is significantly associated with increased risk of high levels of depression (OR = 1.934, 95% CI [1.106, 3.385], $p = .021$) and heightened risk of deteriorating physical health (OR = 1.920, 95% CI [1.086, 3.393], $p = .025$) (Lee et al., 2018).

The period following the initial ASD diagnosis was associated with considerable emotional difficulty. For instance, mothers in Jordan expressed feelings of astonishment, sadness, denial, guilt, and worry over their child's future destiny (Shattnawi et al., 2021). A phenomenological study in Nepal similarly revealed that mothers encountered denial, anger, anxiety, and despair over their child's conditions and future prospects (Acharya & Sharma, 2021). Mothers devoted significant time to therapeutic care and life skills training, resulting in enduring distress that transformed into chronic psychological and

physical fatigue, potentially causing sleep disturbances, exhaustion, and other stress-related conditions (Chowdhury et al., 2020; DesChamps et al., 2020). In Ethiopia, mothers experienced significant stress and discontent as they felt compelled to act as therapists to manage their children's challenging behavior (Alemn, 2025).

Furthermore, anxiety, worry, anger, and fear of the future were most prevalent in the majority of studies. Acharya and Sharma (2020) showed that participating mothers expressed concerns about their child's future due to the lack of supportive organizations and uncertainty around the child's education, job, adaptation, and living conditions. Mothers experience excessive overthinking about essential life skills and everyday activities necessary for their children's well-being, often feeling frustration when lacking assistance and support from family members or when struggling to manage their children's behavior (Acharya & Sharma, 2021). Gobrial's study indicated that mothers experience poor well-being and depression, perpetually feeling hopelessness and frustration due to their child's problems (Gobrial, 2018).

2.3.2 Social Challenges

Mothers suffer from social isolation due to heightened responsibilities, which hinder their ability to get outdoors, or because of stigma within the community. Mothers prefer to retain their children at home due to embarrassment over public behavior, apprehension of criticism, and societal stigmatization, resulting in self-imposed isolation from the external environment. An interpretative phenomenology study in Greece revealed increased isolation from friends and extended family attributed to childcare demands and behavioral concerns (Papadopoulos, 2021). Similarly, a study conducted in Egypt showed that the lack of community understanding leads to the social isolation of mothers. Because their child's disability is not visible, the child's behavior is often blamed on poor parenting. As a result, these mothers feel forced to stay home to avoid judgment, which isolates them further (Gobrial, 2018).

2.3.3 Familial Challenges

The responsibility of caregiving also influenced familial relationships. Marital stress arises from several factors, including diverging autism diagnoses and timelines, the burden of numerous commitments and obligations leading to inconsistent schedules, caregiving challenges, and economic strains impacting marital relations. Studies indicate a correlation between having a child with a disability and a higher risk of divorce, particularly in Saudi Arabia (Alsamiri et al., 2024). This increased strain may lead to communication breakdowns, neglect of marital and family obligations, and ultimately, exacerbate pre-existing psychological stress within the family (Daly et al., 2022.)

In addition, siblings of children with ASD often experience considerable psychological and emotional strain, frequently feeling overlooked as parents attempt to balance their attention between the child with ASD and their other children. This dynamic may foster sibling rivalry, intensified by competition for parental attention. Nevertheless, some families effectively manage these challenges by addressing external stressors and adopting adaptive

coping mechanisms. According to Tathgur & Kang (2021), delays in recognizing ASD symptoms can exacerbate family and marital stress, leading to increased conflict and a higher likelihood of divorce among parents of children diagnosed with ASD.

2.4 Financial Challenges

Families encountered financial limitations that restricted access to essential support, as the substantial lifetime expenses associated with ASD-related therapies and special education burden households, depriving children of needed services and hindering developmental advancement (Al Khateeb et al., 2019; Biruk Befkadu et al., 2022). A systematic review conducted in Arab countries showed that all parents report experiencing financial constraints. This is due to unreasonably expensive services that surpass their financial capacity, which can hinder children from accessing necessary care (Alkhateeb et al., 2022).

2.4.1 Maternal Coping with Caregiving Challenges

Despite the universal challenges that mothers face during caregiving journey, several studies reported that mothers developed strategies to cope with the situation. Many draw strengths from spiritual practices, reframing their caring experience as significant and transformative. A study conducted in Iran highlighted that mothers viewed their connection with God as a powerful influence, enabling them to embrace their children fully. This spiritual relationship motivates them to prioritize their children's well-being and fosters a hopeful outlook for the future (Heidary et al., 2015). Others, as observed in Malaysia (Yaacob et al., 2022), sought medical assistance, relied on respite care, and sought essential support from family and friends.

While these challenges are universal, the resources available to mothers and the cultural contexts they navigate vary greatly, creating unique landscapes of stress and resilience.

2.4.2 Maternal Caregiving in the Palestinian context

In the Palestinian context, the global problems are exacerbated by distinct socio-political circumstances. Palestinian mothers experienced significant emotional and financial strain, intensified by the absence of evidence-based treatments, skilled specialists, and protracted diagnosis, leading to confusion and diminished satisfaction (Abu-Ras, W., Saleh, M., & Birani, 2018; Dababnah & Parish, 2013).

In a qualitative research study by Dababnah and colleagues, parents of children with ASD faced significant barriers to care, including a severe shortage of qualified specialists, high costs, and transportation issues like military checkpoints. The lack of available services was compounded by a general lack of public understanding about ASD. These often led to discrimination and stigma from both the community and extended family, causing parents profound stress, shame, and social isolation. In response, parents employed various coping strategies, ranging from isolation and denial to seeking social connection and relying on religious faith. The study concludes that there is a critical need for increased ASD

awareness and stronger social support systems for parents in the West Bank (Dababnah & Parish, 2013; Dababnah & Bulson, 2015).

Taslaq (2017), in his study, showed how an autism diagnosis profoundly impacts families across multiple dimensions. The diagnosis process itself is often fraught with dissatisfaction due to delays and a lack of professional support. Psychologically, parents undergo a significant grieving process involving denial and depression, while also bearing a heavy physical burden from exhaustive caregiving duties. The diagnosis also strains couples' relationships and overall family dynamics. Furthermore, families face substantial challenges from community stigma and social exclusion, compounding their stress and isolation (Taslaq et al., 2017b).

Parents faced financial stress, child behavioral and medical issues, and despair, according to the research. ASDs were unknown to most parents until their children's diagnosis. Discrimination and stigma from extended family and the community increased parents' shame and social isolation. Some parents isolated themselves or denied the diagnosis, while others sought social connection and knowledge. Some individuals considered religious coping adaptive. The research stressed the need for West Bank parents to obtain more ASD knowledge and social assistance (Dababnah, S., & Parish, 2013).

Moreover, understanding the daily realities of mothers raising children with ASD requires listening to their narratives. However, research on the mothers' experiences of raising children with ASD remains very limited in the Palestinian context. To address this gap, a qualitative study should be conducted to explore the challenges Palestinian mothers face and how they interpret and make sense of their lived realities within their cultural and socio-political context. By adopting a qualitative design, this allows the researcher to attend to mothers' voices, uncover the meanings embedded in their caregiving roles, and illuminate how they construct resilience, cope with challenges, and navigate stigma.

2.5 The Quality of Life of Mothers of Children with ASD

Comprehending the quality of life of mothers is essential for creating comprehensive support systems that uphold the entire family unit. This section will review the literature on the multifaceted quality of life of mothers of children with autism, examining the complex interaction between child-related, maternal, familial, and socio-ecological factors that either exacerbate stress or foster resilience.

2.5.1 Defining the Concept of Quality of Life

The Quality of Life (QoL) has been recently noted as one of the major health concerns for parents following a lifelong complex experience such as raising a child with a disability (Yamada et al., 2012). Quality of life was defined according to the World Health Organization (WHO) as a broad concept that captures, together with an individual's hopes, expectations, and concerns, their appraisal of their life situations within the framework of their culture and values. It covers several domains, including physical health, psychological well-being, autonomy, social ties, personal opinions, and environmental interactions (WHO, 1995). For mothers of children with ASD, measuring the QoL

provides a multidimensional useful way to comprehensively assess parents' health and adaptation.

2.5.2 The Impact on Maternal QoL and Influencing Factors

A systematic review conducted by Vasilopoulou and Nisbet (2016) examined literature concerning the QoL of parents of children diagnosed with ASD. It concluded that these parents generally experience a lower QoL compared to those of typically developing children. Consequently, Dey et al. (2019) found that parents of children with ASD exhibit reduced QoL not only in comparison to parents of typically developing children but also to those of children with other disabilities. This reduction is primarily attributed to the persistent challenges, which adversely affect their standard of living. Additionally, it was noted that mothers, as primary caregivers, report higher levels of stress, anxiety, and depression than fathers, which negatively impacts their QoL scores (Ahmed et al., 2023; Pisula & Porębowicz-Dörsmann, 2017).

2.5.3 The Association Between Sociodemographic Characteristics and Mother's QoL

Several studies found that educational level was associated with improved QoL (Ahmed et al., 2023; Alhazmi et al., 2023). Krakovich et al. (2016) indicated that mothers with a lower education level had higher odds of experiencing parenting stress. Most of the mothers had inadequate knowledge about ASD in the early phases of the illness. Mothers with higher education levels begin to actively and intentionally raise awareness of ASD, actively carry out rehabilitation training for children, and relax physically and mentally to regulate their mood (Krakovich et al., 2016). In a study conducted by Zhou et al., mothers with a primary school education level had significantly higher anxiety and depressive symptoms than mothers with a university degree education level in the univariate ordinal regression analysis (Zhao & Fu, 2022).

Another factor is family income as it may be an important factor affecting the care provided to children with autism. Caregivers with a high income and stable job tend to have better QoL, as they can seek support services more easily (Kuru & Piyal, 2018). Raju et al. (2023) discovered a positive correlation between socioeconomic status (SES), physical health, and social relationships with mother's QoL, emphasizing that increased income improves access to health services and physical environments for families (Raju et al., 2023). Lower SES can hinder parents' ability to fulfill family needs, leading to feelings of inefficiency and self-doubt (Ahmed et al., 2023). Additionally, parents from low-income groups often have negative experiences with service support and may be reluctant to seek help (Grace et al., 2017).

2.5.4 The Association Between Child Characteristics and Mother's QoL

Research indicates a relationship between the severity of autism symptoms and the mother's QoL. Mothers of children with more severe behavioral problems tend to report poorer QoL (Zhou et al., 2019). However, other studies have found no significant

association between severity and QoL of mothers (McStay et al., 2014). In a cross-sectional survey conducted among 180 mothers of children with ASD in Changsha City, China, it was reported that higher Autism Behavioral Checklist (ABC) and Social Responsiveness Scale (SRS) scores (indicating symptom severity) were significantly associated with increased levels of anxiety and depressive symptoms among mothers (Zhou et al., 2019).

2.5.5 The Impact of Support on Mothers' QoL

Social support has emerged as a critical determinant of parental well-being in families raising children with ASD. A study by Rezq et al. (2025) revealed a significant positive correlation between social support and QoL among mothers, emphasizing that this relationship is influenced by factors such as educational attainment and household income. The study underscores the need for focused interventions, particularly for mothers who have multiple ASD-diagnosed children. These findings align with evidence from a meta-analysis demonstrating the beneficial impact of social support on the QoL of mothers with ASD children. Social support (encompassing care, respect, assistance, and affection from one's social networks) contributes to decreased stress and depression, enhanced overall well-being, and reduced emotional distress. Additionally, the presence of social support has been shown to positively affect parents' QoL, with several studies also identifying the supportive role of educational and rehabilitation services in enhancing parents' QoL (Dardas & Ahmad, 2014b).

2.5.6 The Quality of Life of Mothers in the Palestinian Context

Despite growing global attention to the psychosocial challenges faced by parents of children with ASD, very limited research has explored the QoL of mothers within the Palestinian context. This gap highlights the need for culturally contextualized evidence to understand the unique challenges these mothers face in a resource-limited and crisis-affected environment. Accordingly, it is recommended to conduct a study to assess the overall QoL of mothers of children with ASD and examine the factors associated with it. The findings are expected to inform the design of interventions that alleviate caregiving burdens and support policy reforms aimed at enhancing maternal QoL. Understanding the different dimensions of mothers' QoL can provide healthcare professionals and policymakers with deeper insight into the struggles faced by parents, thereby facilitating the development and implementation of effective, context-specific support strategies.

2.6 Support Programs for Mothers of Children with ASD

As mothers of children with ASD face numerous difficulties that disrupt their QoL, the literature shows that targeted interventions are necessary to restore their balance and enhance well-being. According to Derguy et al. (2015), these mothers require adequate knowledge, skills, trust, social networks, and material assistance to effectively cope with caregiving demands. Marino et al. (2021) propose three categories of support programs

designed to meet these needs. The first category involves informational or parental assistance that focuses on disseminating knowledge and guidance. The second category is parent training that aims at equipping parents with skills to manage ASD-related behaviors and challenges. The third category comprises psychological support programs designed to reduce caregiver distress and promote emotional resilience. Collectively, these strategies have a direct or indirect positive influence on the children's development by enhancing the well-being and coping capacity of their caregivers (Marino et al., 2021).

Empirical evidence further underscores that continuous support through psychoeducation, peer networks, and stress-management training can significantly enhance maternal well-being and, consequently, contribute to family stability.

2.6.1 A Framework of Support: Informational, Training, and Psychological Programs

A systematic review of literature examined various interventions aimed at improving the well-being of parents with children diagnosed with ASD. Among the interventions analyzed were psychoeducational programs, cognitive-behavioral therapy (CBT), mindfulness-based interventions, and behaviorally based interventions, which included techniques like massage therapy and online journal writing. Behaviorally based interventions were the most frequently studied, with 19 evaluations, followed by psychoeducational programs with 9 studies and mindfulness-based interventions with 5 studies. The majority of the studies employed group formats targeting parents, often highlighting positive effects on depression, parental stress, and self-efficacy. Engaging in group interventions was noted to be particularly beneficial as it fosters connections among parents undergoing similar challenges (Cachia et al., 2016).

A systematic review employed a critical interpretive synthesis analysis of quantitative and qualitative studies to formulate practice guidelines for health professionals aiding parents of children with ASD. Three primary themes were identified: the importance of social support from fellow parent carers, the effectiveness of training parents in stress management and problem-solving skills, and the need for accurate information on ASD and available resources. These themes can be integrated into strategies that enhance the psychological well-being of parent caregivers while also benefiting the welfare of children with ASD and their families (Catalano et al., 2018).

2.6.2 The Effectiveness of Interventions on Maternal QoL Dimensions and Wellbeing

A robust body of international research demonstrates the efficacy of evidence-based interventions in enhancing the QoL and psychological well-being of parents of children with ASD. These interventions often focus on providing psychoeducation, psychological support, and practical coping strategies by equipping caregivers with the knowledge and skills needed to cope with ASD-related problems. For instance, in a randomized control trial study conducted by Marino et al. (2021), parents enrolled in the Acceptance and Commitment Approach (ACT) protocol demonstrated significant improvements in psychological flexibility, awareness states, personal values in everyday life, and parental stress, whereas reduced scores were elicited in parents' perceptions of their child's

disruptive behaviors. After six months of training using the ACT matrix protocol, the improvement was sustained (Marino et al., 2021).

Psychoeducational programs that give parents accurate information about ASD have also been shown to lower their stress and anxiety, which leads to clearer communication, better relationships with their children, and easier access to services. According to Catalano et al. (2018), parents of children with ASD highlighted that acquiring accurate information about ASD significantly alleviated their stress and anxiety. This led to increased relief and clarity regarding their child's behaviors. Learning more about how their child processes sensory information, parents were able to improve their relationships and responses, which made it easier for them to accept their child. Furthermore, when parents received clear connections between their child's diagnosis and behaviors, they felt more confident in accessing appropriate services. This relevant knowledge also enabled parents to devise effective strategies for managing their child's sensory overloads, illustrating the value of understanding autism's sensory dimensions and supportive approaches (Catalano et al., 2018). Beyond individual skill-building, group-based formats such as social support networks and professionally led workshops (e.g., in mindfulness or stress management) offer dual benefits. They do not only teach practical techniques but also provide crucial emotional support by normalizing experiences and facilitating the exchange of coping strategies among peers.

Furthermore, engagement with other parents, particularly through social support groups, significantly influences their well-being. Such networking reassures parents that they are not alone in facing challenges and validates their experiences. Sharing stories and discussing difficulties fosters idea exchange about resources and coping strategies. This support normalizes their experiences, enhances awareness of their child's needs, boosts confidence in managing daily challenges, and fosters acceptance of their child's behaviors. Parents also provide mutual support, facilitating individual growth and well-being. Participating in professionally led workshops on stress management, including biofeedback and mindfulness, significantly enhances parent carers' mental health by promoting present-focused awareness and responsive decision-making. These workshops not only teach stress management and problem-solving skills, boosting parents' confidence in daily challenges, but also function as social support groups where participants share experiences and strategies. They also provide practical techniques for stress management that are applicable at home, while offering a break from caregiving responsibilities (Marino et al., 2021).

The Research Gap in Arab Countries

The evidence base within Arab countries is notably limited, unlike the well-established international literature. The systematic scoping review by Allawi et al. (2020) identifies significant gaps in the research evidence base for interventions and services related to children with ASD and their families in Arab countries, highlighting the weak quality of existing studies. It calls for more high-quality, culturally sensitive research to address these deficiencies, particularly in the area of educational interventions for individuals with ASD and their families. The review emphasizes the necessity of developing culturally relevant evidence for ASD services in Arab contexts (Alallawi et al., 2020).

Despite this scarcity, a few emerging studies demonstrate the potential for culturally adapting international models. Rayan and Ahmad (2016) investigated the impact of a brief Mindfulness-Based Intervention (MBI) on perceived QOL and positive stress reappraisal (PSR) among Jordanian parents of children with ASD. Utilizing a quasi-experimental design with a nonequivalent control group, 104 parents were divided equally into intervention and control groups, ensuring they were matched by gender, age, and the severity of their children's ASD. The intervention group engaged in a 5-week MBI program, while the control group did not participate in any. The findings revealed that parents in the intervention group exhibited significant enhancements in psychological and social health domains of QOL, mindfulness, and PSR, achieving medium to large effect sizes ($P < 0.01$). Conversely, the control group showed only minor improvements in these measures. The results suggest that MBI is not only culturally adaptable and acceptable but also an effective approach for enhancing QOL and PSR among parents of children with ASD (Rayan & Ahmad, 2016). Another Jordanian study evaluated a counseling program in enhancing the QoL for families with children diagnosed with ASD. The study involved thirty parents, and the researchers utilized the Quality of Life Scale (QOLS) to assess outcomes pre- and post-program. Findings revealed significant improvements in the experimental group's physical and mental health, social interaction, and life satisfaction, although financial income remained unchanged. Participants noted increased self-appreciation and a positive shift in their outlook on life, supported by coping strategies acquired through the counseling sessions (Al-Masa'deh et al., 2022).

On the other hand, a study in Egypt evaluated a tailored Cognitive-Behavioral Therapy (CBT) program aimed at improving problem-solving skills among sixty mothers of children with ASD. The participants were divided into two groups: a CBT group, which received three months of intervention sessions, and a control group. Results demonstrated significant reductions in depression, anxiety, stress, and psychological distress ($p < 0.05$) in the CBT group, alongside enhancements in problem-solving confidence and personal control. The study emphasizes the effectiveness of culturally adapted CBT programs for improving psychological well-being in families of children with ASD (Abdelaziz et al., 2024).

2.6.3 The Gap in Support Programs for Families in the Palestinian Context

While these interventions show promise internationally, their adaptation, implementation, and efficacy within the specific socio-economic and cultural constraints of the West Bank remain largely unstudied.

In the Palestinian context, the needs of mothers raising children with ASD remain critically under-addressed, with minimal formal or community-based support available to alleviate their caregiving challenges. To date, only one intervention study has been documented in this region. Wahdan et al. (2023) evaluated the "Incredible Years-ASD" (IY-ASD) program, a structured intervention that utilizes role-plays, videotaped scenarios, and home activities to help parents develop strategies for managing child behavior (Wahdan et al., 2023). While this program demonstrated significant efficacy in reducing parental stress, its focus was narrow; it did not address broader domains of parental well-being, such as

overall QoL, social functioning, or psychological resilience. This underscores the need for more comprehensive support frameworks that target the multifaceted challenges these mothers face.

However, the prolonged humanitarian crisis, political instability, and economic hardship have strained family structures and overwhelmed the health and social care systems, leaving few specialized services for children with developmental disorders. Mothers, who often assume the primary caregiving role, face compounded stressors arising from limited access to diagnostic and therapeutic services, inadequate educational inclusion, and pervasive social stigma surrounding disability. These conditions exacerbate emotional distress and diminish their QoL. Despite the urgent need for psychosocial and educational interventions, research examining the effectiveness of such support programs for mothers of children with ASD in the Palestinian context remains scarce. Therefore, it is essential to design and evaluate structured educational and psychosocial interventions such as the *Mindful Motherhood* program to enhance the overall QoL, coping capacity, and well-being of Palestinian mothers raising children with ASD.

2.7 Conceptual Framework

For mothers of children with ASD, measuring the QoL provides a multidimensional useful way to comprehensively assess parents' health and adaptation. The dependent variable in our study will be the QoL of mothers of children with ASD. According to the World Health Organization Quality of Life Scale (WHOQOL–BREF), QoL consists of four dimensions, physical health, psychological health, social relationship, and environment (Ahmad et al., 2023). In the reviewed literature, studies have established relationships between several factors and the QoL of mothers who have a child with ASD. For mothers of children with ASD, this QoL is dynamically influenced by a complex interplay of child characteristics, maternal and family characteristics, cultural factors, and external support systems. This framework integrates empirical evidence to delineate the principal factors that predict and influence the quality of life of these mothers.

The conceptual framework (Figure 2.1) posits that mothers' QoL (the dependent variable, structured across four domains) is directly influenced by four primary factor clusters: Child Characteristics, Maternal and Family factors, Cultural and Contextual factors, and Support Systems and Interventions. Cultural and contextual factors directly influence the availability and nature of support systems. Societal stigma can hinder the development and community acceptance of formal programs, while proactive initiatives, such as awareness campaigns, can promote their establishment. Simultaneously, maternal and family factors dictate access and utilization; a higher socioeconomic status facilitates the acquisition of private therapies and services, and increased maternal education improves the ability to navigate these systems effectively. Parental stress acts as a key mediator, meaning the independent variables indirectly affect maternal QoL by first influencing the level of parental stress. Factors such as challenging child characteristics or limited support could not affect QoL directly, but rather through the mechanism of elevating parental stress, which then has a strong, direct negative effect on QoL.

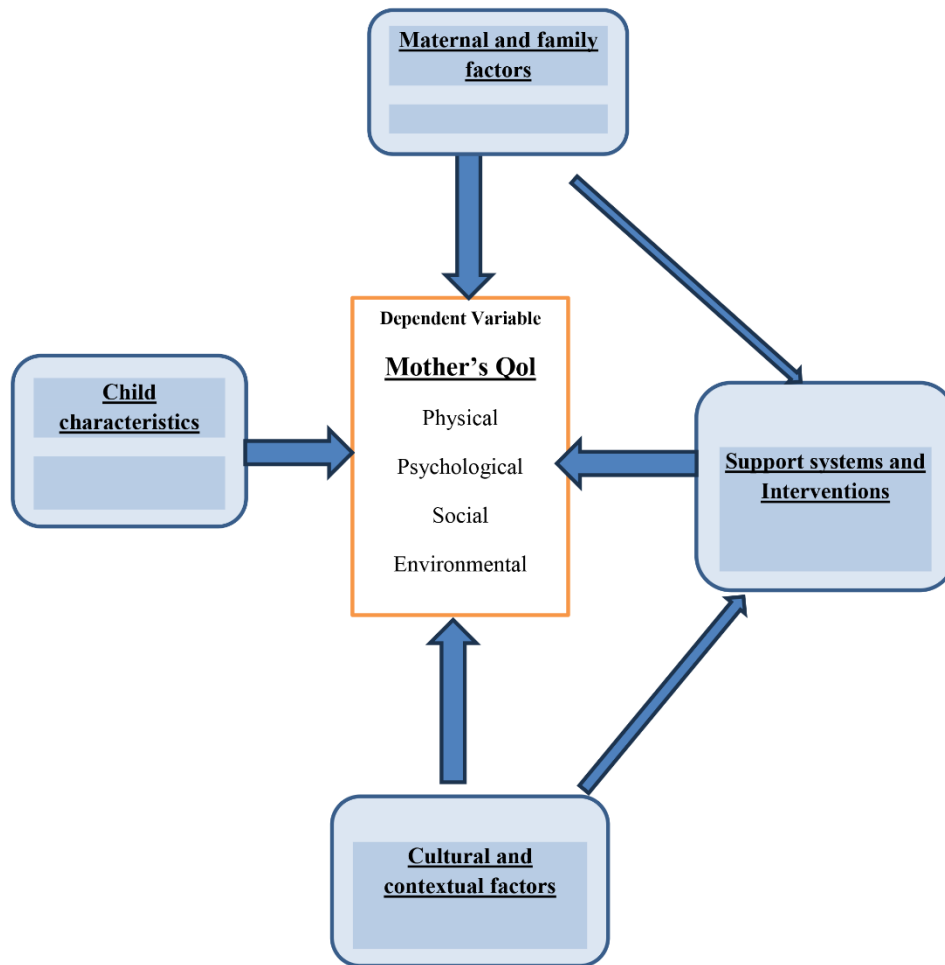


Fig (2.1). Conceptual Framework: Quality of Life of Mothers of Children with ASD

The Dependent Variable Quality of Life (QoL Domains) (WHO, 1996)

The mothers' QoL is the outcome and contains four major domains:

Physical health is related to pain and discomfort, as well as sleep and rest, energy, and fatigue. Mobility activities of daily living dependence on medicinal substances and medical aids work capacity.

Psychological health encompasses positive feelings. Thinking, learning, memory, and concentration. Self-esteem, bodily image and appearance. Negative feelings, spirituality religion, and personal beliefs.

Social relationship: Social relationships, personal relationships, social support, and sexual activity

Environment health involves financial resources, physical safety and security, home environment, opportunities for acquiring new information and skills, participation in and opportunities for recreation/lesire activities, satisfaction with living place condition, accebility to health services, and transport.

Independent Variable

1. Child Characteristics

ASD severity and behavioral problems: This is a consistently negative predictor. Mothers who perceive greater severity and more challenging behaviors in their children report significantly lower QoL across all domains, primarily by elevating Parental Stress (Vasilopoulou & Nisbet, 2016).

Child's age: The evidence is mixed. Some studies indicate lower environmental QoL with older children (e.g., because of long-term caregiving needs), while others suggest better QoL as families adapt over time.

2. Maternal and Family Factors

Socioeconomic status (SES): Higher family income and maternal education levels are robust positive predictors of QoL (Hsiao, 2018; Tekinarslan, 2013). Higher SES facilitates access to services, reduces financial strain, and may enhance the ability to utilize community resources.

Employment status: Employment (part-time or full-time) is generally associated with higher QoL, particularly in psychological and environmental domains, by providing income, social contact, and a sense of identity beyond the caregiving role (Öz et al., 2020).

Mother's age: Some studies indicate worsening QoL with increasing maternal age, potentially due to caregiver fatigue and health concerns (Tekinarslan, 2013).

Mother's education: Mothers with higher education levels begin to actively and intentionally raise awareness of ASD, actively carry out rehabilitation training for children, and relax physically and mentally to regulate their mood (Krakovich et al., 2016).

Family support: that social support enhances maternal QoL and is influenced by educational level and income, suggesting that there are targeted interventions to support mothers of children with ASD (Rezq et al., 2025).

3. Support Systems & Interventions

Formal Support and Services (Educational, Rehabilitative, and Financial): Access to educational, rehabilitative, and financial services (e.g., government aid) is vital. However, the perceived efficacy and acceptability of these services moderate their impact. Dissatisfaction with services can nullify their benefits (Raju et al., 2023; Vasilopoulou & Nisbet, 2016).

Psychosocial & Health-Promoting Interventions:

Targeted psychosocial interventions, such as the Family Peer Advocate (FPA) model and peer-support groups, have been shown to reduce stress, enhance mental health, and boost parenting confidence among caregivers of children with ASD. Participation in health-promoting activities like exercise and time away from home is linked to improved perceived mental health in parents (Vasilopoulou & Nisbet, 2016; Ahmad et al., 2023; Raju et al., 2023).

4. Cultural and Contextual Factors

Stigma and community awareness: Societal stigma is a contextual negative factor that can increase stress and isolate families, harming social QoL. Conversely, community-level interventions that raise awareness serve as protective factors by reducing stigma and fostering inclusion.

Community-level interventions are necessary to raise awareness and improve the perception of autism. This will encourage social support for these parents, which will play a crucial role in enhancing their QoL. This may help minimize the stigma related to the disorder, which isolates children and their parents from society.

2.8 Summary

This chapter synthesizes existing knowledge regarding the challenges faced by mothers of children with ASD, which include psychological, physical, social, and financial burdens that significantly affect maternal QoL. Factors influencing this decline encompass child characteristics, socioeconomic conditions, and the availability of social support. Evidence-based interventions like mindfulness programs have shown promise in enhancing parental well-being globally. However, in the Palestinian context, these challenges are exacerbated by systemic issues such as a lack of specialized services, diagnostic delays, economic hardships, and social stigma, all amidst ongoing political instability.

The review identifies a critical evidence gap regarding the QoL of Palestinian mothers of children with ASD, the absence of culturally adapted psychosocial support programs, and a lack of rigorous studies assessing intervention impacts within this specific context. This underscores the need for the current research to address these gaps by evaluating the QoL of Palestinian mothers and the efficacy of a tailored "Mindful Motherhood" support program, ultimately aiming to provide culturally relevant evidence to improve support mechanisms and policy for this vulnerable population.

Chapter Three

Methodology

3.1 Introduction

This chapter outlines the comprehensive mixed-methods design employed to explore the experiences and QoL of mothers raising children with ASD in the West Bank, Palestine, and to develop and evaluate a support intervention. The research was conducted in three sequential, integrated phases: a qualitative exploration of lived experiences, a quantitative QoL survey, and a quasi-experimental evaluation of the "Mindful Motherhood" support program. The chapter details the study design, participant selection, instruments, data collection procedures, and analytical strategies for each phase, as well as the ethical considerations guiding the research.

3.2 Study Design

This study employed a mixed-methods, quasi-experimental design to comprehensively explore the lived experiences and examine the QoL of mothers raising children with ASD in the West Bank, Palestine ; and to develop, implement, and evaluate the effectiveness of a structured support program ("Mindful Motherhood"). This study was conducted in three phases: The first phase involved a qualitative exploration of mothers' lived experiences (study I), followed by a quantitative QoL survey (study II), and finally, the intervention phase with a quasi-experiment design (study III). In this study, the mixed-methods approach successfully combined mothers' narratives with quantifiable results, providing a robust framework to develop an evidence-based support program for mothers of children with ASD (Plano Clark, 2017).

The qualitative study adopted a phenomenological hermeneutics design to explore the lived experience of mothers raising children with ASD in the West Bank. This approach was guided by Ricoeur's (1976) interpretation theory and further elaborated by Lindseth and Norberg (Lindseth & Norberg, 2004). This design integrates explanation and

understanding to uncover the essence of lived experience. Phenomenological hermeneutics emphasizes the exploration of individuals' contexts to reveal the more profound meaning of lived experiences as they are brought to light through personal narratives. This methodological choice allows us to attend to mothers' voices, uncover the meanings embedded in their caregiving roles, and illuminate how they construct resilience, cope with challenges, and negotiate stigma. By emphasizing interpretation and meaning-making, phenomenological hermeneutics offers the most appropriate framework for addressing our research question. Researchers, practitioners, and policymakers can benefit from the nuanced insights this approach generates, which go beyond individual narratives. Specifically, the study contributes to the development of culturally sensitive, family-centered interventions and educational programs tailored to the needs of children with ASD and their families in Palestine.

The QoL survey employed a cross-sectional design to assess mothers' QoL using a WHOQOL-BREF tool and identify factors associated with QoL. This phase aimed to quantify the challenges and resources identified in the initial qualitative study on a broader scale.

In the intervention phase, a support program was developed based on the findings from the qualitative and QoL survey. This study utilized a quasi-experimental design to assess the impact of the support program on the quality of life of mothers of children with ASD. This approach was selected for its robustness and practicality in evaluating interventions within real-world, resource-limited community settings without randomization, where random assignment is often not feasible or ethical (Capili & Anastasi, 2025). Quasi-experimental designs are recognized as a key methodology for generating evidence of intervention effectiveness when randomized controlled trials are not possible, as they allow for the estimation of causal effects through the use of pre-existing groups and controlled comparisons (Kousha et al., 2021; Ndata et al., 2025).

The QoL of the participants in both the intervention and control groups was measured at three times: before the implementation of the intervention, two weeks after completion of the intervention (post-test), and six months following the intervention (follow-up) to evaluate the sustainability of the program's effects. An overview of the three studies is presented in Table 3.1.

Table (3.1) Overview of the studies

	Study I	Study II	Study III
Design	Qualitative phenomenological hermeneutics	Cross-sectional quantitative study	Quasi-experimental study
Data collection	In depth interviews	WHOQOL-BREF tool	WHOQOL-BREF tool
Participants	Purposeful recruitment (n=16)	Purposive sampling (n=119)	(n=56; 28 for experimental group, 28 for control group)
Data analysis	A phenomenological hermeneutic approach	Univariate, bivariate, and multivariate analysis	Descriptive analysis, Mann-Whitney U test, Friedman test followed by Wilcoxon sign test was applied to assess changes in QoL scores across the three time points within each group (before, immediately following intervention, and 6 months after intervention) in each group .

3.3 Setting and Participants

The participants in the three studies were selected using purposive sampling from different rehabilitation centers serving children with ASD in the north, middle, and south of the West Bank, Palestine. Mothers were eligible to participate if they had at least one child aged 4-12 years with a confirmed clinical diagnosis of ASD and provided informed consent. In the qualitative study, sixteen mothers of children with ASD were recruited. The selection process aimed to ensure diversity by including mothers from various age groups, educational backgrounds, and residential areas across different districts in the West Bank. Additionally, a snowball sampling method was used to identify more participants. Once consent was obtained, interviews were scheduled at the mothers' convenience in the participants' homes or in a private room at the rehabilitation center. Recruitment continued until data saturation was achieved. Saturation was defined as the point at which additional interviews no longer generate new themes or insight into existing ones, and patterns across participants begin to repeat consistently. This iterative assessment was conducted through regular team discussions during data collection and preliminary analysis to confirm that the sample adequately captured the diversity of experiences among Palestinian mothers of children with ASD.

In study II (QoL survey), researchers compiled data from 127 mothers whose children with ASD attended the centers during the data collection period. Out of these, 119 mothers agreed to participate, resulting in a 94% response rate. Participants completed the questionnaire (Appendix 3) in private rooms at the centers. In addition, an online questionnaire (created using Google Forms) was used to gather data from participants who were unable to visit the center during the study period because of political barriers.

In study III (quasi-experiment), the sample size was calculated using G*Power version 3.1.9.2 (Han et al., 2022). The minimum sample size for each of the two groups was calculated as 26, based on the two-tailed test of the difference between two independent means with a 1:1 ratio, test power of 0.80, significance level of 0.05, and a hypothesized large effect size (Cohen's $d = 0.80$), based on the comprehensive nature of the intervention. Thus, the analysis indicated a required total sample size of 52 mothers. To account for the potential lower efficiency of the non-parametric Mann–Whitney U test, this number was inflated by approximately 15%, yielding a target sample size of 60. Although we recruited 60 participants, two participants from each group withdrew from the study, resulting in a final analyzed sample of 56. This final sample was deemed sufficient, as it closely approximated the initial target. They were recruited from the South ($n=32$) and the combined Middle and Northern regions ($n=28$). Participants from each region were then evenly divided into experimental and control groups, resulting in 16 per group from the South and 14 per group from the Middle/North. This study was conducted at two purposively selected locations to ensure diverse representation from Palestinian communities: Hope Flowers School in Bethlehem (recruiting mothers from the southern West Bank) and Jannati Academy Center in Ramallah (recruiting mothers from the central and northern West Bank). A baseline evaluation was performed on 25 May 2024, preceding the intervention. The program was then implemented from 25 May to 15 September 2024. Follow-up questionnaires (Appendix 3) were administered at two weeks (1 October 2024) and six months (March 2025) post-intervention.

3.4 Instrument

3.4.1. Study I (Qualitative)

The interview guide was developed collaboratively by the research team following an extensive review of relevant literature. To ensure methodological rigor, the guide was reviewed for clarity, relevance, cultural appropriateness, and content validity by two independent experts in qualitative research and autism spectrum disorders. In addition, the guide was piloted with two mothers of children with ASD to assess comprehensibility and to confirm that the questions elicited rich, meaningful narratives. Feedback from the pilot led to minor adjustments in wording to enhance clarity. The interview guide includes open-ended questions as presented in Appendix 1 and Appendix 2.

3.4.1.1 Reflexivity

Reflexivity was an integral component of this study, guided by a hermeneutic phenomenological stance that acknowledges, rather than seeks to eliminate, researchers' pre-understandings. The research team explicitly recognized their positionalities as Palestinian public health researchers working within the same socio-political context as the participants. Prior understandings related to autism and caregiving were articulated and critically examined to identify potential influences on the development of the interview guide and the interpretation of data.

To address and manage researcher influence throughout the research process, several strategies were employed. Data collection was conducted in participant-led settings using open-ended questions to allow mothers' voices to guide the direction of the discussions. The analysis was conducted as a collaborative, iterative process. The research team held regular peer debriefing sessions where transcripts were read and discussed collectively. These sessions served as a platform for reflective dialogue, allowing team members to surface, challenge, and bracket their assumptions. Furthermore, preliminary themes and interpretations were continually checked against the raw data ("the text") and the participants' own words during these meetings. This rigorous, dialogic approach was fundamental to enhancing reflexive awareness and ensuring that the final thematic structure remained deeply grounded in the lived experiences and narratives of the participating mothers, rather than the researchers' preconceptions.

3.4.1.2 Rigor and Trustworthiness

To ensure rigor and trustworthiness, four interrelated criteria were employed: credibility, dependability, confirmability, and transferability (Lincoln and Guba, 1985). Experts strengthened the study's credibility through in-depth interviews, diverse participant characteristics, and content validation. Dependability was ensured through a consistent interview protocol, regular discussions with the thesis advisor, and open dialogue among team members (the mentor and an expert in qualitative research). Confirmability was achieved through collaborative efforts among team members, who actively participated in the interpretive process. Transferability was achieved by providing a clear description of the study's context, participant characteristics, and data collection methods. A thick description of the mother's experience, supported by appropriate quotations, was included to evaluate the findings' applicability to other contexts or groups. A purposive sampling strategy was used to capture rich, diverse data; ensuring maximum information was obtained from a relatively small group of participants.

3.4.2 Study II (QoL Survey) & Study III (Quasi-Experiment)

3.4.2.1. Demographic Questionnaire

A structured demographic questionnaire was developed and used in study II and study III to collect socio-demographic and health-related information from mothers and their children diagnosed with ASD. Maternal variables included age, education level, marital status, employment status, family income, and place of residence. Household composition was also recorded, specifically the number of adults over 18 years, the number of children under 18, and the number of children diagnosed with ASD. Child-related variables encompassed gender, current age, age at diagnosis, the duration between symptom recognition and formal diagnosis, and health coverage status.

3.4.2.2 World Health Organization Quality of Life Assessment–Brief (WHOQOL-BREF)

The WHOQOL-BREF was used in studies II and III to evaluate mothers' perceived quality of life (WHO, 1996). The WHOQOL-BREF is a condensed form of the WHOQOL-100, comprising 26 self-administered items. It evaluates quality of life (QoL) across four domains: physical health (7 items), psychological health (6 items), social relationships (3 items), and environmental health (8 items), alongside individual items related to an individual's overall QoL perception and health status. Respondents rate items using a 5-point scale, where higher scores indicate better QoL. A validated Arabic version was employed in this study, particularly for parents of children with ASD (Dardas & Ahmad, 2014b). The scoring scale ranges from 1 (strongly disagree or very dissatisfied) to 5 (strongly agree or very satisfied), with certain items (3, 4, and 26) scored inversely. The first two items, pertaining to self-rated QoL and health satisfaction, were analyzed independently. There are three levels of mean QoL scores: low (1–2.33), moderate (2.34–3.66), and high (3.67–5). The length of each category is determined by the difference between the upper and lower limits, divided by the number of levels, as outlined in relevant literature (Ahmed et al., 2023). The questionnaire is presented in Appendix 3.

3.4.2.3 Validity and reliability of the questionnaire

Validity and reliability were assessed for the questionnaire (The WHOQOL-BREF). It was piloted with 10 mothers for clarity. Content and face validity were confirmed by expert review. Internal consistency was confirmed using Cronbach's alpha, which indicated a high overall reliability of 0.94. Domain-specific Cronbach's alpha coefficients were 0.85 for physical, 0.84 for psychological, 0.72 for social, and 0.86 for environmental health for the whole group.

3.5 Data Collection and Procedure

3.5.1 Study I (Qualitative)

Data were collected through face-to-face interviews with participants. Once consent was obtained, interviews were scheduled at the mothers' convenience in the participants' homes or in a private room at the rehabilitation center. Interviews were carried out between February and April 2024. The duration of each interview varied from 40 to 80 minutes. Audio recorders and notebooks were used for effective documentation.

Sociodemographic data was also collected from the mothers about their age, marital status, education level, place of residence, and employment. We also collected information about the child's gender, age, and the severity of their autism disorder. Sixteen mothers participated in this study. Mothers were encouraged to share their experiences freely, using broad, open-ended questions to foster narrative expression. The opening question was, *"Tell me about your experience of having a child with autism."* Additional follow-up prompts such as *"Can you tell me more about..."* and *"How did you feel when..."* helped

guide the discussion and further clarify their experiences. Following the interview, the researcher checked to ensure the participants were not upset and determined whether they needed emotional support. To ensure participant safety, a psychologist was on call during all interviews to provide immediate care, as discussing their child with ASD could trigger distress. After each session, the researcher checked the mother's emotional state. If needed, a support protocol was activated: the researcher first provided immediate, non-judgmental listening and validation, then, with consent, connected the mother to pre-vetted professional resources like a counselor or support hotline. To close the session, the researcher invited participants to reflect on the interview itself by asking, "What was this experience like for you?" The feedback was remarkably consistent: mothers expressed that the simple act of having a dedicated, attentive listener was deeply beneficial. For many, the structured conversation provided a unique opportunity for narrative release, a chance to tell their complete story freely, without fear of interruption, judgment, or the need to protect the listener. This experience of being fully heard and received offered powerful emotional affirmation, which helped to alleviate feelings of isolation and reinforced that their experiences and emotions were real and valid.

3.5.2 Study II (QoL survey)

Data was collected from May to August 2024 using a WHOQOL-BREF tool (WHO, 1996). Participants completed the questionnaire in private rooms at the centers. In addition, an online questionnaire (created using Google Forms) was used to gather data from participants who were unable to visit the center during the study period because of Closure in the West Bank following the October 2023. Completing the form took approximately 15-20 minutes.

3.5.3 Study III (Quasi-Experiment)

Participants in both the intervention and control groups completed the QoL questionnaire at three time points: pre-intervention, two weeks post-intervention, and at a six-month follow-up. The intent was to evaluate not only the immediate effects of the program but also its long-term impact. The control group did not receive any form of support during this timeframe, allowing for a clear comparison of results.

Participants were selected from two locations (North and South), and the experimental group received a set of 12-week sessions. To ensure data integrity and minimize bias, all program sessions for the experimental groups were executed in both locations concurrently. Furthermore, data collection (including, pretest, post-test, and follow-up assessments) was standardized across all groups at the same time, effectively controlling for any effects from time-sensitive external events. This synchronized methodology provides a robust framework to investigate the direct impact of the intervention on QoL improvements by comparing results against the control group over time. Moreover, strategies were established to maintain participant commitment throughout every stage of the data collection process.

3.6 The Intervention: Development and Description of the Program

The "Mindful Motherhood" program serves as a comprehensive group-based initiative designed to provide support and education for mothers raising children with Autism Spectrum Disorder (ASD). Its creation was guided by an integration of qualitative research findings from an initial study (Study I) and QoL survey results from a second study (Study II). A thorough review of the literature on quality of life was conducted, focusing particularly on factors that enhance QoL for families dealing with disabilities. The program's development involved collaboration with psychological counselors, psychologists, and family and behavioral therapists, ensuring that it addresses the multifaceted emotional, cognitive, and social challenges faced by these mothers holistically (Abdelaziz et al., 2024; Al-Masa'deh et al., 2022; Catalano et al., 2018; Kousha et al., 2021; Marino et al., 2021; Rayan & Ahmad, 2016). The initiative aims to improve the overall well-being of mothers and their families by providing targeted support and resources tailored to their unique experiences.

Program Structure and Format

The program was structured as a closed-group intervention comprising 12 weekly sessions over three months to foster group cohesion and trust. Each two-hour session was facilitated by two trained professionals, ensuring a balanced approach between psychoeducation, group discussion, and skill-building exercises. The sessions were given by a multi-disciplinary team containing pediatric neurologists, dietitian, psychologists, behavioral and occupational therapists. The small group size of 13-15 participants was deliberate to promote meaningful engagement and mutual support. The study employed a two-site, controlled design. In Bethlehem, 15 mothers received the intervention while 15 served as controls. In Ramallah, 13 mothers received the intervention while 13 served as controls, resulting in a total sample of 56 participants (N=56). Consistent attendance was a key requirement, as it was integral to building rapport and achieving the program's objectives.

The Program Concept and Essential Elements

The program's concept centers on strengthening the mother rather than focusing solely on the child with autism. It adopts a multi-dimensional approach, simultaneously targeting cognitive, emotional, behavioral, social, and physical aspects of QoL. Each session included psychoeducation on a specific topic for the week, a guided discussion to process information and share experiences, skill-building exercises and activities to translate learning into practice, and session review and reflection to consolidate insights. It also serves as a platform for emotional and psychological support, enabling mothers to share their daily challenges in a non-judgmental environment and receive support from their peers through shared experiences. A pivotal element of the intervention was the group format itself, which actively combated isolation by building a sustainable peer-support network.

Phased Curriculum

The curriculum was sequenced into three progressive phases to mirror the natural caregiving journey:

Foundation and Acceptance (Sessions 1-3): This initial phase focused on building a safe environment, providing essential education about ASD, and validating common emotional responses like grief and loss to guide mothers toward acceptance.

Skill Building and Empowerment (Sessions 4-9): This core phase equipped mothers with practical skills in areas such as cognitive restructuring, self-care, boundary setting, communication, stress management, coping strategies, and problem solving, ensuring tangible outcomes.

Integration and Future-Oriented Growth (Sessions 10-12): The final phase focused on consolidating learning, cultivating a positive self-concept, managing future concerns, and instilling a sense of hope for sustained well-being.

In essence, the "Mindful Motherhood" program is designed to shift mothers from a state of survival to one of empowered advocacy, fostering resilience that benefits both their QoL and the well-being of their children. The detailed session-by-session agenda is presented in Appendices 4 and 5 in English and Arabic versions. (See Fig (3.1))

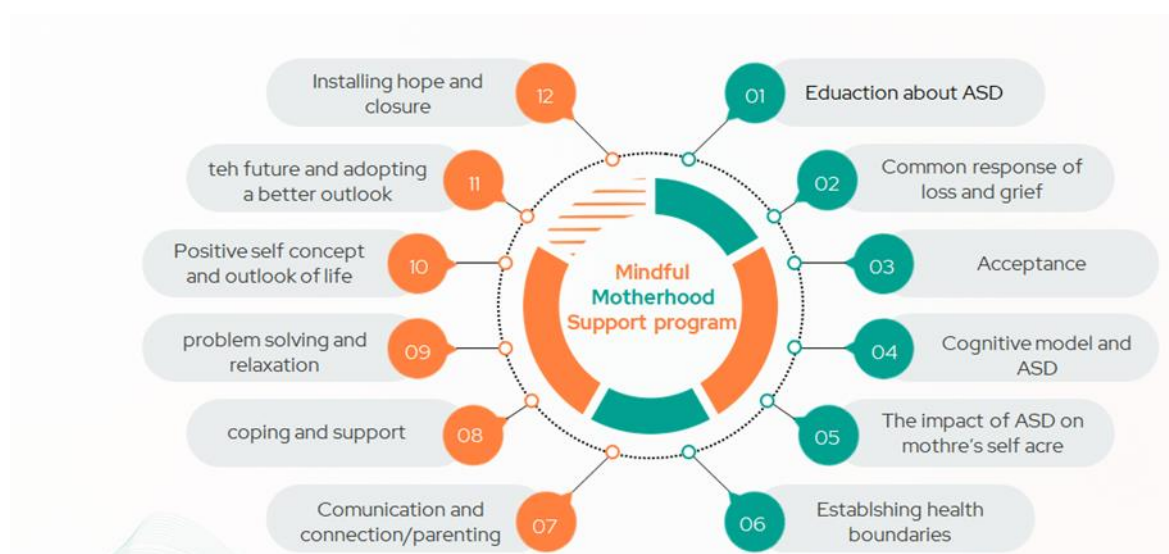


Fig (3.1) Session agendas for the Mindful Motherhood support program

3.7 Data Analysis

3.7.1 Study I (Qualitative)

The recorded interviews and collected notes were all transcribed verbatim. Then, transcriptions were reviewed several times to ensure familiarity with the content. A phenomenological hermeneutic approach, as described by Lindseth and Norberg (2004), was used to analyze the data. This method involves engaging in the hermeneutic cycle that includes moving between understanding and explanation through three methodological

steps: naïve reading, structural analysis, and comprehensive understanding. Naïve reading is a crucial step in understanding a text, as it provides a comprehensive overview. The researcher highlights the emotional struggles mothers face when raising children with ASD, such as denial, grief, guilt, and future concerns. However, acceptance, faith in God, family support, and understanding of autism are essential for overcoming these challenges. The second phase was a structural analysis, which involved a more detailed examination of the text to identify and formulate themes. The text was carefully read to extract meaning units relevant to the study's aim. The meaning units which include single sentences, several sentences, or even a paragraph were critically analyzed in light of the naïve reading. This phase incorporates critical thinking, discussions with others, and reviewing relevant literature to enhance understanding and awareness of meaning within the text. This iterative and reflective process ensures a rich and nuanced interpretation of the lived experiences of the participants. Then subthemes and themes were derived from the meaning units, to reflect the essential meaning of the lived experience. Example from the structural analysis is presented in Table 3.2.

For a comprehensive understanding, the whole text was read carefully several times. The dialectical movements between understanding and interpretation allowed for a more profound engagement in understanding the lived experiences of the mothers. Furthermore, in comprehensive reading, mothers in this study faced a journey filled with challenges. Emotional burdens were the primary issues they encountered, further complicated by social, economic, and familial difficulties. The struggles these mothers faced in recognizing and understanding the diagnosis, exacerbated by caregiving demands and the need to access and navigate services, highlight their ongoing challenges. Despite these obstacles, the mothers' narratives revealed their significant efforts to manage essential daily life skills that promote their children's health and quality of life. They showed an ability to accept their children's behaviors and support them in overcoming adversities. Their spiritual values and familial support empowered them to create a new dynamic that fosters family health and well-being.

Table (3.2) Example from the structural analysis in the study I

Meaning unit	Condensing unit	Subtheme	Theme
It was my first baby, and the diagnosis was a complete shock. I cried because it was so difficult to accept	Feeling sad and denial toward the child's diagnosis with autism	Emotional challenges	Caregiving challenges and burden
The centers were too expensive. We had to spend everything we had on sessions that were less than an hour	The therapy was a financial drain (short sessions at a great cost)	Financial burden	
I don't go out much. My son's behaviors embarrass me, and people don't accept him	I stay home, embarrassed by my son's behaviors and the lack of acceptance	Social isolation and stigma	
after the diagnosis, things got worse with my husband. He never helped. He would just push our child toward me	Ignorance and lack of support from husband after the diagnosis	Burden on family relationship	

3.7.2 Study II (QoL Survey) & Study III (Quasi-Experiment)

A statistical analyses were performed using IBM SPSS Statistics, version 23(IBM Corp., 2015), with a significance level set at $p = 0.05$ for study II and III. The Shapiro-Wilk test was used to assess the normality of the data. In study II where data was normally distributed, descriptive statistics were utilized to present frequencies and percentages for categorical variables, along with means and standard deviations for continuous variables, depicting the characteristics of mothers and children as well as overall quality of life and its domains. To examine the relationships between overall QoL and socio-demographic variables, (independent t-tests, ANOVA with post- hoc test, and correlation analyses were conducted. To control for confounding factors, binary logistic regression was employed to determine the predictors and their relative significance applying a cutoff of 2.5 to distinguish between high and low QoL (Ahmed et al., 2023). In study II, descriptive statistics were used to summarize the data, including frequencies and percentages for categorical variables and means with standard deviations for continuous variables. The Shapiro-Wilk yielded a significant result ($p=0.025$), indicating that the data was not normally distributed. Accordingly, median and IQR were for dependent variable description, and nonparametric tests were used for subsequent analysis. Within-group comparisons of QoL scores were conducted using Wilcoxon Signed-Rank Tests. Between-group comparisons at three time points (pre-intervention, post-intervention, and six-month follow-up) were performed using the Mann-Whitney U test. Effect sizes for between-group

comparisons were calculated using Cliff's Delta (δ), with the following conventional thresholds applied: $|\delta| = 0.147$ (small), $0.147-0.33$ (medium), and ≥ 0.33 (large). Additionally, the Friedman test followed by Wilcoxon sign test was applied to assess changes in QoL scores across the three time points within each group.

3.8 Ethical Consideration

Approval to conduct the study was obtained from the Research Ethical Review Committee at Al-Quds University, Palestine. Mothers received a clear explanation of the nature and objectives and were informed that participation is voluntary, with the right to withdraw without consequence. All collected data were treated with confidentiality. Informed consent was obtained from the participating mothers after they agreed to take part in the study. Following data collection, de-identified data were entered into SPSS and stored in secure files on the researcher's computer with restricted access. The researcher stored hard copies of the completed data sheets in a locked file cabinet. The research team only used the data for research purposes. See Appendix 6 and 7.

The qualitative study involved mothers providing informed consent for audio recordings of interviews. The aim was to create a safe environment for mothers to share their experiences and thoughts, avoiding discomfort or embarrassment. A psychologist was also contacted to be available on call at the time of conducting each interview. This measure ensures that psychological care is available for the mothers if needed, as disclosing sensitive information may trigger hidden feelings and stress related to their child with ASD.

3.9 Summary

The study utilized a mixed-methods approach. First, a phenomenological hermeneutic design was used to conduct in-depth interviews with 16 mothers, analyzing their narratives to understand core themes of challenge, burden, and resilience. Second, a cross-sectional survey with 119 mothers employed the WHOQOL-BREF tool to quantify QoL and identify associated socio-demographic factors. Third, these formative findings informed the development of the "Mindful Motherhood" program, a 12-week group-based intervention. Its effectiveness was tested using a quasi-experimental design with 56 mothers (28 experimental, 28 control), measuring QoL at baseline, post-intervention, and a six-month follow-up. Quantitative data were analyzed using descriptive and inferential statistics (SPSS v.23), while qualitative data underwent a structured hermeneutic analysis. Ethical approval was secured, and all participants provided informed consent, with measures in place to ensure confidentiality and well-being.

Chapter Four

Results

4.1 Introduction

This chapter presents the findings from the three sequential studies of this mixed-methods research. The results are structured by study, detailing the qualitative exploration of mothers' lived experiences, the quantitative assessment of their QoL and associated factors, and the evaluation of the "Mindful Motherhood" intervention's effectiveness. The main findings from the three studies are summarized and presented, study by study, in the following sections.

4.2 Lived experience of mothers of children with ASD (Qualitative)

Sixteen mothers participated in this study. The mothers' ages ranged from 28 to 48 years. Thirteen mothers were married, two were divorced, and one was separated. Half of the mothers had received a university education, while the other half had completed only high school or had fewer qualifications. Approximately three-quarters were unemployed. Geographically, six out of the 16 mothers were from the central West Bank, five from the south, and five from the north. Additionally, eight mothers lived in urban areas, six in rural locations, and two in camps. Among these mothers, fifteen have one child diagnosed with ASD, while one mother has twins. (See Table 4.1).

Table (4.1): Demographic characteristics of mothers and children (n=16)

Mother's characteristics		Total number (n)
Mean age in years (min-max)		35.5 (28-48)
Marital status	Married	13
	Separated	1
	Divorced	2
Educational level	University	8
	School	8
Employment	Employed	4
	Unemployed	12
Place of residency	North of West Bank	5
	Middle of West Bank	6
	South of West Bank	5
Locality	Urban	8
	Rural	6
	Camp	2
Number of children with ASD in the household	One child	15
	Two children	1

The sociodemographic characteristics of the children with ASD as reported by their mothers were as follows: age ranged from 4 to 12 years, with 11 out of 16 being male, including two male twins. Among them, 9 were diagnosed with severe autism, 5 with moderate autism, and 3 with mild autism (See Table 4.2).

Table (4.2) Characteristics of children with ASD ($n = 17$).

Children's characteristics		Total number (n)
Age of the child with ASD		
Mean(min-max)		9 years (4-12)
Child's gender	Male	11
	Female	6
Severity of ASD	Severe	9
	Moderate	5
	Mild	3

Structural Analysis: (Table 4.3) shows the structure analysis of the mothers' narratives that revealed ten subthemes that conveyed the meaning of the mothers' experiences of having a child with Autism. These subthemes were formulated in condensed descriptions to assemble the following three themes: difficult and overwhelming experiences, caregiving challenging and burden, and building resilience

Table (4.3) Summary of the main study findings: Themes, and subthemes

Themes	Difficult and overwhelming experience	Caregiving challenging and burden	Building resilience
Subthemes	1. Difficulties in recognizing and understanding the child's behavior 2. Struggling to provide care and support 3. Accessing and navigating services	1. Emotional burden 2. Social isolation and stigma 3. Burden on family relationship 4. Financial burden	1. Spiritual coping 2. Transforming through acceptance and adaptation 3. Cultivating connections and prioritizing well-Being

Theme one: Difficult and overwhelming experience

The mothers described the difficulties they faced in understanding the changes in their children's behaviors. They were struggling to meet their child's healthcare needs and to provide effective support services to manage changes in the child's behavior. Three key subthemes emerged from their experiences: difficulties in recognizing and understanding the child's behavior, struggling to provide care and support, and accessing and navigating services.

Subtheme 1.1 Difficulties in recognizing and understanding the child's behaviors:

Many mothers in this study reported difficulties in recognizing and understanding the challenging behavior of their children, particularly when it was their first experience with parenthood. One mother said,

“My child did not respond to his name. People around me acknowledged that he had a problem, but I was not attentive to it because he was my first child.” (M12).

During the early stages of symptom recognition, they had difficulties determining whether their children's behaviors fell within typical developmental patterns or indicated potential concerns. One mother, who later discovered that her twins had autism, reflected,

“My children were delayed in talking until 2 years of age, but I thought it was normal since I was a first-time mother. The nurse noticed the delay during their vaccinations.” (M2).

Some mothers did not notice changes in their child's behavior. They initially interpreted behaviors like speech delays or motor difficulties as normal developmental variations. However, the observations or feedback from family members or healthcare providers raised the mother's concerns about their child's development.

One mother said, *“At 2 years, my child lost eye contact and did not respond to his name. My aunt suggested he might have autism, but I was unfamiliar with what autism means.”*(M3).

The mothers often reported communication delays, repetitive movements, and difficulties with social interaction as initial signs of ASD. Some mothers conveyed that these signs became more problematic as their children got older.

One mother said, “By the age of 3 years, it was clear that my child was different from other children. She had poor eye contact, didn’t respond to her name, and was very introverted.” (M10).

A common challenge many mothers faced was a lack of awareness and understanding of autism. They reported the confused thoughts that they experienced regarding the meaning of autism, especially when they first received the diagnosis. Mothers were unable to differentiate between typical and atypical child behavior. Without adequate information, the majority of mothers have found it challenging to understand what autism is, its symptoms, whether it could be cured, and what it means for their child's future. One mother noted that she only became aware of the condition after searching online. Others reported observing developmental delays, yet doctors initially dismissed them as normal.

One mother said, *“At the age of 1 year and 7 months, my child stopped talking, stopped making eye contact, and did not respond to his name. Subsequently, my husband and I felt that he had a problem. My aunt told me that maybe he had autism, but I did not know what autism meant.”* (M3)

Mothers faced difficulties in coming to terms with their children's diagnosis of autism. The diagnosis of autism was unexpected and difficult to comprehend, leading to incredulity and denial among many women. The internet was used for research, but the excessive data may have complicated the acceptance of their child's condition. Despite the problem being recognized, some mothers struggled to accept their child's circumstances.

One woman said, *“It was an unexpected experience to have a child with a disability. I never expected to have a child with autism, which has been such a challenging experience. I was shocked.”* (M4)

Subtheme 1.2: Struggling to provide care and support:

Mothers reported feeling overwhelmed by their caregiving responsibilities and the complete dependency of their children, which involved constant monitoring and teaching. The situation led to exhaustion and a sense of self-neglect. They explained that they lost their typical life, jobs, and consistent sleep.

One woman shared her experience: *“I devoted my life to my child with ASD. He needed my help. Caring for him is not simple, and I lost my job. It is difficult to live my daily life as before”* (M10).

Furthermore, mothers faced significant challenges in understanding their children’s needs and managing their behaviors, which often led to feelings of frustration and helplessness. While they recognized the importance of behavioral therapy to improve their children’s communication and social skills, they struggled with the slow and incremental nature of the progress. This slow improvement often compounded their feelings of uncertainty and doubt about the effectiveness of the therapy.

One mother said, *“I’m worried about the ability of my child to communicate. I can’t understand what makes him pleased, angry, or bored. He frequently cries, and it often requires more than an hour for me to discern his needs* (M4).

Subtheme 1.3: Accessing and navigating services:

Mothers of ASD children faced challenges within health services. The diagnostic process is frequently overwhelming, marked by long wait times and poor communication from healthcare providers. Many mothers experienced psychological distress and caregiving responsibilities while seeking clarity about their child's condition. Once a diagnosis is obtained, securing an appropriate educational place often requires further advocacy to meet their child's specific needs. All mothers described challenges in navigating the diagnostic process. Achieving a confirmed diagnosis was often a long, exhausting, and confusing process involving several evaluations and visits. In some cases, the diagnosis was unreliable or changeable. They also expressed frustration over the lack of professional support in terms of explanation, guidance, and follow-up. Some mothers reported receiving inconsistent information, leaving them feeling confused. The overall sentiment reflects a need for better support and clearer, more consistent explanations regarding autism.

One mother said, *“I moved from one doctor to another to confirm the diagnosis. When my child was 1 year and 4 months old, one doctor mentioned that there was a problem but did not specify what it was. He referred us to a pediatric neurologist, who finally confirmed the diagnosis”* (M11).

Mothers also experienced concerns regarding the quality and accessibility of crucial services. They felt overwhelmed by the scarcity of evidence-based services and qualified professionals, with many available options being private clinics. Additionally, they faced inadequate support systems, poor cooperation between relevant ministries, and insufficient legal protections for their children, which exacerbates feelings of marginalization and vulnerability.

A woman stated, *“At 1 year and 3 months, my child stopped talking. I took her to many clinics. Though her hearing test was normal. I was anxious about why she wasn’t talking; I just wanted someone to provide me answers”* (M14).

All mothers reported difficulties in finding suitable kindergartens and schools for their children with ASD. They conveyed their struggles and frustrated feelings about the insufficient resources for integrating these children into mainstream classrooms. The

available schools that they found are not well prepared to accommodate their children with developmental delays and are lacking well-trained and qualified teachers who can supervise ASD children. As a result, these mothers bore the responsibility of caring for and educating their children who had been rejected from kindergarten at an early age.

One mother expressed, *“My child doesn’t respond to instructions in the school, constantly screams, and won’t stay in his place. His condition seems to be getting worse with the school’s general environment.”* (M3)

Theme two: Caregiving challenges and burden

The second theme of this study emphasizes the profound impact on mothers' daily lives, revealing that they experienced several challenges, including emotional burdens, social isolation and stigma, burdens on family relationships, and financial burdens.

Subtheme 2.1 Emotional burden:

The emotional burden experienced by mothers of children with autism is profound and multifaceted. All mothers reported feelings of sadness, shock, and sorrow following their child's diagnosis. Many had tearful reactions and a strong desire for social isolation. This emotional response often began with denial and a struggle to accept the diagnosis, evolving into feelings of frustration, despair, and guilt over perceived personal responsibility for their child's condition. This emotional turbulence sometimes led to delays in seeking treatment and follow-up as they grappled with their feelings.

One mother described her initial reaction: *“When I recognized the diagnosis, I was shocked and stayed in my room several days. I refused to see or to speak with anyone. It was challenging to accept, and I found myself crying continually”* (M11).

Many mothers reported experiencing ongoing emotional distress and mental health challenges, including depression and frustration.

One mother reported *“I was so sad; I felt like it was the end of life.”* M2. Another mother said, *“Feeling lonely, always in a bad mood, and having a dark outlook on life, not engaging in social gatherings.”* (M10).

They also faced sleep disturbances, often worsened by their child's own sleep problems, resulting in fatigue and increased stress.

One mother noted, *“I have sleeping troubles. My child sleeps late and wakes up several times at night. This makes me always distressed and tired”* (M1).

Self-blame and guilt are common experiences. Four mothers felt responsible and blamed themselves for their child's diagnosis, believing that certain actions, such as allowing their child to watch too much TV, may have contributed to their condition.

One mother said, *“I thought that I was responsible because I left my child watching TV for a long time.”* (M3).

Many mothers experienced strong feelings of anger and embarrassment in social situations related to their child's behavior. These feelings were exacerbated by societal expectations and caregiving challenges.

One mother said, *“During visits, my child becomes restless and starts moving and exploring, and I feel embarrassed”* (M14).

The mothers expressed a range of emotions regarding their child's potential for improvement. Some mothers experienced profound hopelessness, perceiving minimal prospects for their child's improvement or acceptance within the community.

One mother remarked, *"Autism feels like frustration. I'm not optimistic for his future. There is no solution and no treatment... I've given up"* (M8).

However, others maintained hope, finding encouragement in early intervention and celebrating any signs of improvement in the child's behaviors.

One mother shared, *"I felt that my child improved with extensive intervention at an early age. When he reached this stage of improvement, I forgot everything I had done."* (M5).

Most mothers expressed fear or anxiety about future pregnancies, worrying about the possibility of having another child on the autism spectrum.

One mother said, *"I fear having children again. I do not contemplate bringing another baby."* (M2).

All mothers expressed deep concerns about their child's future, including fears of dependency and lack of support as the child grows older. They worried about different aspects of their children's lives, such as their ability to integrate with society, find employment, navigate adolescence, and avoid potential harassment.

One mother shared her worries: *"My child's future needs someone to care for him, as he may never marry in the future. I'm always thinking about him and teaching his brother to take care of him and not leave him alone in the future. The child needs us and has no one else."* (M12)

Subtheme 2.2: Social isolation and stigma: Many mothers experienced social isolation due to fear of judgment, stigma, and the disruptive behaviors of their children. Some chose to withdraw from social interaction to avoid embarrassment, while others minimized their social relationships due to the increased demands of childcare.

One mother said, *"My social relationships are limited. Not everyone accepts my child with ASD. He often jumps and moves around the house, including going to the kitchen. I feel embarrassed by his behaviors."* (M1).

In addition, some mothers described the negative reactions from the neighborhood and people around the society, in which they tend to mock, tease, and label the child's behavior. Sometimes they blamed the mothers for their inability to control the child's behavior and related this to the poor discipline. Accordingly, most of the mothers of children with ASD in this study decided to decrease their social activities and limit their social interactions with the neighborhood to protect the child from negative judgments and bullying.

One mother said, *"It frustrates me how people perceive and label my child's behavior." They called him "crazy" for his hyperactivity. I felt sad that people did not accept him and judged him as an aggressive child."* (M11)

Subtheme 2.3 Burden on family relationship:

Having a child with ASD has increased the burden on the family in different dimensions. Most mothers reported that their time and attention are primarily directed towards the child with autism, which takes almost all their efforts, and little is left to satisfy the needs of other family members. Mothers expressed their worries about the impact of this on their emotional relations with their spouses and on the socioemotional development and academic achievement of their children for being neglected and deprived of social activities and parental support. The child's behaviors exacerbate family conflicts, according to these mothers.

One mother explained, *"My child takes up all my time, and I neglect my husband and everyone else to take care of him. Because of the child's behaviors and continuous screaming, my husband's frustration has increased, and the conflict between us has grown"* (M9).

Many mothers described feelings of unhappiness within their family dynamics after getting the child's diagnosis. They mainly experienced the unsupportive role of their spouses and rejection or avoidance behaviors towards the child. One mother noted that her husband discouraged her from pursuing the child's treatment to avoid the social stigma, which escalated the conflicts between them.

She stated, *"My husband sometimes viewed it as shameful, which led to conflicts between us. He prevented me from going out with her and from taking her treatment counseling sessions"* (M9).

Some mothers have reported facing stressful situations with their husbands due to having a child with autism, which occasionally led to temporary separations. Additionally, some individuals have suggested that the husband should remarry, further increasing the family's burden.

Subtheme 2.4: Financial burden:

Financial burden emerged as a major concern of all the participating mothers. Having a child with autism and the consequent therapies for the child's condition, including investigations, psychotherapy, special education, speech, occupational, and behavioral therapies, and hiring shadow teachers to assist their children in school, have increased the financial demands of the family.

A mother said, *"I cannot provide a shadow teacher to integrate my child into mainstream education. The cost is high and may reach 1500 New Israeli Shekels per month in addition to other follow-up costs"* (M4).

Many mothers indicated that they could not afford all the necessary therapies. They reported having to neglect or stop these essential services because of financial constraints, compounded by a lack of insurance coverage and financial support.

One mother expressed, *"The financial responsibilities for therapies, regular investigations, and transportation are overwhelming; we cannot manage to provide the necessary coverage."* (M14).

Caring for a child with autism was the mother's responsibility, which increased her burden and forced some working mothers to quit their jobs to dedicate time to their child's care. This exacerbated their financial difficulties. One mother expressed that she

resorted to using some financial assistance (zakat) to cover the session's costs: *"The financial situation is difficult. I have some assistance (zakat) from my family to cover my child's sessions."* (M11)

Theme Three: Building resilience

The third theme captured by the mother's experience was building resilience. Mothers reported using a variety of strategies to deal with the difficulties of parenting children with ASD. Mothers can overcome obstacles and improve resilience by using spiritual/religious coping, transforming through acceptance and adaptability, and cultivating connections and prioritizing well-being.

Subtheme 3.1 Spiritual/religious coping: Initially, some mothers experienced feelings of sadness and denial upon receiving their child's diagnosis. However, being religious and having a strong faith in God helped these mothers to accept and overcome adversities. Most of the mothers considered the child a gift given to them by God and took the responsibility of the child's care as surrender to God. This connection with God helps them to manage their emotions and reinforce their commitment to advocating for their children, despite knowing that conditions like autism cannot be cured.

One mother said, *"I am responsible for the child, and God gave me this responsibility. My child is a gift from God, and I have to accept and take care of him."* (M1)

Subtheme 3.2 Transforming through acceptance and adaptation:

Mothers of children with autism shared narratives of their journey from denial to acceptance, illustrating profound personal growth and transformation. Acceptance played a pivotal role in fostering a positive outlook and enabling mothers to take proactive steps in supporting their children. Many mothers described overcoming initial struggles with denial and reaching a point of acceptance that reshaped their perspectives.

One mother explained, *"After thinking, I was convinced that I should accept the difficult situation and do something to help the child by starting treatment."* (M11).

This shift in mindset allowed mothers to build stronger emotional bonds with their children. By embracing their children's uniqueness, many mothers moved beyond societal labels, viewing their children as different rather than disabled. This positive outlook enhanced their relationships and emotional well-being.

As one mother articulated, *"My children are not ill or disabled. I started to see them as normal children, just different in characteristics. They are my life and provide me strength"* (M2).

In parallel with acceptance, mothers adapted to their new realities, acknowledging the permanence of their child's condition. They reorganized their lives to prioritize their children's needs, experiencing personal growth through increased patience, empathy, and tolerance.

One mother reflected, *"I have grown more patient and less anxious. I no longer strive for perfection in my tasks as I did in the past."* (M14).

Adapting also meant confronting societal challenges and stigma with resilience and advocacy. Many mothers became determined to ensure their children's inclusion in society, actively seeking opportunities for interaction and understanding.

One mother shared, *"I often receive harsh comments from women at the market about my child being too noisy. I used to be brought to tears by their comments, but now I advocate for him and occasionally clarify his condition (M11).*

Another mother demonstrated her advocacy efforts: *"I am not discouraged about finding a place that will accept my child. My child needs to interact and play with other children. When I see that my child is being rejected, I start seeking another option."* (M12).

By embracing acceptance and adaptation, mothers transformed their outlook and became stronger advocates for their children, navigating challenges with resilience and determination.

Subtheme 3.3 Cultivating Connections and Prioritizing Well-Being:

Mothers of children with autism often sought support through various networks and emphasized the importance of self-care in navigating the challenges of caregiving. Building connections with others in similar situations, including spouses, extended family, and especially other mothers of children with autism, proved to be a vital coping strategy. These networks provided emotional solace and practical assistance, enabling mothers to manage daily demands effectively. Peer interaction was particularly valuable for sharing experiences, exchanging advice, and building relationships.

One mother shared, *"I created a Facebook page to connect with mothers of children with ASD to share and exchange our experiences and build support connections."* (M2).

Accessing information about autism through workshops, online resources, and peer networks further empowered mothers. These efforts enhanced their understanding and fostered positive attitudes toward their children's conditions.

One mother described her proactive approach: *"I utilized YouTube to learn about occupational therapy and how to support a child with autism, and as a result, I became his teacher."* (M1.)

Recognizing the intense emotional and physical demands of caregiving, many mothers also prioritized self-care. They understood the necessity of taking personal time to recharge and maintain their well-being, which, in turn, allowed them to be more present for their children. Mothers engaged in activities such as spending time with friends, relaxing, or seeking help from family members or hired caregivers to create space for self-renewal.

One mother explained, *"When I'm feeling exhausted, I often ask a family member to stay with my child at home, or I might hire someone to help so I can take a break"* (M3).

By cultivating support networks and focusing on self-care, mothers found a balance that helped them meet the demands of raising a child with autism while preserving their emotional and physical health.

4.3 The quality of lives of mothers of children with ADS (QoL Survey)

4.3.1 Demographic Characteristics

Table (4.3-A, B) indicates that 46.6% of the mothers were under 35 years old, 41.2% had bachelor's degrees, and 93.3% were married. The majority (71.4%) were unemployed. Mothers were distributed across the West Bank, with 38.7% from the south, 31.1% from the north, and 30.1% from the middle. Over half lived in urban areas. Around 50% reported an average income, and 32.7% reported below-average income. On average, households had three adults and three children less than 18 years old (67.5%). Around 92% of mothers had one child with ASD, and 84% of these children were male, with a mean age of 8.1 years. About 52.1% reported a two-years or longer gap between noticing the symptoms and receiving a diagnosis.

Approximately 58.8% of children had health coverage, while 69.7% experienced behavioral problems. Currently, 31.1% of the children receive special education services, 30.3% have undergone occupational therapy, and 14.3% are not receiving any therapy services.

Furthermore, 58.8% of mothers relied on therapists and health providers for information in raising the child with ASD, whereas 14% used the internet and social media. Emotional support was received by 69% from their families, while 25.2% indicated a lack of emotional support. Approximately half of the mothers slept 6 hours per night, 20% less than 6 hours, and they spent an average of 8 hours daily caring for their children with ASD. The most significant negative impact reported of caring for a child with ASD was on the social life and family relationships of mothers with (41.1%) and physical and mental health with (35.3%), whereas spirituality was the most positively affected (27.7%). Around 68% of mothers had health coverage, (31.1%) had psychological distress, and 12.6 % had arthritis. Mothers' QoL ratings were split, with 32% rating it poor or very poor, 35.4% good or very good, and 33.6 % neutral. Health satisfaction was fairly low, with 47.8% dissatisfied or very dissatisfied.

Table (4.3-A) Sociodemographic characteristics of participating mothers and their children with ASD

Variable	Category	N (%), Mean ($\pm$ SD)
Mother's age	<35 years	55(46.6)
	$\geq$ 35 years	63(53.4)
Level of education	Secondary School or less	25(21.0)
	Diploma	25(21.0)
	Bachelor	49(41.2)
	High education	8(6.7)
Place of residence in the West Bank	South	46(38.7)
	Middle	36(30.3)
	North	37(31.1)
Employment status	Employed	34(28.6)
	Unemployed	85(71.4)
Monthly family income (average income is 3000 NIS)	Higher and much higher than the average	20(16.8)
	Within average	60(50.4)
	Lower and much lower than average	39(32.8)
Number of children in the household	< 3	81(68.1)
	$\geq$ 3	38(31.9)
Number of adults in the household		3($\pm$ 1.1)
Health coverage	Yes	81(68.1)
	No	38(31.9)
Health problems	Hypertension	12(10.0)
	Arthritis	15(12.6)
	Psychological distress	37(12.6)
	Digestive problems	10(7.14)
Sleeping hours at night	Less than 6hours	24(20.2)
	6 hours	61(51.3)
	More than 6 hours	34(28.6)
Current age of the child		8.1($\pm$ 3)
Time between noticing the symptoms and receiving a diagnosis	Less than 2years	57(47.9)
	2 years and more	62(52.1)
The child's health problems	Behavioral problems	83(69.7)
	Sensory integration disorder	13(10.9)
	Psychological problems	8(6.8)
	Neurological problems	4(3.4)
The child with ASD is currently receiving the therapy services	No therapy services	17(14.3)
	Occupational therapy	36(30.3)
	Special education	37(31.1)
	Speech therapy	29(24.4)

Table (4.3-B) Sociodemographic characteristics of participating mothers and their children with ASD

Variable	Category	N (%), Mean ($\pm$ SD)
Mothers' life negatively affected by caring for a child with ASD	Social activities and family relationship	49(41.1)
	Physical and psychological health	42(35.3)
	Sporting and recreational activities	2(1.7)
Mothers' life positively affected by caring for a child with ASD	Social activities and family relationship	18(15.0)
	Physical and psychological health	13(10.9)
	Spiritually	33(27.7)
The majority of information in raising the child with ASD is provided by	Health care providers and therapists	70(58.8)
	Family members and spouse	18(14.2)
	Internet, social media, and support groups	21(17.7)
The most emotional support for coping with the responsibilities is provided by	No one	30(25.0)
	Family members and spouse	82 (69.0)
	friends	6(5.0)
Self-rated quality of life	Poor and very poor	38(32.0)
	Neither poor nor good	40(33.6)
	Good and very good	41(35.4)
Perceived satisfaction with own health	Fairly dissatisfied and very dissatisfied	57(47.8)
	Neither satisfied not dissatisfied	22(18.5)
	Satisfied and very satisfied	40(33.6)

4.3.2 Overall QoL and domain scores

Table (4.4) shows that the mean of the perceived overall QoL was 2.85 out of 5, indicating a moderate level of QoL. The highest scored dimension is “physical QoL” with a mean of 3.01 and SD of 1.11. However, the least scored dimension is “Environmental QoL” with a mean of 2.64 and SD of 1.10, followed by the “psychological QoL” with a mean of 2.77 and SD of 1.08.

Table (4.4) Means, standard deviation and percentages for overall QoL and domain scores (N=119)

QoL domain	Mean^a (SD)	Level^b
Physical QoL	3.01(1.11)	Moderate
Psychological QoL	2.77(1.08)	Moderate
Environmental QoL	2.64(1.10)	Moderate
Social QoL	2.99(1.11)	Moderate
Overall QoL	2.85(1.10)	Moderate

Note: a: score out of 5, b: levels are: 1-2.33 low, 2.33-3.67= moderate and 3.67 – 5 high

4.3.2.1 Physical quality of life score

Table (4.5) shows that the mean of the perceived physical quality of life is 3.01. Indicating a moderate level of QoL. The least scored statement is “Do you have enough energy for everyday life?” with a mean of 2.61 and SD 0.84.

Table (4.5) Means, standard deviation and percentages to examine the extent of perceived physical QoL (N=119)

Statement	Mean(SD)	Percentage
1.Pain and discomfort	3.43(1.31)	68.6%
2.Dependence on medical substances and medical aids	3.42(1.32)	68.4%
3.Energy	2.61(0.84)	52.3%
4.Mobility	2.82(1.09)	56.5%
5.Sleep and rest	2.88(1.09)	57.6%
6.Activities of daily living	2.92(1.04)	58.3%
7.Work capacity	2.99(1.09)	59.8%
Mean	3.01(1.11)	60.2%

4.3.2.2 Psychological quality of life score

Table (4.6) shows that the mean of the perceived psychological QoL is 2.77, indicating a moderate level of QoL. The least scored statement is "How often do you have negative feelings such as bad mood, hopelessness, anxiety, and depression?" with mean of 2.23 and SD of 1.17, and “How much do you enjoy life?” with a mean of 2.25 and SD of 0.87

Table (4.6) Means, standard deviation and percentages to examine the extent of perceived psychological QoL. (N=119)

Statement	Mean(SD)	Percentage
1.Positive feeling(enjoying life)	2.25(0.87)	45.0%
2.Spiritually,religion,and personal beliefs	2.97(1.23)	59.3%
3.Thinking,learning,memory and concentration	2.36(1.08)	52.6%
4.Bodily image	3.21(1.05)	64.7%
5.Self-esteem	3.24(1.11)	64.7%
6.Negative feeling such as bad mood, hopelessness, anxiety, .depression	2.23(1.17)	46.6%
Mean	2.77(1.08)	55.45

4.3.2.3 Environmental Quality of Life score

Table (4.7) shows that the mean of the perceived environmental QoL is (2.64), indicating a moderate level of QoL. The least scored statement is “To what extent do you have the opportunity for leisure activities?” with a mean of 1.93 and SD 0.97.

Table (4.7) Means, standard deviation and percentages to examine the extent of perceived environmental QoL (N=119).

Statement	Mean(SD)	Percentage
1.Feeling of safety	2.91(1.18)	58.15%%
2.Helathy physical environmnet	2.55(1.22)	50.92%
3.Financial resources	2.45(1.00)	48.91%
4.Opprotities for aquring new information and skills	2.91(0.88)	58.15%
5.Participation in and opportunities for recreation/lesire activities	1.93(0.97)	38.66%
6.Satisfaction with living place condition	2.68(1.26)	53.61%
7.Accebility to helath services	2.71(1.08)	54.12%
8.Transoprt	2.97(1.18)	59.33%
Mean	2.64(1.10)	52.73%

4.3.2.4 Social Quality of Life score

Table (4.8) shows that the mean of the perceived social quality of life is 2.99, indicating a moderate level of perceived social quality of life. The least scored statement is “How satisfied are you with the support you get from your friends?” with a mean of 2.76 and SD of 1.14.

Table (4.8) Means, standard deviation and percentages to examine the extent of perceived social quality of life. (N=119)

Statement	Mean(SD)	Percentage
1.Personal relationship	3.09(1.15)	61.8%
2.Sexual activity	3.10(1.04)	62.0%
3.Social support	2.76(1.14)	55.3%
Mean	2.99(1.11)	59.7%

4.3.3 Association between the characteristics of mothers/participants and Quality of Life Scores

The findings reveal a statistically significant difference in overall QoL and the age of mothers, with those under 35 reporting higher average QoL scores than those aged 35 and above ($t=2.590$, $p=0.013$). Additionally, significant differences were noted in the environmental QoL ($t=2.972$, $p=0.004$) and social QoL scores ($t=2.415$, $p=0.017$). However, no significant differences were found in the physical and psychological domains of QoL.

Additionally, the analysis revealed no significant difference between mothers' education levels and their overall QoL score ($F= 0.749$, $P = 0.525$). However, there were significant differences in the social dimension of QoL ($F = 3.03$, $P = 0.032$), indicating that mothers with higher education levels reported better scores in this area. In contrast, no statistically significant differences were found in the physical, psychological, and environmental dimensions of QoL.

The results reveal a statistically significant difference between the means of the three categories of family income and overall QoL ($F=8.370$, $P<0.001$); mothers of children with ASD with higher incomes (much higher and higher than average) tend to have better QoL scores compared to those with lower incomes (less than average and much less), and those with average incomes also have significantly better QoL scores compared to those with lower incomes. Additionally, significant differences were found in the psychological dimension ($F=4.88$, $P=0.009$) and the environment dimension of QoL ($F=15.50$, $P<0.001$). The "much higher and higher than average" group has the highest mean psychological and environmental QoL score, followed by the "within average" group. However, no significant differences were found in the physical and social QoL dimensions.

In addition, a statistically significant difference was found between the number of hours a mother sleeps at night and the overall QoL score ($F=3.100$, $P = 0.049$). Likewise, significant differences were observed in physical ($F=3.45$, $P= 0.027$) and psychological QoL scores ($F=3.710$, $P= 0.035$), indicating that mothers who sleep 6 hours per night had higher scores. However, no significant differences were noted in the environmental and social dimensions scores as shown in Table 4.9.

The results also indicated a weak negative correlation between the current child's age and overall QoL ($r = -0.238$, $p = 0.006$). Additionally, negative correlations were observed with the four dimensions: physical ($r = -0.159$, $p= 0.012$), psychological ($r = -0.121$, $p= 0.014$), environmental ($r = -0.316$, $p= 0.001$), and social QoL ($r = -0.238$, $p=0.017$) as shown in table (4.10). Marital status, employment, place of residency, number of adults and number

of children in the household, health coverage, gender of the child, time between noticing the symptoms and receiving a diagnosis, child's health problems, were not statistically significant with the QoL.

Table (4.9) Association between the characteristics of mothers and QoL overall and domain scores (N=119)

Independent Variable ^a		Overall QoL Mean (SD)	Physical QoL Mean (SD)	Psychological QoL Mean (SD)	Environmental QoL Mean (SD)	Social QoL Mean (SD)
Mother's age	<35 years	2.95(0.69)	2.85(0.57)	3.06(0.93)	2.87(0.57)	3.20(0.89)
	≥35years	2.67(0.51)	2.70(0.42)	2.91(0.75)	2.45(0.42)	2.81(0.88)
	t	2.50	1.71	0.92	2.97	2.42
	P	0.013*	0.091	0.403	0.004*	0.017*
Education level	(Less than high school)	2.71(0.63)	2.84(0.58)	2.84(0.27)	2.42(0.78)	2.94(0.93)
	Diploma	2.86(0.56)	2.82(0.43)	3.16(0.76)	2.69(0.75)	2.96(0.92)
	(BA and higher education)	2.81(2.79)	2.69(0.04)	2.98(0.89)	2.74(0.78)	3.17(0.87)
	F	0.52	1.27	0.91	1.94	3.03
	P	0.59	0.29	0.40	0.14	0.032*
Family income	(Higher and much higher than the average)	3.63(0.78)	2.80(0.48)	3.22(0.86)	3.16(0.66)	3.14(0.89)
	(Within Average)	2.91(0.75)	2.82(0.49)	3.11(0.77)	2.79(0.68)	2.79(0.85)
	(Less and much less than average)	2.49(0.780)	2.67(0.54)	2.64(0.86)	2.15(0.75)	2.51(0.90)
	F	8.37	1.09	4.89	15.50	2.58
	P	<0.001*	0.337	0.009*	<0.001*	0.080
Sleeping hours at night	<6h	5.52(0.52)	2.52(0.63)	2.57(0.77)	2.35(0.77)	2.86(0.82)
	=6h	2.86(0.59)	2.84(0.48)	3.07(0.82)	2.70(0.77)	2.94(0.95)
	>6h	2.78(0.63)	2.80(0.40)	3.06(0.89)	2.70(0.80)	3.14(3.24)
	F	3.10(0.61)	3.71	3.456	1.898	0.891
	P	0.046*	0.027*	0.035*	0.155	0.443

Note: a Reference category in parenthesis

*Statistically significant, p<0.05

Table (4.10) Correlation between child's age and overall QoL and all domains (N=119)

Variable		Overall QoL	Physical QoL	Psychological QoL	Environmental QoL	Social QoL
Child's age	r	-0.238	-0.159	-0.121	-0.316	-0.238
	P	0.006*	0.012	0.014	0.001	0.017

*Statistically significant, $p < 0.05$

4.3.4 Logistic Regression

A cutoff score of 2.5 out of 5 was used based on prior literature to categorize the sample units into low ($n=44$, 37%) and high ($n=75$, 63%) QoL groups for the binary logistic regression (Ahmed et al., 2023). After checking all the required assumptions, the researcher utilized the binary logistic regression model to examine the effect of a combination of independent variables (mother's age, education level, family monthly income, mother's sleeping hours at night, and child's age). These specific variables were selected for inclusion in the multivariate model based on their significant association ($p < 0.05$) with the outcome variable in preliminary bivariate analyses.

Table (4.11) shows the logistic regression results. The model was statistically significant, Chi-square ($df = 24$, $p < 0.001$). The five combined independent variables explained 56.7% of the variance in the cutoff overall QoL score (Nagelkerke $R^2 = 0.567$). The results indicated that mothers under 35 years old are significantly more likely to report a better QoL than those over 35 years ($OR=3.359$; 95% CI= 1.203- 9.377; $P=0.021$). Mothers with a diploma have much higher odds of reporting better QoL compared to those with only secondary education or less ($OR= 7.345$; 95% CI =1.056-39.071; $P=0.044$). Mothers with higher and much higher than average family incomes had 19.215 more odds of having a high QoL than those with below-average incomes, and mothers within average family incomes also had 10.426 greater odds of having a chance to report a better QoL than those with below-average family incomes. Finally, mothers who sleep less than 6 hours a night have a lower QoL compared to those who sleep more than 6 hours ($OR= 0.111$; 95% CI 0.18- 0.698- $P=0.019$). Child's age was not statistically significant.

Table (4.11) Binary logistic regression of mother's age, child's age, educational level, family monthly income, and sleeping hours on overall QoL (N=119).

Independent variables (Ref)	OR	P value	IC 95% (Minimum- Maximum)
Mother's age (Ref. ≥ 35 years)			
> 35 years	3.359	0.021*	1.203-9.377
Educational level (Ref. Secondary school or less)			
diploma	7.345	0.044*	1.056-39.071
Family income (Ref. less than average)		0.001*	
Much higher and higher than average	19.215	0.004*	1.962-38.910
Within average	10.426	0.001*	2.595-21.713
Sleep hours at night (Ref. more than 6 hours)			
less than 6 hours at night	0.111	0.019*	0.018-0.698
Childs' age		.446	

Note: Model Summary: $\chi^2(5) = 24.00$, $*p < .001$. Nagelkerke $R^2 = .567$.

Note: CI = Confidence Interval. The dependent variable was a binary measure of overall Quality of Life (1 = higher QoL, 0 = lower QoL), based on a clinically relevant cut-off point. The table shows the adjusted odds of reporting a higher QoL for each predictor. The reference category (Ref) for each variable is the group against which the Odds Ratio is calculated.

*Statistically significant, $p < 0.5$

4.4 The Mindful Motherhood Support Program (Quasi-Experiment)

4.4.1 Descriptive Analysis

Table (4.12) shows the demographic characteristics of the participating mothers, including the experimental and control groups. The majority (58.9%) were aged 30-39 years. In terms of education, 37.5% held a bachelor's degree, followed by 30.1% with secondary school education or less. Geographically, 50.0% were from southern governorates, 26.8% from the central governorates, and 23.2% from the northern governorates. Regarding residence, 53.6% lived in cities, 41.1% in villages, and 5.4% in refugee camps.

Most participants (92.9%) were married, and 69.6% were unemployed. Additionally, the largest subgroup (37.5%) had three children under the age of three. The vast majority (92.9%) had one child diagnosed with autism. Monthly family income was reported as moderate by 58.9%, while 21.4% reported it as below or well below average. Regarding the diagnosis timeline, 60.7% indicated that less than two years passed between noticing developmental concerns and receiving an ASD diagnosis. Additionally, 55.4% stated that their child was diagnosed at age three or older, while 44.6% received the diagnosis before the age of three.

Table (4.12) Socio-demographic characteristics of respondents in the study of QoL of mothers with ASD children in West Bank (N=56).

Variables	Category	N (%) Total	Experimental (n=28)	Control (n=28)
Mothers' age	20 -29 years	10(17.9)	6(21.6%)	4(14.3%)
	30 -39 year	33(58.9)	15(53.6)	18(64.3%)
	40 -49 years	13(23.2)	7(25.0%)	6(21.4%)
level of educational	Secondary school or less	17(30.4)	11(39.3%)	7(25.0%)
	Diploma	13(23.2)	9 (32.1%)	4(14.3%)
	Bachelor	21(37.5)	7 (25.0%)	14(50.0%)
	High education	5(8.9)	2 (7.1%)	3(10.7%)
Place of residence in the West Bank (governorate)	South	28(50.0)	14(50.0%)	14(50.0%)
	Middle	15(26.8)	7(25.0%)	8(28.0%)
	North	13(23.2)	7(25.0%)	6(28.6%)
Place of residency	City	30(53.6)	16(57.1%)	14(50.0%)
	Village	23(41.1)	11(39.3%)	12(42.9%)
	Camp	3(5.4)	1(3.6%)	2(7.1%)
Marital status	Widow	1(1.8)	1(3.65)	0(0.0%)
	Married	52(92.9)	23(82.1%)	23(82.1%)
	Divorced	3(5.4)	4(14.3%)	5(17.9%)
Employment status	Yes, full time	9(16.1)	3(10.7%)	6(21.4%)
	Yes, part time	8(14.3)	3(10.7%)	5(17.9%)
	No	39(69.6)	22(78.6%)	17(60.7%)
Number of children under the age of 18 live in the household	Less than 3 children	20(35.7)	13(47.4%)	8(28.6%)
	3 children	21(37.5)	9(32.1%)	12(42.4)
	More than 3 children	15(26.9)	7(25.0%)	8(28.6%)
Family income	Higher than average (average is 3000NIS monthly)	9(16.1)	2(7.1%)	7(25)
	Within average	33(58.9)	15(53.6%)	18(64.3%)
	Less and much less than average	14(21.4)	8(28.6%)	6(21.4%)

Table (4.13) presents descriptive analysis the median and interquartile range (IQR) for QoL domains at baseline, post-intervention, and at a 6-month follow-up. The data reveal a clear divergent trend between the control and experimental groups. In the control group,

median scores across all domains; Physical, Environmental, Psychological, Social, and Overall QoL demonstrated a slight decline or remained relatively stable from pre-intervention to the 6-month follow-up. In stark contrast, the experimental group showed marked improvement immediately after the intervention, with substantially higher median scores post-intervention compared to their baseline. A follow-up assessment after six months revealed that while the intervention's positive impact on overall quality of life was largely sustained, its benefits in the social and environmental domains showed signs of declined over time.

Table (4.13) Median and interquartile range for each QoL domain pre- post intervention and six months follow-up

Domain	Pre-Intervention Median (IQR)		Post-Intervention Median (IQR)		6-Month Follow-Up Median (IQR)	
	Control	Experiment	Control	Experiment	Control	Experiment
Physical	3.00 (2.43–3.64)	3.29 (2.46–3.57)	2.71 (2.21–3.57)	3.71(3.32–4.11)	2.21(1.89–3.14)	3.50 (3.14–4.00)
Psychological	2.44 (1.88–3.00)	2.81 (2.41–3.34)	2.25 (1.75–2.88)	3.38(2.91–3.50)	2.13 (1.56–2.75)	3.13 (2.66–3.50)
Environmental	2.58 (2.04–3.29)	3.00 (2.38–3.42)	2.50 (1.88–2.83)	3.67(3.17–4.00)	2.33 (2.00–3.08)	3.50 (2.67–3.96)
Social	3.00 (2.00–3.58)	3.33 (2.67–3.67)	3.00 (2.00–3.63)	3.67(3.08–4.00)	2.83 (2.00–3.92)	3.33 (3.00–4.00)
Overall	2.69 (2.08–3.32)	3.00 (2.55–3.38)	2.60 (2.13–3.06)	3.60(3.13–3.88)	2.38 (1.88–2.98)	3.46 (2.83–3.78)

4.4.2 Between-Group Comparisons of Overall QoL and its Domains

Table (4.14) showed non-parametric test results. Mann-Whitney U tests were conducted to evaluate the differences in QoL domain scores between the experimental and control groups across three time points: pre-intervention, post-intervention, and at a 6-month follow-up. At baseline, there were no significant differences between the groups on any QoL domain (all Cliff's Delta $|\delta| < 0.147$, negligible effect sizes), indicating that the groups were equivalent before the intervention.

Following the intervention, the experimental group demonstrated statistically significant and large improvements compared to the control group across all four QoL domains and overall QoL at the post-test assessment (all $p < 0.05$; Physical: $\delta = -0.64$; Environmental: $\delta = -0.66$; Psychological: $\delta = -0.70$; Social: $\delta = -0.47$; Overall QoL: $\delta = -0.68$). These substantial gains were largely maintained at the 6-month follow-up. Large effect sizes persisted for the physical ($\delta = -0.63$), environmental ($\delta = -0.59$), psychological ($\delta = -0.70$), and overall QoL ($\delta = -0.68$) domains. The social domain showed a sustained improvement, though the effect size decreased from large to medium ($\delta = -0.34$).

Table (4.14) Between-Group Comparisons of overall QoL and its domains: Experimental vs. Control at Baseline (pre-intervention), Post-Intervention (Post I), and 6-Month Follow-up

Domain	Time Point	Test Statistic (U, <i>p</i>)	Effect Size(δ), 95% CI
Physical	Pre-I	370.00, <i>p</i> = 0.812	-0.06 [-0.35, 0.23]
	Post-I	141.50, <i>p</i> < 0.001*	-0.64 [-0.82, -0.40]
	6-Month	145.50, <i>p</i> < 0.001*	-0.63 [-0.81, -0.38]
Environmental	Pre-I	241.00, <i>p</i> = 0.105	-0.39 [-0.65, -0.08]
	Post-I	131.50, <i>p</i> < 0.001*	-0.66 [-0.83, -0.43]
	6-Month	162.50, <i>p</i> = 0.001*	-0.59 [-0.78, -0.33]
Psychological	Pre-I	300.50, <i>p</i> = 0.265	-0.23 [-0.52, 0.10]
	Post-I	118.50, <i>p</i> < 0.001*	-0.70 [-0.86, -0.48]
	6-Month	119.50, <i>p</i> < 0.001*	-0.70 [-0.86, -0.48]
Social	Pre-I	298.00, <i>p</i> = 0.280	-0.24 [-0.53, 0.09]
	Post-I	208.00, <i>p</i> = 0.011*	-0.47 [-0.70, -0.17]
	6-Month	259.50, <i>p</i> = 0.048*	-0.34 [-0.60, -0.01]
QoL	Pre-I	295.50, <i>p</i> = 0.113	-0.25 [-0.54, 0.08]
	Post-I	124.50, <i>p</i> < 0.001*	-0.68 [-0.85, -0.45]
	6-Month	124.50, <i>p</i> < 0.001*	-0.68 [-0.85, -0.45]

*Significant (*p*<0.05). A negative δ value indicates that the experimental group had higher median scores on the QoL domain than the control group. The magnitude of the effect is interpreted using the absolute value, $|\delta|$.

*Effect size thresholds of Delta: Small (0.147), Medium (0.147- 0.33), Large (0.33 or More) for Cliff's Delta $|\delta|$.

4.4.3 Within-Group Changes in Quality of Life Scores from Baseline to Post-Intervention and 6-Month Follow-Up

As shown in Table 4.15, Friedman tests followed by Wilcoxon post-hoc analyses were conducted to assess changes over time within each group. Friedman tests were conducted for each QoL domain, followed by Wilcoxon signed-rank post-hoc tests.

The experiment group showed a significant overall change in physical scores over time (*p*=0.005), with a high improvement immediately after the intervention (*p*<0.001). This improvement was maintained at the 6-month follow-up and remained significant from baseline (*p*=0.015). In contrast, there was no significant change in the physical domain in the control group.

In the psychological domain, there is a significant overall change in the experimental group (*p*<0.001), with the most immediate improvement before and after the intervention (*p*<0.001). However, the improvement was still statistically significant after six months, but there was a trend toward a decline (*p* = 0.043). In contrast, the control group showed no significant change over time.

The overall test for the environmental domain was not significant (*p*=0.120), but the pre vs. post difference was significant (*p*=0.004), and the control group showed no significant difference. In addition, the study found a significant improvement in social outcomes in the experimental group (*p*=0.41), with a significant improvement observed pre-and post-

intervention ($p=0.017$). However, this improvement did not persist at six months. However, there was no significant difference in the control group at three points in times. The result shows a significant change in the overall QoL (total score) in the experimental group ($p<0.001$), with a large and immediate improvement pre-and post-intervention ($p<0.001$). However, a marginal or borderline significant decline from the post-intervention peak to the 6-month follow-up was observed, indicating that some of the peak benefits were not fully maintained. In contrast, the control group showed no significant change over time, as per Friedman's analysis.

Table (4.15) Friedman tests followed by Wilcoxon post-hoc analyses, within-group changes in quality of life scores from baseline to post-intervention and 6-month follow-up

Domain	Group	Friedman Test (p-value)	Pre vs. Post (p-value)	Pre vs. 6-Month (p-value)	Post vs. 6-Month (p-value)
Physical	Experimental	0.005*	0.001*	0.015*	0.321
	Control	0.672	0.681	0.399	0.535
Psychological	Experimental	0.001*	0.001*	0.043*	0.08
	Control	0.672	0.681	0.399	0.535
Environmental	Experimental	0.12	0.004*	0.235	0.235
	Control	0.396	0.949	0.347	0.344
Social	Experimental	0.041*	0.017*	0.163	0.320
	Control	0.932	0.428	0.82	0.622
Overall QoL	Experimental	0.001*	0.001*	0.021*	0.050
	Control	0.488	0.738	0.171	0.158

*Significant ($p<0.05$)

4.5 Summary

Study I (Qualitative): Interviews with 16 mothers revealed three core themes characterizing their journey: (1) **Difficult and overwhelming experiences**, encompassing initial confusion, daily caregiving struggles, and systemic barriers to services; (2) **Caregiving challenges and burden**, detailing profound emotional distress, social isolation, strained family relationships, and severe financial strain; and (3) **Building resilience**, achieved through spiritual coping, acceptance and adaptation, and cultivating support networks and self-care.

Study II (QoL Survey): A cross-sectional survey of 119 mothers found a moderate overall QoL score (mean=2.85/5). The environmental domain scored lowest, followed by psychological well-being. Factors significantly associated with better QoL included being under 35 years old, having a diploma-level education, having higher family income, and getting adequate sleep (≥ 6 hours). Logistic regression validated these as principal indicators of enhanced mother's QoL.

Study III (Quasi-Experiment): Evaluation of the "Mindful Motherhood" program with 56 mothers (28 experimental, 28 control) demonstrated its significant effectiveness. The

experimental group showed large, statistically significant improvements in all QoL domains post-intervention compared to the control group, with the greatest effect on psychological and overall QoL. These improvements were largely sustained at a six-month follow-up, confirming the intervention's positive and durable impact on maternal well-being.

Chapter Five

Discussion

5.1 Introduction

This chapter synthesizes and interprets the key findings from the three integrated studies of this dissertation. It moves beyond a simple reporting of results to explore their collective meaning, situating them within the broader literature and theoretical frameworks. The discussion elucidates how the qualitative narratives of struggle and resilience provide the essential context for the measured deficits in QoL. Furthermore, it examines how the "Mindful Motherhood" intervention successfully activated these innate resilient capacities to foster measurable, positive change in maternal well-being.

5.2 Summary of Principal Findings

This dissertation employed a mixed-methods approach to comprehensively investigate the well-being of mothers of children with ASD in the West Bank. The three studies, in aggregate, provide a comprehensive narrative: from understanding lived experience, to measuring the impact on QoL, to evaluating a pathway for improvement.

Study 1 (Qualitative) revealed one main theme: "Navigating through the path of struggle and building resilience of adversity". Results indicated the profound and multifaceted burden of care, characterized by difficult and overwhelming experiences manifested in difficulty in recognizing and comprehending child's behaviors, struggling to provide care, and accessing and navigating services. Findings also revealed a landscape of profound challenges that emerged in emotional, social, financial, and familial aspects of their lives. Despite these challenges, the results also illuminated a powerful building of resilience among mothers as they adopted spiritual coping, transformed through acceptance and adaptation with the situation, and cultivated connection and built networks and prioritized their well-being.

Study II (Quantitative QoL survey) quantified this burden, demonstrating a "borderline-moderate" overall QoL, with the environmental and psychological domains most severely affected. It identified key factors associated with the mother's QoL, including the mother's age and education, family income, and insufficient sleep.

Study III (Quasi-Experimental Intervention) demonstrated that the "Mindful Motherhood" intervention, a comprehensive and structured program designed to improve

mothers' QoL, was effective in creating significant improvements in their QoL in all four domains, with the most significant improvement in psychological and overall QoL. The intervention's effectiveness remained significant at six-month follow-up, with most gains in psychological and overall QoL, but some decline in social and environmental domains required further support.

By integrating the qualitative insights from **Study I**, the quantitative QoL survey from **Study II**, and the interventional outcomes from **Study III**, a powerful and nuanced picture emerges. This discussion synthesizes these findings to argue that the lived experiences provide the essential context for the quantitative deficits in QoL and that together, they form a foundation for the intervention, which successfully activated resilience to foster QoL.

5.3 The Multifaceted Burden of Care and Its Impact on QoL: An Integration of Qualitative Findings and QoL survey Results

The role of Palestinian mothers is defined within a traditionally patriarchal society that assigns them primary responsibility for domestic duties and child-rearing—a role intensified by the compounded pressures of ongoing political conflict and socio-economic hardship (UN ESCWA, 2023; UN Women, 2018). When raising a child with autism, this pre-existing burden becomes profoundly multifaceted.

The overwhelming reality described qualitatively revealed that Palestinian mothers faced significant challenges from the initial struggle to recognize and comprehend their children's behaviors, leading to delayed diagnosis and immense stress. This situation is similar to the experiences of mothers in Nepal and Saudi Arabia (Acharya & Sharma, 2021; Asiri et al., 2023). Systemic barriers exacerbate this burden by making it difficult to access healthcare, rehabilitation, and educational services, which are often only available through costly private institutions.

However, they were also frustrated over the lack of qualified professionals and resources for their children. Similarly, Tathgur & Kang (2021) highlighted the need for improved support and resources for mothers and children with ASD. In addition to managing childcare and household chores, they must manage additional care needs related to autism spectrum disorder and respond to daily demands, along with navigating limited support services, creating physical, emotional, and economic burdens (Abu-Ras & Birani, 2019) that adversely affect their QoL (Sánchez Amate & Luque de la Rosa, 2024; Sinha et al., 2024). This aligns with a qualitative Palestinian study, which revealed that some families initially reject their children's ASD, leading to treatment delays. Insufficient knowledge and financial difficulties exacerbate these delays. The lack of accessible government programs and economic difficulties further complicate child-rearing and domestic responsibilities (Assaf, M., & Al-Hayeh, 2024). It is important to realize that these problems are interconnected and constitute a single, overwhelming reality that drains mothers emotionally and financially while limiting their chances of obtaining treatment, thereby doubling their burden.

The qualitative finding was explicitly quantified in the QoL survey (study II), where mothers reported borderline-moderate QoL (Mean=2.85), with nearly half reporting fair or

very dissatisfaction with their health, highlighting significant challenges related to both their overall QoL and their health. However, the environmental domain showed the lowest QoL scores (mean=2.66), particularly for leisure activity opportunities (mean=1.93). This aligns with the results of the Jordanian study, which is similar to the Palestinian context and demonstrated that the overall QoL among parents of children with ASD was low (mean= 2.32), with the environmental domain showing the lowest QoL scores, including environmental domain, encompassing financial resources, safety, and access to services (mean= 2.06), followed by the social domain (mean= 2.18) (Ahmed et al., 2023). This finding is consistent with broader research indicating that the environmental aspects of QoL were lowest among parents of children with ASD (Christodoulou et al., 2020; Pisula & Porębowicz-Dörsmann, 2017). This result is not a coincidence but a direct reflection of the resource-poor, conflict-affected environment. The qualitative data on financial burden, which forced mothers to neglect essential therapies, provides the painful human narrative behind these statistical scores. Our most critical finding is that the environmental domain has the lowest score. It tells us that the mothers' suffering is not primarily a psychological failing but a logical response to a broken system.

Furthermore, the emotional challenges emerged in study I (qualitative), encompassing grief, denial, frustration, guilt, stress, and anxiety regarding their children's future. This finding aligns with prior studies that mothers of children with ASD faced heightened stress and burnout, particularly concerning their children's autonomy and safety (Acharya & Sharma, 2021; Tathgur & Kang, 2021). The emotional challenges were also echoed in the low score of the psychological domain in the QoL survey (study II), where the psychological QoL domain was one of the lowest scored (mean=2.77), with participants reporting particularly high levels of negative feelings, such as (mean=2.23) and a low capacity to enjoy life (mean=2.25). Many studies have emphasized the importance of interventions targeting mothers of children with ASD to address their psychological health (Sánchez Amate & Luque de la Rosa, 2024). Moreover, our study findings are consistent with recent Palestinian research showing high rates of anxiety and depression among Palestinian women raising children with ASD. Many struggled to balance personal and professional lives. About 31.9% reported extreme depression, and 39.4% reported anxiety. Therefore, support and focused interventions are recommended for improved mental well-being (Muhsen, 2024). These represent a silent public health crisis. Combining the qualitative findings on grief with these extreme quantitative scores for depression and anxiety underscores the severity of the psychological burden. It transforms the problem from a general "stress" into a serious mental health condition requiring urgent, specialized intervention.

Furthermore, the social burden experienced by mothers of children with ASD constitutes a considerable challenge. In the qualitative study, mothers experienced social isolation due to fear of judgment, stigma, and disruptive behaviors. Some choose to withdraw from social interactions to avoid embarrassment, while others minimize their relationships due to increased childcare demands. Some mothers feel embarrassed by their child's disruptive behavior and face negative reactions from the neighborhood and society. To keep their child safe from bullying and negative judgments, most mothers cut back on their social activities and limit their interactions. These findings align with several qualitative and

quantitative studies from the occupied Palestinian territory that document parental experiences of exclusion, shame, withdrawal from social life, and avoidance of community settings because of negative attitudes and anticipated stigma (Dababnah & Parish, 2013; Zahaika et al., 2021). Moreover, this finding is consistent with international studies, which indicated that negative societal perceptions restricted mothers' social interactions, compounded by misunderstanding and blame, frequently perceived as indicators of inadequate parenting (Nealy et al., 2012; Reddy et al., 2019). The impact on social life was also reflected in the QoL survey, where mothers reported moderate scores in the social domain, indicating a significant challenge related to social support, which was perceived to be at a low level. These findings are consistent with Palestinian research demonstrating that mothers of children with disabilities frequently experience limited social support, social isolation, and restricted help-seeking behavior due to stigma, community misunderstanding, and service gaps (Abu-Ras, W., Saleh, M., & Birani, 2018; Dababnah, S., & Parish, 2013). Similarly, international studies highlighted the pivotal role of social support in reducing stress among caregivers while identifying persistent social stigma, limited public awareness, and inadequate institutional support systems as key barriers (Sinha et al., 2024; Raju et al., 2023).

The survey found that 49% of mothers reported negative impacts on family relationships and social activities when they were raising a child with AS. A significant finding emerging from the narratives was the profound strain on marital relationships, characterized by spousal conflict, temporary separations, and external societal pressures. Notably, several mothers reported suggestions from their community that their husbands should remarry—a pressure cited as a devastating addition to their existing burdens. These factors appeared to form a critical pathway contributing to the observed prevalence of divorce and permanent separation within the participant group. This data is supported by literature suggesting that the existence of a child with ASD causes stress, conflicts, and increased divorce rates among parents of ASD-diagnosed children (Papadopoulos, 2021; Tathgur & Kang, 2021).

Finally, the physical toll of caregiving, described as profound exhaustion, sleep disturbances, and self-neglect, was quantified in the physical domain of the QoL survey, where "having energy" was the lowest scoring item (mean=2.61) in the physical domain. This finding aligns with a recent study that has highlighted that the fatigue of Turkish mothers of children with ASD has a greater impact on cognitive, physical, and psychosocial functions (Kara et al., 2025). The low energy indicative of fatigue significantly impacts QoL and well-being, reflecting physical and mental burnout that rest cannot alleviate (Seymour et al., 2013). A mother lacking energy is unable to advocate for her child, sustain social connections, or implement coping strategies. Consequently, tackling this fundamental physical depletion is crucial for improving overall resilience.

In addition, sleep duration in the survey significantly impacted a mother's QoL, both psychologically and physically. Sleep deprivation worsens physical and mental health issues (Baattaiah et al., 2023). This data is consistent with the findings of study by Soytaç and colleagues (2020) that mothers of children with ASD had lower levels of sleep quality and QOL compared to the mothers of typically developing children. Leader and colleagues (2022) examined the correlation between sleep and variables such as stress, anxiety,

depressive symptoms, social support, and QoL in parents of children with ASD (Leader et al., 2022). Enough sleep corresponds with improved QoL and enhanced caregiving capacity, so addressing sleep-related issues is crucial to support a mother's well-being.

In conclusion, the powerful convergence of the qualitative and quantitative data presents an undeniable picture: the multifaceted burden on Palestinian mothers of children with ASD is a systemic crisis with clear, measurable repercussions on their environmental, psychological, social, and physical well-being. This integration does not merely confirm findings; it provides the essential context that transforms statistics into a compelling call for action.

5.4 Key Predictors of Quality of Life among Mothers: From Themes to Measurable Risk

The quantitative QoL survey served to reflect and quantify the challenges identified in the qualitative narratives, translating lived experiences into measurable risk factors. This analysis highlighted a "borderline-moderate" overall QoL (mean=2.85) of the mothers and, more critically, identified a clear profile of vulnerability by determining key socio-demographic predictors.

The QoL survey results showed that family income was one of the strongest indicators of QoL. Mothers with lower incomes had a much lower overall, psychological, and environmental QoL ($p < 0.001$). The logistic regression clearly showed that mothers with higher incomes had over 19 times the odds of reporting better QoL than those with below-average incomes. This study underscores how financial constraints directly limit access to services and exacerbate daily stress (Christodoulou et al., 2020; Raju et al., 2023). This observation is also strongly demonstrated in a qualitative study, where the financial burden of mothers has significantly increased family demands, leading to neglect or cessation of necessary therapies.

The QoL survey (study II) found that younger mothers (<35 years) reported significantly better QoL than their older counterparts. Mothers under 35 are more likely to report better QoL than those over 35. Some studies also found also a negative correlation between the age of the mother and QoL, as the QOL scores were found to worsen with increasing age of the mother (Tekinarslan, 2013). This phenomenon may be due to older mothers experiencing more physical exhaustion from caregiving due to age-related declines in energy, strength, and overall health.

The QoL survey analysis showed also how important education is. While education level was not significantly associated with overall QoL, it was linked to better social QoL. This suggests that education may equip mothers with specific skills, resources, or confidence to build and maintain the crucial support networks identified in the qualitative theme of "Cultivating Connections" as one of the coping strategies used among participating mothers to build resilience in study I. Education also influences understanding of conditions, rehabilitation services, and coping strategies, potentially improving overall quality of life (Ahmed et al., 2023).

The QoL survey further highlighted the critical importance of building networks by finding that 69% of mothers relied on family for support. Conversely, the 25% who reported

having "no one" represent a critically isolated and high-risk subgroup. This result underscores that the absolute absence of a support network is a severe risk factor, compounding all other burdens. It is important to notice that social support enhances maternal QoL and is influenced by educational level and income, suggesting that there are targeted interventions to support mothers of children with ASD (Rezq et al., 2025).

Similarly, the Palestinian cross-sectional study indicated that various factors associated with these mental health outcomes and occupational balance were identified as sociodemographic, such as mother's age, social status, work status, and mother's educational level, in addition to resilience, coping, and illness perception (Muhsen, 2024). This finding tells us how education plays a complex role. It does not protect a mother from fatigue or financial hardship, but it does equip her with a particular resource to alleviate isolation. Consequently, the 25% of mothers who are categorized as "no one gives them support" should be our primary focus. The lack of support is a dangerous issue. Therefore, support programs must be structured to proactively detect and engage these "hidden" families, since they are the least eager to seek assistance independently.

This triangulation of quantitative and qualitative data provides robust evidence that the most vulnerable mother is likely to be older, poor, and isolated. Furthermore, understanding factors associated with mothers' QoL is crucial as it helps policymakers and clinicians to prioritize resources for the most vulnerable groups. These findings strongly demonstrate that socio-economic and demographic factors are not merely background context but rather powerful determinants that can help or hinder the mother's ability to thrive.

5.5 The Path to Resilience: Meaning-Making, "Sumud," and Theoretical Integration

Regardless of the difficulties faced by Palestinian mothers of children with ASD, the third theme of this study emphasized mothers' dedication to fostering resilience, a term that strongly aligns with the Palestinian cultural value of Sumud (steadfastness), as Palestinian women have historically fought for their rights amidst occupation, violence, gender discrimination, and patriarchal norms, demonstrating remarkable resilience in various aspects of life (Marie et al., 2018; Ryan, 2015). This resilience process enables positive adaptation to adversity.

In the qualitative study, a strong faith in God or deeply held religious beliefs helped mothers manage challenges and view children as blessings. Similarly, the QoL survey revealed that 27.7% of respondents identified spirituality as the most positive aspect of raising children with ASD. The literature indicated that the spiritual connection for parents of children with ASD is a powerful mechanism and represents a fundamental source of comfort and resilience, facilitating a transition toward acceptance (Gona et al., 2016; Yaacob et al., 2022).

In the qualitative study, mothers developed resilience by accepting their situations, actively addressing challenges, sustaining a positive outlook, and concentrating on alternatives. They prioritized their children's developmental needs and adjusted their home routines. Research indicated those recognizing children's strengths, rather than their disabilities, reduce stress levels and improve resilience, which benefits the child's development

(Ghanouni & Eves, 2023; Zhou et al., 2019). This proactive adaptation is where the abstract concept of Sumud becomes tangible, through daily acts of problem-solving and routine-building that mothers assert their agency. They are not just enduring their situation; they are actively creating a new normal situation.

A third critical pathway for building resilience was the deliberate cultivation of support networks. The qualitative study highlighted how mothers created nurturing social environments by connecting with other parents facing similar challenges. These networks provided emotional solace, practical knowledge, and a space to set realistic expectations, which directly buffered against isolation and stigma (Zhou et al., 2019; Yaacob et al., 2022). This aligns with the quantitative finding of the QoL survey that social support is a key predictor of QoL. These cultivated connections operationalize the "family adjustment and adaptation response" model (McCubbin & McCubbin, 1993), demonstrating how families actively restructure their social resources to achieve a new balance in the face of crisis.

Theoretical Contribution: Situating Resilience in Context

The findings of the qualitative study contributed to the Meaning Making Model (MMM) theoretical framework to understand how parents cope with the stress of raising a child with a disability. The MMM suggests that distress is not a direct result of the child's disability but rather a product of a discrepancy between the parents' pre-existing global meaning and the appraised situational meaning of the diagnosis. The model links coping strategies to positive outcomes, suggesting that successful employment of meaning-focused coping strategies facilitates the reduction of the meaning discrepancy, leading to improved psychological adjustment and greater subjective well-being. The MMM contributes to the foundational theory that parental adaptation is a dynamic process of reconciling a shattered worldview with a new reality through active meaning-making, which determines psychological outcomes (Platsidou & Mavridou, 2025).

The qualitative study also advances current frameworks of childcare, stress management, and family systems theory by situating maternal care within the overlapping contexts of patriarchy, resource scarcity, and conflict. The results align with the strengths-based resilience model of family stress, coping, and adjustment (McCubbin & McCubbin, 1993), emphasizing the responses and adaptations of families over time in reaction to stressors. Palestinian mothers employed adaptive strategies to address caregiving challenges, sustain family functioning, and promote their children's development through proactive parenting, spiritual meaning-making, and resilience. This study provides an in-depth analysis of resilience in families with children diagnosed with ASD in low-resource, conflict-affected areas, highlighting the environmental and cultural influences on adaptation and coping mechanisms.

5.6 The Effectiveness of the "Mindful Motherhood" Intervention: A Structured Pathway to Resilience

The "Mindful Motherhood" intervention served as the crucial third act in this research narrative, moving from identifying burden and resilience to actively testing a pathway for

change. The intervention was explicitly designed as a structured operationalization of the organic resilience strategies—spiritual coping, acceptance, proactive problem-solving, and cultivating connections—that emerged from the qualitative study. The intervention's demonstrated effectiveness offers compelling evidence that we can systematically nurture these innate capacities to yield measurable improvements in well-being.

The "Mindful Motherhood" intervention was found to be effective in addressing the challenges identified in both the qualitative study and the QoL survey, as well as in linking the resilience theme from the qualitative study, where mothers developed resilience through spiritual coping based on strong faith in God, acceptance, adaptation, problem-solving, and cultivating connections by forming support networks with other mothers of children with ASD while prioritizing their well-being. The "Mindful Motherhood" intervention can be understood as a structured operationalization of these coping strategies. The posttest scores of QoL for the experimental group had increased significantly, with the most significant improvement in psychological and overall QoL, while the control group remained stable or showed slight declines. These results are consistent with findings from a study conducted in Jordan, similar to the Palestinian context, which also demonstrated the effectiveness of structured support interventions in improving QoL among parents of children with ASD (Al-Masa'deh et al., 2022). The significant improvement in QoL could be attributed to the nature of the program, as it is comprehensive and holistic and addresses the multifaceted areas of QoL. Findings supported by Frantz et al., 2018, showed that parents of children with ASD need ongoing support for their physical, psychological, social, and environmental health, which can improve families' quality of life and abilities in addressing behavioral difficulties (Frantz et al., 2018). At a six-month follow-up evaluation, the intervention's effectiveness remained significant, with most gains maintained, particularly in the psychological domain and overall QoL. The effect size remained high, indicating an improvement in their QoL over time. However, there was some decline in the social and environmental domain, suggesting the need for further support to achieve sustained improvements. A highly instructive finding was the partial decay of gains in the social and environmental domains at follow-up. While the group format successfully created temporary, powerful support networks, these bonds weakened once the formal structure ended. Furthermore, the intervention had minimal sustained impact on the environmental domain, despite covering advocacy and problem-solving. This decline in both the social and environmental domains serves as evidence of the systemic barriers that exist.

The most substantial enhancements were observed in the psychological domain. Initial sessions focused on assisting mothers in accepting their child's diagnosis and processing grief. Research has shown that ACT improves psychological flexibility and reduces stress. Parents adhering to the ACT protocol reported notable improvements in psychological flexibility, emotional states, personal values in daily life, and a reduction in parental stress and distress regarding their children's behaviors (Ryan, 2015). Subsequent sessions used cognitive restructuring strategies, a crucial element of CBT models, which focus on altering negative thought patterns to alleviate emotional distress. The intervention's use of "cognitive restructuring strategies" and modules on "practical knowledge regarding ASD, problem-solving skills, and advocacy" formally equipped mothers with the tools to be

more effective "proactive problem-solvers," mirroring the adaptive strategies observed in the resilience theme. The results were in line with recent studies that looked at how well group counseling based on psychoeducation and CBT worked to help mothers of children with ASD who were depressed (Cachia et al., 2016; Wolgensinger, 2015; Zaki & Moawad, 2016). The intervention's initial focus on "assisting mothers in accepting their child's diagnosis and processing grief" directly facilitates the "transition toward acceptance" that mothers described as part of their spiritual meaning-making. This aligns with the Meaning Making Model, showing the intervention helped bridge the gap between their pre-diagnosis expectations and their new reality (Platsidou & Mavridou, 2025).

The intervention produced a short-term improvement in social outcomes that declined by the 6-month follow-up. Peer-facilitated social support networks created by group-based interventions improved social domains and reduced feelings of isolation in mothers. These networks provide emotional strength, shared problem-solving, and long-term social bonds, enabling mothers to implement strategies in real-life contexts (Paynter & Gilmore, 2021). The intervention also strengthened family relationships through modules on communication, boundary-setting, and culturally sensitive parenting strategies, leading to better balance between caregiving and personal needs, where the burden on family was recognized from the findings in the qualitative study.

The impact on the environmental domain is tenuous and inconsistent. There may have been a temporary effect, but it wasn't strong or long-lasting. Despite the intervention's emphasis on imparting practical knowledge regarding ASD, problem-solving skills, advocacy for children's needs, self-care, boundary-setting, and strategies for fostering more manageable and supportive home environments, the enhancement in this area was not substantial. This finding is consistent with a study showing that parents of children with ASD are dissatisfied with several aspects of the environmental domain, such as income, housing conditions, and healthcare services for their children (Rayan & Ahmad, 2016).

Ultimately, the Mindful Motherhood program appeared to initiate a positive feedback loop in the lives of participants. By first addressing psychological acceptance and distress and then equipping mothers with practical tools for coping, communication, and self-care, the intervention enabled them to reframe their challenges and make meaningful improvements across all QoL domains. This transformation from surviving to thriving underscores the power of well-designed, culturally sensitive, and group-based psychosocial interventions.

5.7 Summary of the Chapter

The discussion consolidates findings from three studies to present a comprehensive narrative on the multifaceted burden of care faced by mothers. Study I identifies key challenges, including emotional distress, social isolation, financial strain, and systemic barriers. Study II quantifies this burden, revealing a borderline-moderate overall QoL, with the most severe impacts found in environmental and psychological domains. Important predictors of this compromised QoL include lower family income, older maternal age, and inadequate sleep.

In spite of these significant challenges, mothers exhibited remarkable resilience, termed "Sumud," fostered through spiritual coping, acceptance, proactive adaptation, and the

establishment of support networks, which were major themes in the qualitative findings. The "Mindful Motherhood" intervention, outlined in Study III, was developed as a structured approach to enhance this resilience. The intervention proved to be highly effective, leading to considerable and lasting improvements in all QoL domains, particularly in psychological and overall QoL, which were sustained during a six-month follow-up.

The analysis indicates that the intervention operationalizes natural resilience strategies by facilitating acceptance and grief processing, aligning with the MMM, teaching cognitive-behavioral skills for psychological flexibility, and establishing effective peer-support networks. However, the partial decline in social and environmental domains at follow-up emphasizes the limitations of relying solely on psychosocial interventions. This decline points to the ongoing systemic barriers, such as poverty, stigma, and lack of services, that restrict maternal well-being. Therefore, there is an essential need for accompanying policy and environmental-level reforms.

In conclusion, the findings highlight that while structured, culturally sensitive programs can significantly enhance maternal coping and psychological health, achieving sustainable and comprehensive improvement requires a dual strategy: fostering individual resilience alongside addressing broader socio-environmental determinants of health.

Chapter Six

6.1 Conclusion

This dissertation presents the multifaceted experiences of mothers of children with autism in the West Bank, utilizing a mixed-methods approach and interventional study to provide a comprehensive story. The findings indicated that these mothers experience a multidimensional burden, encompassing physical, psychological, social, and economic factors, as well as the impact of the political situation and resource scarcity. These difficulties also suggested a borderline-moderate quality of life. The environmental and psychological domains were recognized as the most profoundly impacted, demonstrating the cumulative pressures of resource scarcity, societal stigma, and the existing geopolitical landscape.

The findings highlight a significant narrative of resilience, represented by the Palestinian concept of *Sumud*. Mothers exhibit significant resilience in the face of considerable challenges by employing spiritual coping, acceptance, proactive problem-solving and developing support networks. Furthermore, the findings provide evidence of the effectiveness of the Mindful Motherhood program as a powerful intervention. The program was significantly successful in improving mothers' QoL, particularly in the psychological domain, by empowering them with practical tools for cognitive restructuring, stress management, and self-care. The program effectiveness was sustained at the six-month follow-up. Overall, this study not only documents the struggles but also offers a clear path toward hope, empowerment.

The studies conclude that while Palestinian mothers face a unique constellation of adversities rooted in patriarchy, political conflict, and resource scarcity, they also possess profound capacities for resilience that can be effectively nurtured through targeted psychosocial support. Investing in targeted, multi-dimensional, and group-based support for these mothers is essential, as their well-being is fundamental to fostering healthier mothers, better-supported children, and more resilient families.

6.2 Limitation

Despite the valuable contributions of the studies, there are some limitations that should be acknowledged. The limitations of the studies include the following:

Participant recruitment and contextual instability: Recruitment was complicated by the social stigma associated with an autism diagnosis, which led many mothers to decline participation, necessitating a purposive sampling approach. Furthermore, the intervention was implemented during the Israel-Gaza war, resulting in the postponement of several sessions due to general strikes and security disruptions in the West Bank.

Cross-Sectional Design of the Survey: The QoL survey (Study II) provides a snapshot in time. While it identifies correlations and predictors, it cannot establish causal relationships between the variables and maternal QoL.

Non-random sample: Participants in the qualitative and intervention studies were purposively selected, which may limit the transferability/generalizability of the results to all mothers of children with autism in the West Bank

Self-report bias: The study relied heavily on self-report measures (such as the QoL questionnaire and interviews), which may be influenced by the social desirability or temporary moods of the participants.

Focus on mothers only: The study focused exclusively on mothers' experiences. Including the perspectives of fathers or other caregivers would have provided a more complete picture of family dynamics.

6.3 Recommendation

A. Recommendations for Policymakers (Systemic & Legislative)

1. Launch national public awareness and de-stigmatization campaigns.

Fund and execute sustained, multi-platform public education campaigns to increase understanding of ASD, combat stigma, and promote social inclusion from an early age. This addresses the root cause of social isolation identified in the study.

2. Mandate and fund the integration of maternal mental health care.

Issue binding clinical guidelines and create dedicated funding streams to make maternal psychosocial screening and basic support services a reimbursable and mandatory component of national ASD care protocols.

3. Scale the "Mindful Motherhood" program through public systems.

Adopt the program as a recommended, evidence-based intervention within national health and social service frameworks. Allocate public funds for trainer-of-trainer initiatives to ensure nationwide reach and fidelity.

4. Develop comprehensive financial and insurance solutions.

Create state-subsidized programs for therapy, respite care, and transportation. Crucially, legislate to mandate comprehensive coverage for autism diagnosis and lifelong services within all essential health benefit packages, both public and private.

5. Strengthen public infrastructure and inter-ministerial coordination.

Invest in building long-term capacity by training specialized professionals and creating autism-specific resource units in mainstream schools and primary healthcare centers. Establish a permanent inter-ministerial committee (Health, Education, Social Affairs) for integrated policy and planning.

6. Enforce and strengthen legislative protections.

Review, enforce, and strengthen existing laws (e.g., disability rights laws) to guarantee the rights of individuals with ASD to inclusive education, non-discriminatory access to all public services (health, social, recreational), and full participation in society.

B. Recommendations for Decision-Makers (Clinical & Organizational Leadership)

These are directed at healthcare providers, clinic directors, hospital administrators, and NGO program managers.

1. Integrate psychosocial support into standard clinical protocols.

Immediately implement routine screening for maternal anxiety, depression, and quality of life during all follow-up visits for children with ASD. This is a fundamental shift from child-focused to family-aware care.

2. Adopt and implement the "Mindful Motherhood" program.

Formalize this evidence-based intervention within your service portfolio. Invest in training internal staff (e.g., psychologists, senior nurses) as certified facilitators to ensure quality and sustainability.

3. Operationalize a family-centered care model.

Develop service pathways that actively include the family unit. This should include offering couples counseling and sibling support sessions as part of the standard care package for families affected by ASD.

4. Establish dedicated care coordination.

Designate a care coordinator (e.g., a social worker or case manager) for each family to provide a clear, personalized roadmap from diagnosis through all stages of service provision, reducing administrative distress.

5. Create and host sustainable peer-support networks.

Facilitate regular, low-cost peer-support groups for mothers. These can be hosted on-site or in partnership with community centers and led by trained facilitators or experienced "graduate" mothers from your programs.

C. Recommendations for future research

- 1. Longitudinal and controlled Studies:** Future research should employ longitudinal designs to track changes in maternal QoL and family adaptation over time.
- 2. Broaden the scope of inquiry:** Conduct studies that include the perspectives of fathers, siblings, and extended family to gain a holistic understanding of the family system.
- 3. Investigate systemic interventions:** Research should explore the effectiveness of systemic-level interventions, such as anti-stigma media campaigns, teacher training

programs, and policy advocacy efforts, and evaluate their impact on maternal and family well-being.

4. **Methodological improvements:** Employ larger, randomized controlled trials (RCTs) with bigger sample sizes to enhance the statistical power and generalizability of the results

References

- Abdelaziz, E. M., Alsadaan, N., Alqahtani, M., Elsharkawy, N. B., Ouda, M. M. A., Ramadan, O. M. E., Shaban, M., & Shokre, E. S. (2024). Effectiveness of Cognitive Behavioral Therapy (CBT) on Psychological Distress among Mothers of Children with Autism Spectrum Disorder: The Role of Problem-Solving Appraisal. *Behavioral Sciences*, 14(1), 1–16. <https://doi.org/10.3390/bs14010046>
- Abu-Ras, W., Saleh, M., & Birani, A. (2018). Challenges and determination: the case of Palestinian parents of children with disabilities. *Journal of Family Issues*, 39(10), 39(10), 2757–2780.
- Abu-Ras, W., & Birani, A. (2019). *Psychological stressors among Palestinian parents of children with disabilities: Challenges, coping, and determinati*. September. <https://doi.org/10.1177/0192513X18757830>
- Acharya, S., & Sharma, K. (2021). Lived Experiences of Mothers Raising Children with Autism in Chitwan District, Nepal. *Autism Research and Treatment*, 2021, 1–12. <https://doi.org/10.1155/2021/6614490>
- Ahmed, E. A., Alkhaldi, S. M., Alduraiddi, H., Albsoul, R. A., & Alhamdan, M. Z. (2023). Quality of Life of Mothers and Fathers of Children with Autism Spectrum Disorder in Jordan. *Clinical Practice & Epidemiology in Mental Health*, 19(1), 1–8. <https://doi.org/10.2174/17450179-v19-e230529-2022-40>
- Al-Masa'deh, M. M., Younis, N. A., Al-Zoud, N. S., Homidi, M. A., & Rahahleh, Z. J. (2022). the Effectiveness of Counseling Programs in Enhancing Quality of Life for Families of Children With Autism Spectrum Disorder in Jordan. *Humanities and Social Sciences Letters*, 10(1), 75–87. <https://doi.org/10.18488/73.v10i1.2944>
- Al Khateeb, J. M., Kaczmarek, L., & Al Hadidi, M. S. (2019). Parents' perceptions of raising children with autism spectrum disorders in the United States and Arab countries: A comparative review. *Autism*, 23(7), 1645–1654. <https://doi.org/10.1177/1362361319833929>
- Alallawi, B., Hastings, R. P., & Gray, G. (2020). A Systematic Scoping Review of Social, Educational, and Psychological Research on Individuals with Autism Spectrum Disorder and their Family Members in Arab Countries and Cultures. *Review Journal of Autism and Developmental Disorders*, 7(4), 364–382. <https://doi.org/10.1007/s40489-020-00198-8>
- Alemn, D. (2025). The Lived Experiences of Mothers Raising Children with Autism Spectrum Disorder in Ethiopia. *Canadian Journal of Family and Youth / Le Journal Canadien de Famille et de La Jeunesse*, 17(2), 177–197. <https://doi.org/10.29173/cjfy30129>
- Alhazmi, A., Alduraibi, A., Alhemaidd, M., Albrekan, A., & Alshaqha, R. (2023). Quality of Life among the Parents of Saudi Arabian children with Autistic Spectrum Disorder, Riyadh, KSA. *World Family Medicine Journal /Middle East Journal of Family Medicine*, 21(1), 101–115. <https://doi.org/10.5742/mewfm.2023.95256038>
- Alkhateeb, J. M., Hadidi, M. S., & Mounzer, W. (2022). The Impact of Autism Spectrum Disorder on Parents in Arab Countries: A Systematic Literature Review. *Frontiers in Psychology*, 13(July), 1–13. <https://doi.org/10.3389/fpsyg.2022.955442>
- Alsamiri, Y. A., Alaghdaif, A. A., Alsawalem, I. M., Allouash, B. A., & Alfaiddi, S. D. (2024). Mothers of children with disabilities: exploring lived experiences, challenges, and divorce risk. *Frontiers in Psychology*, 15(November), 1–9. <https://doi.org/10.3389/fpsyg.2024.1399419>
- APA. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed.). American psychiatric association.

- Ashbee, E. (2015a). *Educational inclusion for children with autism in Palestine. What opportunities can be found to develop inclusive educational practice and provision for children with autism in Palestine; with special reference to the developing practice in two educationa*. University of Birmingham.
- Ashbee, E. (2015b). *University of Birmingham Research Archive*. November.
- Asiri, W. M. A., Shati, A. A., Al-Qahtani, S. M., Al-Qahtani, Y. A., Aldarami, M. S., Alamri, F. D., Alshahrani, H. S., & Mahmood, S. E. (2023). Assessment of Parental Knowledge, Awareness, and Perception About Autism Spectrum Disorders in Aseer Region, Southwestern Saudi Arabia. *International Journal of General Medicine*, 16, 557–564. <https://doi.org/10.2147/IJGM.S377521>
- Assaf, M., & Al-Hayeh, H. (2024). Family Culture in Dealing with Children with Autism Spectrum Disorder (Analytical Study). *Journal of Educational Sciences*, 8(4), 534–546.
- Baattaiah, B. A., Alharbi, M. D., Babteen, N. M., Al-Maqbool, H. M., Babgi, F. A., & Albatati, A. A. (2023). The relationship between fatigue, sleep quality, resilience, and the risk of postpartum depression: an emphasis on maternal mental health. *BMC Psychology*, 11(1), 1–17. <https://doi.org/10.1186/s40359-023-01043-3>
- Biruk Befkadu, E. Adamek, M., & Ero, D. (2022). The Financial Challenges of Parents of a Child with Autism in Addis Ababa, Ethiopia: A Qualitative Study. *Journal of Social Sciences and Management Studies*, 1(1), 1–7. <https://doi.org/10.56556/jssms.v1i1.33>
- Cachia, R. L., Anderson, A., & Moore, D. W. (2016). Mindfulness, Stress and Well-Being in Parents of Children with Autism Spectrum Disorder: A Systematic Review. *Journal of Child and Family Studies*, 25(1), 1–14. <https://doi.org/10.1007/s10826-015-0193-8>
- Capili, B., & Anastasi, J. K. (2025). *An Introduction to the Quasi-Experimental Design (Nonrandomized Design)*. 124(11), 50–52. <https://doi.org/10.1097/01.NAJ.0001081740.74815.20.An>
- Catalano, D., Holloway, L., & Mpofu, E. (2018). Mental health interventions for parent carers of children with autistic spectrum disorder: Practice guidelines from a critical interpretive synthesis (CIS) systematic review. *International Journal of Environmental Research and Public Health*, 15(2), 1–23. <https://doi.org/10.3390/ijerph15020341>
- Cheng, A. W. Y., & Lai, C. Y. Y. (n.d.). *Parental stress in families of children with special educational needs : a systematic review*. 3.
- Chiarotti, F., & Venerosi, A. (2020). Epidemiology of autism spectrum disorders: A review of worldwide prevalence estimates since 2014. In *Brain Sciences* (Vol. 10, Issue 5). <https://doi.org/10.3390/brainsci10050274>
- Chowdhury, M. S. H., Islam, M. Z., Bhuiyan, M. R., Rafi, A., & Kawsar, A. Al. (2020). Parenting Stress and Coping Capacity Linked with Quality of Life among Parents of Children with Autism Spectrum Disorder. *Journal of Armed Forces Medical College, Bangladesh*, 15(1), 48–54. <https://doi.org/10.3329/jafmc.v15i1.48642>
- Christodoulou, P., Christopoulou, F., Stergiou, A., & Christopoulos, K. (2020). Quality of Life of Parents of Children With Disabilities. *European Journal of Education and Pedagogy*, 1(1), 1–6. <https://doi.org/10.24018/ejedu.2020.1.1.1>
- Dababnah, S., & Parish, S. L. (2013). At a moment, you could collapse”: Raising children with autism in the West Bank. *Children and Youth Services Review*, 35(4), 1670–1678.
- Dababnah, S., & Bulson, K. (2015). “On the Sidelines”: Access to Autism-Related Services in the West Bank. *Journal of Autism and Developmental Disorders*, 45(12), 4124–4134. <https://doi.org/10.1007/s10803-015-2538-y>

- Daly, G., Jackson, J., & Lynch, H. (n.d.). *Family life and autistic children with sensory processing differences : A qualitative evidence synthesis of occupational participation*.
- Dardas, L. A., & Ahmad, M. M. (2014a). Predictors of quality of life for fathers and mothers of children with Autistic Disorder. *Research in Developmental Disabilities*, 35(6), 1326–1333. <https://doi.org/10.1016/j.ridd.2014.03.009>
- Dardas, L. A., & Ahmad, M. M. (2014b). Quality of life among parents of children with autistic disorder: A sample from the Arab world. *Research in Developmental Disabilities*, 35(2), 278–287. <https://doi.org/10.1016/j.ridd.2013.10.029>
- Dardas, L. A., & Ahmad, M. M. (2015). Coping strategies as mediators and moderators between stress and quality of life among parents of children with autistic disorder. *Stress and Health*, 31(1), 5–12. <https://doi.org/10.1002/smi.2513>
- Demšar, A., & Bakracevic, K. (2023). Depression , Anxiety , Stress , and Coping Mechanisms among Parents of Children with Autism Spectrum Disorder Parents of Children with Autism Spectrum Disorder. *International Journal of Disability, Development and Education*, 70(6), 994–1007. <https://doi.org/10.1080/1034912X.2021.1947474>
- DesChamps, T. D., Ibañez, L. V., Edmunds, S. R., Dick, C. C., & Stone, W. L. (2020). Parenting stress in caregivers of young children with ASD concerns prior to a formal diagnosis. *Autism Research*, 13(1), 82–92. <https://doi.org/10.1002/aur.2213>
- Dey, M., Paz Castro, R., Haug, S., & Schaub, M. P. (2019). Quality of life of parents of mentally-ill children: A systematic review and meta-analysis. *Epidemiology and Psychiatric Sciences*, 28(5), 563–577. <https://doi.org/10.1017/S2045796018000409>
- El-Monshed, A. H., & Amr, M. (2021). Perceived stress among mothers of children with autism spectrum disorder in Egypt. *Advances in Autism*, 7(4), 335–344. <https://doi.org/10.1108/AIA-02-2020-0014>
- Frantz, R., Hansen, S. G., & Machalicek, W. (2018). Interventions to Promote Well-Being in Parents of Children with Autism: a Systematic Review. *Review Journal of Autism and Developmental Disorders*, 5(1), 58–77. <https://doi.org/10.1007/s40489-017-0123-3>
- Ghanouni, P., & Eves, L. (2023). Resilience among Parents and Children with Autism Spectrum Disorder. *Mental Illness*, 2023(C). <https://doi.org/10.1155/2023/2925530>
- Giacaman, R., Khatib, R., Shabaneh, L., Ramlawi, A., Sabri, B., Sabatinelli, G., Khawaja, M., & Laurance, T. (2009). Health in the Occupied Palestinian Territory 1 Health status and health services in the occupied Palestinian. *The Lancet*, 373(9666), 837–849. [https://doi.org/10.1016/S0140-6736\(09\)60107-0](https://doi.org/10.1016/S0140-6736(09)60107-0)
- Giacaman, R., & Mitwalli, S. (2021). *Disability in the Occupied Palestinian Territories (West Bank and Gaza): Analysis Report Analysis Central Bureau of Statistics Census Results 2017. January*. www.disabilityundersiege.org
- Gobrial, E. (2018). The lived experiences of mothers of children with the autism spectrum disorders in Egypt. *Social Sciences*, 7(8). <https://doi.org/10.3390/socsci7080133>
- Gona, J. K., Newton, C. R., Rimba, K. K., Mapenzi, R., Kihara, M., Vijver, F. V., & Abubakar, A. (2016). Challenges and coping strategies of parents of children with autism on the Kenyan coast. *Rural and Remote Health*, 16(2), 3517.
- Grace, R. N., Mala, K. K., Kanniammal, C., & Arullapan, J. (2017). Systematic review on quality of life among caregivers of children with autism spectrum disorder. *International Journal of Nursing Education*, 9(4), 83–91. https://www.researchgate.net/profile/Judie_Arulappan/publication/322290358_Systematic_Review_on_Quality_of_Life_among_Caregivers_of_Children_with_Autism_Spectrum_Disorder/links/5b3ca2ce0f7e9b0df5ece168/Systematic-Review-on-Quality-of-Life-among-Caregivers

- Han, J. W., Park, J., & Lee, H. (2022). Analysis of the effect of an artificial intelligence chatbot educational program on non - face - to - face classes : a quasi - experimental study. *BMC Medical Education*, 1–10. <https://doi.org/10.1186/s12909-022-03898-3>
- Heidary, A., Hosseini Shahidi, L., & Mohammadpuor, A. (2015). Spiritual Journey in Mothers' Lived Experiences of Caring for Children With Autism Spectrum Disorders. *Global Journal of Health Science*, 7(6), 79–87. <https://doi.org/10.5539/gjhs.v7n6p79>
- Hosseinpour, A., Biglarian, A., Younesi, S. J., Azkhosh, M., & Safi, M. H. (2022). Exploring Challenges and Needs of Parents Providing Care to Children with Autism Spectrum Disorders: A Qualitative Study. *Iranian Journal of Psychiatry and Behavioral Sciences*, 16(3). <https://doi.org/10.5812/ijpbs-127300>
- IBM Corp. (2015). *IBM SPSS Statistics for Windows, Version 23.0*.
- Kara, K., Kara, O. K., Sutcu, G., & Tonak, H. A. (2025). The Relationship Between Fatigue and Quality of Life in the Turkish Mothers of Children with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 55(8), 2696–2705. <https://doi.org/10.1007/s10803-024-06398-z>
- Kousha, M., Eslamdoust-siahestalkhi, F., Rafieian, S., & Shoar, Y. (2021). *SRPH Effectiveness of Supportive and Educational Group Therapy on Mental Health Improvement of Mothers of Children with Autism Spectrum Disorder*. 3(3), 1–6. <https://doi.org/10.47176/sjmshm.3.3.1>
- Krakovich, T. M., McGrew, J. H., Yu, Y., & Ruble, L. A. (2016). Stress in Parents of Children with Autism Spectrum Disorder: An Exploration of Demands and Resources. *Journal of Autism and Developmental Disorders*, 46(6), 2042–2053. <https://doi.org/10.1007/s10803-016-2728-2>
- Kuru, N., & Piyal, B. (2018). Perceived social support and quality of life of parents of children with Autism. *Nigerian Journal of Clinical Practice*, 21(9), 1182–1189. https://doi.org/10.4103/njcp.njcp_13_18
- Leader, G., Glynn, C., Kirkpatrick, B., Chen, J. L., O'Suilleabháin, P. S., & Mannion, A. (2022). Familial sleep and autism spectrum disorder: a pilot actigraphy study of sleep quality, quality of life and psychological distress. *Irish Journal of Psychological Medicine*, 39(3), 261–271. <https://doi.org/10.1017/ipm.2021.24>
- Lee, J., Hayat, M. J., Spratling, R., Sevcik, R. A., & Clark, P. C. (2018). Relationship of Mothers' Mental and Physical Health to Characteristics of Mothers and Their Children with Developmental Disabilities. *Nursing Research*, 67(6), 456–464. <https://doi.org/10.1097/NNR.0000000000000309>
- Lincoln, Y.S. and Guba, E. . (1985). Naturalistic Inquiry. *Newberry Park*, 289–331.
- Lindseth, A., & Norberg, A. (2004). A phenomenological hermeneutical method for researching lived experience. *Scandinavian Journal of Caring Sciences*, 18(2), 145–153. <https://doi.org/10.1111/j.1471-6712.2004.00258.x>
- Malallah Al Ansari, A., Ali Jahrami, H., Ghazi Hafedh, R., & Mohammed Sharif, I. (2018). A Comparison of the Mental Health, Quality of Life, and General Functioning of Mothers of Young Children and Adolescents with Autism. *Journal of the Bahrain Medical Society*, 30(2), 17–24. https://doi.org/10.26715/jbms.2_18072018
- Marie, M., Hannigan, B., & Jones, A. (2018). Social ecology of resilience and Sumud of Palestinians. *Health (United Kingdom)*, 22(1), 20–35. <https://doi.org/10.1177/1363459316677624>
- Marino, F., Failla, C., Chilà, P., Minutoli, R., Puglisi, A., Arnao, A. A., Pignolo, L., Presti, G., Pergolizzi, F., Moderato, P., Tartarisco, G., Ruta, L., Vagni, D., Cerasa, A., & Pioggia, G. (2021). The effect of acceptance and commitment therapy for improving psychological well-being in parents of individuals with autism spectrum disorders: A randomized controlled trial. *Brain Sciences*, 11(7), 1–15.

- <https://doi.org/10.3390/brainsci11070880>
- McCubbin, H. I., & McCubbin, M. A. (1993). Resiliency in families: A resiliency model of family stress, adjustment and adaptation. In n F. Walsh (Ed.) (Ed.), *Normal family processes: Growing diversity and complexity* (2nd ed., pp. 265–288). Guilford Press.
- McStay, R. L., Trembath, D., & Dissanayake, C. (2014). Stress and Family Quality of Life in Parents of Children with Autism Spectrum Disorder: Parent Gender and the Double ABCX Model. *Journal of Autism and Developmental Disorders*, 44(12), 3101–3118. <https://doi.org/10.1007/s10803-014-2178-7>
- Muhsen, W. N. H. (2024). *Exploring Mental Health Status and Occupational Balance among Palestinian Mothers of Children with Autism Spectrum Disorder (ASD): A Cross Sectional Study* رسالة ماجستير.
- Nasir-Tucktuck, M., Baker, J. N., & Love, M. L. (2017). Educating learners with disabilities in Palestine: The past, present, and future. *Intervention in School and Clinic*, 52(3), 182–187.
- Ndata, C. W., Studies, G., Elechi, C., Polytechnic, A., Harcourt, P., Ineme, M. E., & Umoh, D. I. (2025). *Improving Quality of Life among Primary Caregivers of Children with Autism Spectrum Disorder : The Efficacy of Psychoeducation*. 10(1), 89–101.
- Nealy, C. E., O'Hare, L., Powers, J. D., & Swick, D. C. (2012). The impact of autism spectrum disorders on the family: A qualitative study of mothers' perspectives. *Journal of Family Social Work*, 15(3), 187–201. <https://doi.org/10.1080/10522158.2012.675624>
- Okoye, C., Obialo-Ibeawuchi, C. M., Obajeun, O. A., Sarwar, S., Tawfik, C., Waleed, M. S., Wasim, A. U., Mohamoud, I., Afolayan, A. Y., & Mbaezue, R. N. (2023). Early Diagnosis of Autism Spectrum Disorder: A Review and Analysis of the Risks and Benefits. *Cureus*, 15(8). <https://doi.org/10.7759/cureus.43226>
- Öz, B., Yüksel, T., & Nasiroğlu, S. (2020). Depression-anxiety symptoms and stigma perception in mothers of children with autism spectrum disorder. *Noropsikiyatri Arsivi*, 57(1), 50–55. <https://doi.org/10.29399/npa.23655>
- Palestinian Central Bureau of Statistics. (2011). *Disability survey. Ramallah, Palestine: Palestinian Central Bureau of Statistics and Ministry of Social Affairs*. <https://doi.org/http://www.pcbs.gov.ps/portals>
- Palestinian Central Bureau of Statistics. (2022). *A world of 8 billion: "Towards a resilient future Harnessing opportunities and ensuring rights and choices for all."* https://www.pcbs.gov.ps/portals/_pcbs/PressRelease/Press_En_InterPopDay2022E.pdf
- Papadopoulos, D. (2021). Mothers' experiences and challenges raising a child with autism spectrum disorder: A qualitative study. *Brain Sciences*, 11(3), 1–16. <https://doi.org/10.3390/brainsci11030309>
- Paynter, J., & Gilmore, L. (2021). *Social Support and Coping Strategies of Parents Raising a Child with Autism Spectrum*.
- Pisula, E., & Porębowicz-Dörsmann, A. (2017). Family functioning, parenting stress and quality of life in mothers and fathers of Polish children with high functioning autism or Asperger syndrome. *PLoS ONE*, 12(10), 1–19. <https://doi.org/10.1371/journal.pone.0186536>
- Plano Clark, V. L. (2017). Mixed methods research. *Journal of Positive Psychology*, 12(3), 305–306. <https://doi.org/10.1080/17439760.2016.1262619>
- PLATSIDOU1, M., & Anastasia MAVRIDOU1. (2025). Meaning making in parenting a child with disabilities: Discrepancy of meaning, psychological distress, coping strategies and stress-related growth. *Psychology: The Journal of the Hellenic Psychological Society*, 30(1), 91–106.

- Raju, S., Hepsibah, P. E. V., & Niharika, M. K. (2023). Quality of life in parents of children with Autism spectrum disorder: Emphasizing challenges in the Indian context. *International Journal of Developmental Disabilities*, 69(3), 371–378. <https://doi.org/10.1080/20473869.2023.2173832>
- Rayan, A., & Ahmad, M. (2016). Effectiveness of mindfulness-based interventions on quality of life and positive reappraisal coping among parents of children with autism spectrum disorder. *Research in Developmental Disabilities*, 55, 185–196. <https://doi.org/10.1016/j.ridd.2016.04.002>
- Reddy, G., Fewster, D. L., & Gurayah, T. (2019). PARENTS' VOICES: experiences and coping as a parent of a child with autism spectrum disorder. *South African Journal of Occupational Therapy*, 49(1), 43–50. <https://doi.org/10.17159/2310-3833/2019/vol49no1a7>
- Rezq, K. A., Albalawi, H. M. H., & Alharbi, H. F. (2025). Exploring Social Support and Quality of Life Among Mothers of Children with Autism Spectrum Disorders: A Cross-Sectional Study. *Healthcare (Switzerland)*, 13(2), 1–16. <https://doi.org/10.3390/healthcare13020095>
- Ryan, C. (2015). Everyday Resilience as Resistance: Palestinian Women Practicing Sumud. *International Political Sociology*, 9(4), 299–315. <https://doi.org/10.1111/ips.12099>
- Sánchez Amate, J. J., & Luque de la Rosa, A. (2024). The Effect of Autism Spectrum Disorder on Family Mental Health: Challenges, Emotional Impact, and Coping Strategies. *Brain Sciences*, 14(11). <https://doi.org/10.3390/brainsci14111116>
- Seymour, M., Wood, C., Giallo, R., & Jellet, R. (2013). Fatigue, stress and coping in mothers of children with an autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 43(7), 1547–1554. <https://doi.org/10.1007/s10803-012-1701-y>
- Shattnawi, K. K., Bani, Saeed, W. M., Al-Natour, A., Al-Hammouri, M. M., Al-Azzam, M., & Joseph, R. A. (2021). Parenting a Child With Autism Spectrum Disorder: Perspective of Jordanian Mothers. *Journal of Transcultural Nursing*, 32(5), 474–483. <https://doi.org/10.1177/1043659620970634>
- Shawahna, R., Fahed, B., Qadri, D., Sharawi, L., Soroghli, M., & Dweik, M. (2017). Awareness and knowledge of autism spectrum disorders among pharmacists: A cross-sectional study in Palestinian pharmacy practice. *Journal of Autism and Developmental Disorders*, 47(6), 1618–1627. <https://doi.org/10.1007/s10803-017-3085-5>
- Shawahna, R., Jaber, M., Yahya, N., Jawadeh, F., & Rawajbeh, S. (2021). Are medical students in Palestine adequately trained to care for individuals with autism spectrum disorders? A multicenter cross-sectional study of their familiarity, knowledge, confidence, and willingness to learn. *BMC Medical Education*, 21(1), 1–13. <https://doi.org/10.1186/s12909-021-02865-8>
- Silenzio, V. M. B., & Zahorodny, W. (2023). *Metropolitan Area : variation by sociodemographic factors*. 15(1), 146–155. <https://doi.org/10.1002/aur.2628>
- Singh, N. N., Lancioni, G. E., Winton, A. S. W., Karazsia, B. T., Myers, R. E., Latham, L. L., & Singh, J. (2014). Mindfulness-Based Positive Behavior Support (MBPBS) for Mothers of Adolescents with Autism Spectrum Disorder: Effects on Adolescents' Behavior and Parental Stress. *Mindfulness*, 5(6), 646–657. <https://doi.org/10.1007/s12671-014-0321-3>
- Sinha, R., Rajpoot, K., Uniyal, A., & Sabid Syed, V. (2024). Perceived Mental Health and Quality of Life in Mothers of Children with Autism Spectrum Disorder in Armed

- Forces in a Tertiary Care Center of North India: A Cross-Sectional Study. *Annals of Child Neurology*, 32(4), 245–249. <https://doi.org/10.26815/acn.2024.00612>
- Taslaq, N., Russo, S., Sciences, H., Campus, O., Street, N., Sciences, H., Campus, O., & Street, N. (2017a). *Parents ' Experience during the Diagnostic Process of Autism Spectrum Disorder in the West Bank . A Descriptive Phenomenological Study* (Vol. 7, Issue 6). An-Najah National University.
- Taslaq, N., Russo, S., Sciences, H., Campus, O., Street, N., Sciences, H., Campus, O., & Street, N. (2017b). *Parents ' Experience during the Diagnostic Process of Autism Spectrum Disorder in the West Bank . A Descriptive Phenomenological Study*. 7(6), 79–90.
- Tathgur, M. K., & Kang, H. K. (2021). Challenges of the Caregivers in Managing a Child with Autism Spectrum Disorder— A Qualitative Analysis. *Indian Journal of Psychological Medicine*, 43(5), 416–421. <https://doi.org/10.1177/02537176211000769>
- Tekinarslan, Il. C. (2013). A comparison study of depression and quality of life in Turkish mothers of children with Down syndrome, cerebral palsy, and Autism Spectrum Disorder. *Psychological Reports*, 112(1), 266–287. <https://doi.org/10.2466/21.02.15.PR0.112.1.266-287>
- UN ESCWA. (2023). *Social and economic situation of Palestinian women and girls July 2020–June 2022*. https://www.un.org/unispal/wp-content/uploads/2023/03/ESCWAREPORT_090323.pdf
- UN Women. (2018). *Caught up between a rock & a hard place: Occupation, patriarchy and gender relations a case study of Palestinian women in area C & H2*. <https://palestine.unwomen.org/sites/default/files/Field Office Palestine/Attachments/Publications/2019/2/English.pdf>
- Vasilopoulou, E., & Nisbet, J. (2016). The quality of life of parents of children with autism spectrum disorder: A systematic review. *Research in Autism Spectrum Disorders*, 23, 36–49. <https://doi.org/10.1016/j.rasd.2015.11.008>
- Wahdan, M. M., Malak, M. Z., Al-Amer, R., Ayed, A., Russo, S., & Berte, D. Z. (2023). Effect of incredible years autism spectrum and language delays (IY-ASD) program on stress and behavioral management skills among parents of children with autism spectrum disorder in Palestine. *Journal of Pediatric Nursing*, 72, 45–52. <https://doi.org/10.1016/j.pedn.2023.03.018>
- WHO. (1995). Whoqol Group. (1995). The World Health Organization quality of life assessment (WHOQOL): position paper from the World Health Organization. *Social Science & Medicine*, 41(10), 1403-1409.
- WHO. (1996). WHOQOL-BREF : introduction, administration, scoring and generic version of the assessment : field trial version, December. In *World Health Organization* (pp. 1–16).
- Wolgensinger, L. (2015). Cognitive behavioral group therapy for anxiety: Recent developments. *Dialogues in Clinical Neuroscience*, 17(3), 347–351. <https://doi.org/10.31887/dcms.2015.17.3/lwolgensinger>
- Yaacob, W. N. W., Yaacob, L. H., Zulkifli, M. M., & Muhamad, R. (2022). A Journey towards Resilience: Coping Strategies Adopted by Parents with Children Having Autism Spectrum Disorder in Northeast Malaysia. *International Journal of Environmental Research and Public Health*, 19(4). <https://doi.org/10.3390/ijerph19042458>
- Yamada, A., Kato, M., Suzuki, M., Suzuki, M., Watanabe, N., Akechi, T., & Furukawa, T. A. (2012). Quality of life of parents raising children with pervasive developmental disorders. *BMC Psychiatry*, 12. <https://doi.org/10.1186/1471-244X-12-119>

- Zahaika, D., Daraweesh, D., Shqerat, S., Arameen, D., & Halaweh, H. (2021). Challenges Facing Family Caregivers of Children With Disabilities During COVID-19 Pandemic in Palestine. *Journal of Primary Care and Community Health*, 12. <https://doi.org/10.1177/21501327211043039>
- Zahid, A. (2025). *Perceived Stress and Anxiety among Parents of Children with Autism : A Quantitative Study of a Pakistani Cohort*. 13(01), 83–87. <https://doi.org/10.52131/pjhss.2025.v13i1.2638>
- Zaki, R. A., & Moawad, G. E. N. A. (2016). Influence of autism awareness on the psychological well-being of mothers caring for their children with autism. *Journal of Nursing Education and Practice*, 6(9). <https://doi.org/10.5430/jnep.v6n9p90>
- Zeidan, J., Fombonne, E., Scolah, J., Ibrahim, A., Durkin, M. S., Saxena, S., Yusuf, A., Shih, A., & Elsabbagh, M. (2022). Global prevalence of autism: A systematic review update. *Autism Research*, 15(5), 778–790. <https://doi.org/10.1002/aur.2696>
- Zhao, M., & Fu, W. (2022). The resilience of parents who have children with autism spectrum disorder in China: a social culture perspective. *International Journal of Developmental Disabilities*, 68(2), 207–218. <https://doi.org/10.1080/20473869.2020.1747761>
- Zhou, W., Liu, D., Xiong, X., Xu, H., & Manchia, M. (2019). Emotional problems in mothers of autistic children and their correlation with socioeconomic status and the children's core symptoms. *Medicine (United States)*, 98(32). <https://doi.org/10.1097/MD.00000000000016794>

Appendix 1

The Interview Guide (English version)

Lived experience of mothers having a child with autism in the West Bank, Palestine

Interview guides

Interview number.....	Date
Name of interviewer.....	Time.....
Centre.....	

Demographic characteristics of mothers	
Age.....	Place of residence.....
Educational level.....	Work

Demographic characteristics of child	
Sex.....	Age.....

- Can you tell me about your experience? How is it to be a mother to a child with autism?
 - When did you start to notice that something was going wrong with your child?
 - What did you notice that prompted you to seek help?
 - What did you do when you realized that your child had a problem?
- Can you describe your feelings when you understood the diagnosis? Can you tell me about that?
 - How do you feel about that?
 - How did you react upon being diagnosed with autism?
 - How did you perceive the initial information you received about autism and its treatment?
- How did other members of the family and people around you react to your child's condition (autism)? How does this make you feel?
 - Could you tell me about the family's relationship before and after the diagnosis? Marital relationship?
 - How has having a child with autism affected your relationships with others?
 - How did they treat you?
- Can you tell me about your experience with your child's treatment/interventions? Could you provide me an example? How do you feel about it?
 - Has your child improved with treatment/interventions?
 - How did it go?
- Can you describe your daily life experience? What are some of the challenges you face on a typical day?
 - What is the best part of your day?
 - Could you describe your relationship with your child and how your child communicates emotions to you?
 - What's the most difficult part of your relationship with your child?

- Could you please share your experiences raising your child with ASD over the years?
 - What are your additional responsibilities when raising an child with ASD ?
 - How do these responsibilities affect your daily life? Your social life/social relationship/marital relationship/your job? Could you elaborate on your personal needs?
 - Could you tell me about the effect of your child's condition (autism) on your financial condition?
 - Looking ahead, what concerns do you have about your child's future?
 - What have been the main challenges for you as the mother of an child with ASD ?
 - Do you feel you have changed as a person since the day you had your child? How?
 - What advice would you give to a new mother whose child has autism?
- Tell me about your experience as a mother of a child with autism in the Palestinian culture. How do you feel about this?
 - What is your experience with community/school/healthcare professionals and social workers/psychologists?
 - How do you view the relationship between a child with autism and society? How do you perceive the social acceptance of your child?
 - What type of support and services are available to your child? How would you describe support and services in the community to your child?
 - Would you like to add something else that we have forgotten to discuss?

Appendix 2

The Interview Guide (Arabic Version)

أسئلة المقابلة

رقم المقابلة	التاريخ
اسم الباحث	الوقت
المركز	

الخصائص الديموغرافية للأم	
العمر	مكان الإقامة
المستوى التعليمي	العمل

الخصائص الديموغرافية للطفل	
الجنس	العمر

س1) هل يمكن أن تخبرني عن تجربتك؟ كيف يكون الأمر أن تكوني أمّاً لطفل توحد؟

- متى بدأت تلاحظين وجود مشكلة عند طفلك؟
- ما الذي لاحظتيه على طفلك وجعلك تطلبين المساعدة؟
- ماذا فعلت عندما أدركت أن طفلك يعاني من مشكلة

س2) هل يمكنك وصف مشاعرك عندما فهمت التشخيص؟ هل يمكن أن تخبرني عن ذلك

- ما هو شعورك حيال ذلك؟
- كيف كان رد فعلك عند تشخيص التوحد؟
- كيف ترى المعلومات الأولية التي تلقيتها عن (التوحد) والعلاج؟

3) كيف كان رد فعل أفراد الأسرة الآخرين والأشخاص من حولك تجاه حالة طفلك (التوحد)؟ بماذا شعرت؟

- هل يمكن أن تخبرني عن علاقة الأسرة قبل وبعد التشخيص؟ / العلاقة الزوجية؟
- كيف أثر إنجاب طفل مصاب بالتوحد على علاقتك بالآخرين؟ / كيف تعاملوا معك؟

4) هل يمكن أن تخبرني عن تجربتك مع علاج / تدخلات طفلك؟ هل بإمكانك إعطائي مثالاً؟ كيف تشعر حيال ذلك؟

- هل تحسن طفلك مع العلاج / التدخلات؟

- كيف سارت الأمور؟

5) هل يمكنك وصف تجربة حياتك اليومية؟ ما هي بعض التحديات التي تواجهها في يوم عادي؟
- ما هو أفضل جزء من يومك؟

- هل يمكنك وصف علاقتك مع طفلك وكيف ينقل طفلك المشاعر لك؟

- ما هو أصعب جزء في علاقتك بطفلك؟

6) هل يمكن أن تخبرني من فضلك عن تجربتك أثناء تربية طفلك المصاب بالتوحد بعد مرور عدد من السنوات مع طفلك

- ما هي مسؤولياتك الإضافية عند تربية طفل مصاب بالتوحد؟

- كيف تؤثر هذه المسؤوليات على حياتك اليومية؟ حياتك الاجتماعية / علاقتك الاجتماعية / علاقتك الزوجية / وظيفتك؟ احتياجاتك الشخصية؟

- هل يمكن أن تخبرني عن تأثير حالة طفلك (التوحد) على الوضع المالي؟

-و "بالنظر إلى المستقبل ، ما هي مخاوفك بشأن مستقبل طفلك؟

- ما هي التحديات الرئيسية بالنسبة لك كأم لطفل التوحد؟

- هل تشعر أنك قد تغيرت كشخص منذ اليوم الذي أنجبت فيه طفلك؟ كيف؟

- ما هي النصيحة التي تعطيها للأم الجديدة التي يعاني طفلها من التوحد؟

7) حدثني عن تجربتك كأم لطفل التوحد في المجتمع الفلسطيني؟ كيف تشعر حيال ذلك؟

- ما هي تجربتك مع المجتمع / المدرسة / المتخصصين في الرعاية الصحية والأخصائيين الاجتماعيين والنفسيين؟

-كيف ترى العلاقة بين الطفل المصاب بالتوحد والمجتمع؟ كيف تجد القبول الاجتماعي الخاص بك

- ما هو نوع الدعم والخدمات المتاحة لطفلك؟ كيف تصف الدعم والخدمات في المجتمع لطفلك؟

Appendix 3

Quality of Life Questionnaire and Informed Consent (Arabic Version)



جامعة القدس

برنامج الدكتوراه في الصحة العامة

الاستبيان-الموافقة الاخلاقية

عزيزتي المشتركة

أطلب منك المشاركة في دراسة بحثية بعنوان: جودة الحياة عند امهات اطفال التوحد في الضفة الغربية, فلسطين:

يعتبر هذا البحث شرطا أساسيا لمتطلبات الحصول على درجة الدكتوراه في الصحة العامة من كلية الدراسات العليا -جامعة القدس . تهدف هذه الاستبانة إلى جمع بيانات لقياس جودة الحياة ومعرفة العوامل المرتبطة بهاءند امهات اطفال التوحد في فلسطين-، ولا توجد إجابات خاطئة أو صحيحة. لذا نأمل منكم الإجابة بموضوعية على أسئلة الاستبيان وبوضع إشارة على الإجابة التي ترونها مناسبة في المكان المخصص

معلومات عن الاستبانة: تحتوي هذه الاستبانة على 3 اجزاء رئيسية. يتراوح الوقت المتوقع لإتمامها ثلاثون دقيقة. الرجاء الاجابة على جميع الأسئلة مع الأخذ بالاعتبار تجربتك.

الاستقلالية والسرية: مشاركتك في هذه الدراسة اختيارية، إذا كنت لا ترغبين في المشاركة في الدراسة، فيمكنك رفض المشاركة أو الانسحاب من الدراسة في أي وقت دون أن يؤثر ذلك على الخدمة المقدمة. سيتم احترام إجابتك وسرية التعامل معها حيث سيتم استخدامها لأغراض الدراسة فقط. ولن يتم الاطلاع عليها إلا من قبل فريق البحث العلمي . لن يكون هناك إمكانية لربط إجابتك مع اسمك .سيتم تخزين المعلومات التي تنتجها هذه الدراسة في ملف خاص وتحديدها برقم رمز فقط . جميع البيانات الواردة من المشاركين سيتم تحليلها بشكل جماعي.

استخدام المعلومات في هذا الاستبانة يتم اجراء هذه الدراسة بواسطة باحثة دكتوراه من جامعة القدس حيث أنه سيتم استخدام النتائج لوضع التوصيات لتوجيه صناعات السياسات في تطوير السياسات وبرامج دعم امهات أطفال التوحد في فلسطين)

توقيع بالموافقة على المشاركة-----

لمزيد من المعلومات وفي حال رغبتكم الاستفسار لا تتردد بالتواصل مع الباحث الرئيسي من جامعة القدس

طالبة الدكتوراه : بشائر النتشة رقم الجوال 0546177041

شاكرين لكم حسن تعاونك

الاستبيان

رقم الاستمارة ☐ ☐ ☐	التاريخ -----
المكان -----	اسم الباحث -----

الأسئلة التالية يتم الاجابة عنها من قبل المشتركة
الجزء الأول: يطرح هذا القسم اسئلة عنك وعن عائلتك. الرجاء الاجابة عن الأسئلة ووضع اشارة في المكان المخصص.

M01	كم عمرك _____						
M02	ما هو مستواك التعليمي؟ <table border="1"> <tr> <td>☐ 1. لم التحق بالمدرسة</td> <td>☐ 2. ثانوية عامة او اقل</td> <td>☐ 3. دبلوم</td> </tr> <tr> <td>☐ 4. بكالوريوس</td> <td>☐ 5. دراسات عليا</td> <td></td> </tr> </table>	☐ 1. لم التحق بالمدرسة	☐ 2. ثانوية عامة او اقل	☐ 3. دبلوم	☐ 4. بكالوريوس	☐ 5. دراسات عليا	
☐ 1. لم التحق بالمدرسة	☐ 2. ثانوية عامة او اقل	☐ 3. دبلوم					
☐ 4. بكالوريوس	☐ 5. دراسات عليا						
M03	مكان السكن (اي من المحافظات التالية من الضفة الغربية)؟ ☐ 1. الشمال (جنين، طولكرم، نابلس، قلقيلية، سلفيت، طوباس) ☐ 2. الوسط (رام الله والبيرة، القدس، أريحا) ☐ 3. الجنوب (الخليل، بيت لحم)						
M04	مكان السكن (الأقامة) ؟ ☐ 1. مدينة ☐ 2. قرية ☐ 3. مخيم						
M05	ما هي حالتك الاجتماعية؟ ☐ 1. متزوجة ☐ 2. مطلقة منفصلة ☐ 3. أرملة						
M06	هل لديك عمل؟ ☐ 1. لا أعمل ☐ 2. نعم، دوام جزئي ☐ 3. نعم، دوام كامل						
M07	كم عدد البالغين (بما فيهم أنت)، بعمر 18 عاماً أو أكبر، الذين يعيشون في منزلك؟ _____						
M08	كم عدد الأطفال الذين تقل أعمارهم عن 18 عاماً الذين يعيشون في منزلك؟ _____						
M09	كم عدد أطفالك المشخصين بالتوحد؟ _____						
M10	كيف تقيمين دخل العائلة الشهري اذا علمت ان متوسط الدخل في الضفة الغربية تقريبا 3000 شيكل ؟ <table border="1"> <tr> <td>☐ 1. أقل بكثير من المتوسط</td> <td>☐ 2. أقل من المتوسط.</td> </tr> <tr> <td>☐ 3. ضمن المتوسط</td> <td>☐ 4. أكثر من المتوسط</td> </tr> <tr> <td>☐ 5. أعلى بكثير من المتوسط</td> <td></td> </tr> </table>	☐ 1. أقل بكثير من المتوسط	☐ 2. أقل من المتوسط.	☐ 3. ضمن المتوسط	☐ 4. أكثر من المتوسط	☐ 5. أعلى بكثير من المتوسط	
☐ 1. أقل بكثير من المتوسط	☐ 2. أقل من المتوسط.						
☐ 3. ضمن المتوسط	☐ 4. أكثر من المتوسط						
☐ 5. أعلى بكثير من المتوسط							
M11	هل (أنت) لديك تامين صحي؟						

☐ 1. لا ☐ 2. نعم		
أي مشاكل صحية تتلقين العلاج منها حالياً. (يمكنك اختيار أكثر من إجابة)		
1. القلق ☐	2. الشعور بالحزن أو الإحباط ☐	3. ارتفاع ضغط الدم ☐
4. مشاكل جلدية ☐	5. سكري ☐	6. مشاكل في الجهاز الهضمي ☐
7. التهاب مفاصل ☐	8. مشاكل عصبية ☐	9. مشاكل في العظام والعضلات ☐
10. سرطان ☐		
11. مشاكل طبية أخرى، يرجى التحديد: _____ ☐		
12. مشاكل ن أخرى، يرجى التحديد: _____ ☐		
في المتوسط، كم ساعة تنام في الليلة؟		
☐ 1. أقل من 4 ساعات	☐ 2. (4-5) ساعات	☐ 3. (5-6) ساعات
☐ 4. (7-8) ساعات	☐ 5. أكثر من 8 ساعات	
ما هي مجالات حياتك التي تتأثر سلباً برعاية طفلك المصاب باضطراب طيف التوحد؟ (تحقق من كل ما ينطبق)		
1. لم يتأثر أي مجال ☐	2. العلاقات الأسرية ☐	3. الصحة البدنية أو الجسدية ☐
4. الصحة النفسية ☐	5. الأنشطة الرياضية/ الترفيهية ☐	6. النشاطات الاجتماعية ☐
7. الدينية والروحانية ☐	8. غير ذلك، يرجى التحديد: _____	
ما هي مجالات حياتك التي تتأثر إيجابياً برعاية طفلك المصاب باضطراب طيف التوحد؟ (تحقق من كل ما ينطبق)		
1. لم يتأثر أي مجال ☐	2. العلاقات الأسرية ☐	3. الصحة البدنية أو الجسدية ☐
4. الصحة النفسية ☐	5. الأنشطة الرياضية/ الترفيهية ☐	6. النشاطات الاجتماعية ☐
7. الدينية والروحانية ☐	8. غير ذلك، يرجى التحديد: _____	

القسم الثاني. بطرح هذا القسم أسئلة حول طفلك المصاب باضطراب طيف التوحد. إذا كان لديك أكثر من طفل مصاب باضطراب طيف التوحد، يرجى اختبار الطفل الأكبر للأسئلة التالية

C01	كم كان عمرك عندما حملت بطفلك المصاب باضطراب طيف التوحد؟ _____															
C02	ما هو العمر الحالي لطفلك المصاب باضطراب طيف التوحد؟ _____															
03C	ما هو جنس طفلك المصاب بالتوحد؟ <table border="1"> <tr> <td>1. ذكر ☐</td> <td>2. أنثى ☐</td> </tr> </table>	1. ذكر ☐	2. أنثى ☐													
1. ذكر ☐	2. أنثى ☐															
C04	ما هو ترتيب طفلك المصاب بالتوحد بين إبنائك؟ (ترتيبه بالنسبة للأخوة)؟ _____															
C05	كم عدد أسابيع حملك عندما أنجبت طفلك المصاب باضطراب طيف التوحد؟ _____ أسابيع															
C06	هل واجهت أي مشاكل أثناء الحمل مع طفلك المصاب باضطراب طيف التوحد؟ 1. لا ☐ 2. نعم ☐															
C07	في أي عمر للطفل تم تشخيصه باضطراب طيف التوحد لأول مرة؟ _____ -															
C08	كم من الوقت كان بين الوقت الذي لاحظت فيه لأول مرة أن طفلك يعاني من مشاكل ووقت تشخيص طفلك بأنه مصاب باضطراب طيف التوحد؟ <table border="1"> <tr> <td>1. أقل من 6 شهور ☐</td> <td>2. سنة واحدة ☐</td> <td>3. سنتين ☐</td> </tr> <tr> <td>4. ثلاث سنوات ☐</td> <td>5. أربع سنوات ☐</td> <td>6. خمس سنوات وأكثر ☐</td> </tr> </table>	1. أقل من 6 شهور ☐	2. سنة واحدة ☐	3. سنتين ☐	4. ثلاث سنوات ☐	5. أربع سنوات ☐	6. خمس سنوات وأكثر ☐									
1. أقل من 6 شهور ☐	2. سنة واحدة ☐	3. سنتين ☐														
4. ثلاث سنوات ☐	5. أربع سنوات ☐	6. خمس سنوات وأكثر ☐														
C09	هل يتمتع طفلك المصاب باضطراب طيف التوحد بتأمين صحي؟ 1. لا ☐ 2. نعم ☐															
C10	أي من المشاكل الصحية التالية يتلقى طفلك المصاب باضطراب طيف التوحد العلاج منها حالياً (يمكنك اختيار أكثر من إجابة) <table border="1"> <tr> <td>1. القلق ☐</td> <td>2. الشعور بالحزن أو الإحباط ☐</td> <td>3. مشاكل سلوكية ☐</td> </tr> <tr> <td>4. مشاكل تغذية ☐</td> <td>5. خلل في التكامل الحسي ☐</td> <td>6. مشاكل في الجهاز الهضمي ☐</td> </tr> <tr> <td>7. نوبات تشنجات ☐</td> <td>8. مشاكل عصبية ☐</td> <td>9. مشاكل في العظام والعضلات ☐</td> </tr> <tr> <td colspan="3">10. مشاكل طبية أخرى، يرجى التحديد - ☐</td> </tr> <tr> <td colspan="3">11. مشاكل نفسية أخرى، يرجى التحديد - ☐</td> </tr> </table>	1. القلق ☐	2. الشعور بالحزن أو الإحباط ☐	3. مشاكل سلوكية ☐	4. مشاكل تغذية ☐	5. خلل في التكامل الحسي ☐	6. مشاكل في الجهاز الهضمي ☐	7. نوبات تشنجات ☐	8. مشاكل عصبية ☐	9. مشاكل في العظام والعضلات ☐	10. مشاكل طبية أخرى، يرجى التحديد - ☐			11. مشاكل نفسية أخرى، يرجى التحديد - ☐		
1. القلق ☐	2. الشعور بالحزن أو الإحباط ☐	3. مشاكل سلوكية ☐														
4. مشاكل تغذية ☐	5. خلل في التكامل الحسي ☐	6. مشاكل في الجهاز الهضمي ☐														
7. نوبات تشنجات ☐	8. مشاكل عصبية ☐	9. مشاكل في العظام والعضلات ☐														
10. مشاكل طبية أخرى، يرجى التحديد - ☐																
11. مشاكل نفسية أخرى، يرجى التحديد - ☐																

C11	في المتوسط، كم ساعة ينام طفلك في الليلة؟		
	1. أقل من 4 ساعات ☐	2. (4-5) ساعات ☐	3. (5-6) ساعات ☐
	4. (7-8) ساعات ☐	5. أكثر من 8 ساعات ☐	
C12	في المتوسط، ما هو عدد الساعات التي تقضيها يومياً في تقديم الرعاية لطفلك المصاب باضطراب طيف التوحد؟ _____		
C13	ما هي الخدمات العلاجية التي يتلقاها طفلك المصاب باضطراب طيف التوحد حالياً؟ (تحقق من كل ما ينطبق)		
	1. لا توجد خدمة علاجية ☐	2. علاج وظيفي ☐	3. تربية خاصة تعليم خاص ☐
	4. علاج فيزيائي ☐	5. علاج نطق ☐	
C14	في أي صف تعليمي يلتحق طفلك ؟		
	1. لم يلتحق بأي مدرسة ☐	2. صف دراسي عادي ☐	3. صف دراسي-دمج ☐
	4. مدرسة منزلية ☐	5. صف علاجي ☐	6. غير ذلك، حدددي ____ ☐
C15	من الذي يقدم غالبية المعلومات التي تلبي احتياجاتك في تربية طفلك المصاب باضطراب طيف التوحد؟		
	1. مقدمو الرعاية الصحية (أطباء، ممرضون...) ☐	2. أفراد العائلة ☐	3. المعلمون ☐
	4. الأصدقاء ☐	5. المعالجين (وظيفي أو نطق) ☐	6. الانترنت ومواقع التواصل الاجتماعي ☐
C16	من يقدم الدعم العاطفي الأكبر؟ للتعامل مع مسؤولياتك كأم لطفل مصاب بالتوحد؟		
	1. لا احد ☐	2. أفراد العائلة ☐	3. الأصدقاء ☐
	4. الزوج ☐	5. الانترنت ومواقع التواصل الاجتماعي ☐	6. مجموعات الدعم ☐
C17	الطفل يعيش في		
	2. أسرة ممتدة (بالإضافة لبعض الأقارب) ☐ (أب وأم وابناء) نووية 1. أسرة ☐		

القسم الثالث:

يسأل هذا الاستبيان (WHOQOL-BREF) عن شعورك تجاه نوعية حياتك أو صحتك أو مجالات أخرى من حياتك. الرجاء الإجابة على جميع الأسئلة. إذا لم تكوني متأكدة من الإجابة التي يجب تقديمها لسؤال ما، فيرجى اختيار الإجابة التي تبدو أكثر ملاءمة. غالباً ما يكون هذا هو ردك الأول. من فضلك ضعي في اعتبارك معاييرك وآمالك ومتعتك واهتماماتك. نطلب منك أن تفكري في حياتك في الأسبوعين الماضيين. يرجى قراءة كل سؤال وتقييم مشاعرك واختيار الإجابة الأفضل.

يرجى قراءة السؤال وتقييم مشاعرك للأسبوعين الماضيين ووضع دائرة على الرقم الموجود على الميزان لكل سؤال الذي يعطى الإجابة الأفضل بالنسبة لك.

		سيئة للغاية	سيئة	لا بأس	جيدة	جيدة جداً
Q1	كيف تقيمين نوعية حياتك	1	2	3	4	5

		غير راض على الإطلاق	غير راض	لا راض ولا غير راض	راض	راض تماماً
Q2	ما مدى رضاك عن صحتك	1	2	3	4	5

الأسئلة التالية تستفسر عن مدى تعرضك لأشياء معينة خلال الأسبوعين الماضيين

		لا يوجد	قليلاً	درجة متوسطة	كثير جداً	درجة بالغة
Ph1	إلى أي حد تشعرين بأن الألم الجسدي يمنعك من القيام بالأعمال التي تريدها ؟	1	2	3	4	5
Ph2	إلى أي مدى أنت بحاجة للعلاج الطبي لنتمكن من القيام بأعمالك اليومية ؟	1	2	3	4	5
Ps1	إلى أي مدى تستمتعين بالحياة ؟	1	2	3	4	5
Ps2	إلى أي مدى تشعرين بأن حياتك ذات معنى ؟	1	2	3	4	5

		لا يوجد	قليلاً	متوسط	كثير	كثير بدرجة بالغة
Ps3	إلى أي مدى أنت قادرة على التركيز ؟	1	2	3	4	5
E1	إلى أي مدى تشعرين بالأمان في حياتك اليومية ؟	1	2	3	4	5
E2	إلى أي حد تعتبرين أن البيئة المحيطة بك صحية ؟	1	2	3	4	5

الاسئلة التالية تسأل عن مدى قدرتك على اتمام امور معينة خلال الاسبوعين الماضيين

		لا يوجد	قليلا	بدرجة متوسطة	كثير	كثير جدا
Ph3	هل لديك طاقة كافيه لمزاولة الحياة اليومية؟	1	2	3	4	5
Ps4	هل أنت قادرة على قبول مظهرك الخارجي؟	1	2	3	4	5
E3	هل لديك من المال ما يكفي لتلبية احتياجاتك؟	1	2	3	4	5
E4	ما مدى توفر المعلومات التي تحتاجها في حياتك اليومية؟	1	2	3	4	5
E5	إلي أي مدى لديك الفرصة لممارسة الأنشطة الترفيهية؟	1	2	3	4	5

		سيئة للغاية	سيئة	لا بأس	جيدة	جيدة جدا
Ps4	الى أي مدى أنت قادرة على التنقل بسهولة؟	1	2	3	4	5

الأسئلة التالية تطلب منك تعبر عن مدى رضاك تجاه جوانب مختلفة من حياتك خلال الأسبوعين الماضيين

		غير راض على الاطلاق	غير راض	لا راض ولا غير راض	راض	راض تماما
Ph5	كم أنت راضية عن نومك ؟	1	2	3	4	5
Ph6	إلي أي مدى أنت راضية عن قدرتك على القيام بنشاطاتك اليومية ؟	1	2	3	4	5
Ph7	كم أنت راضية عن قدراتك على العمل ؟	1	2	3	4	5
Ps5	كم أنت راضية عن نفسك ؟	1	2	3	4	5
S1	كم أنت راضية عن علاقاتك الشخصية ؟	1	2	3	4	5
S2	كم أنت راضية عن حياتك الجنسية ؟	1	2	3	4	5
S3	كم أنت راض عن الدعم أو المساعدة من الأصدقاء ؟	1	2	3	4	5
E6	كم أنت راضية عن الأوضاع في مكان سكنتك؟	1	2	3	4	5
E7	كم أنت راضية عن الخدمات الصحية المتوفرة لك ؟	1	2	3	4	5
E8	كم أنت راضية عن وسائل المواصلات التي تستخدمها ؟	1	2	3	4	5

السؤال التالي يشير إلى كم مرة شعرت أو مررت بتجربة معينة خلال الاسبوعين الماضيين

	أبدا	نادرا	غالبا	غالبا جدا	دائما
Ps6	1	2	3	4	5
كم من المرات كانت لديك مشاعر سلبية مثل المزاج السيئ، اليأس، القلق، الاكتئاب؟					

نهاية اسئلة الاستبيان

Appendix 4
Research Ethical Committee Approval

Al-Quds University
Jerusalem
School of Public Health



جامعة القدس
القدس
كلية الصحة العامة

التاريخ: 2024/2/19

الرقم: REF. 11/24

عزيزتي الطالبة بشائر الننتشة المحترمة
برنامج الدكتوراة في الصحة العامة

الموضوع: موافقة لجنة أخلاقيات البحث العلمي

قامت اللجنة الفرعية لأخلاقيات البحث التابعة لكلية الصحة العامة بمراجعة مشروع الرسالة بعنوان:

"Experiences and quality of life of mothers of children with autism disorder in the West Bank, Palestine".

المقدم من (مشرف البحث/د.اسمى الامام).

يعتبر مشروعك مستوفياً لمتطلبات أخلاقيات البحث في جامعة القدس.

نتمنى لكم كل التوفيق في تسيير المشروع.

ملاحظة: في حالة الحاجة الى موافقة من اللجنة المركزية في الجامعة، تستطيع التقدم باستخدام هذه

الموافقة على الرابط: <https://research.alquds.edu/en/ethics/48-how-to-apply.html>

رئيسة اللجنة الفرعية لأخلاقيات البحث

كلية الصحة العامة

د. نهى الشريف



د. نهى الشريف

Appendix 5

Participant Information and Informed Consent

Study Title: Effectiveness of the “Mindful Motherhood” Support Program on Quality of Life Among Palestinian Mothers of Children with Autism Spectrum Disorder: A Quasi-Experimental Study

Purpose of the Study: This study aims to evaluate the effectiveness of a structured educational and support intervention, *Mindful Motherhood*, in improving the overall quality of life among mothers raising children with Autism Spectrum Disorder (ASD).

Why You Have Been Invited: You have been invited to participate because you are a mother of a child diagnosed with ASD. Your participation will contribute valuable information to help researchers better understand and improve the well-being of mothers caring for children with autism.

Study Design and Participation: This study includes two groups of participants:

- **Experimental Group:** will participate in the *Mindful Motherhood* program.
- **Control Group:** will not receive the program during the study period but will be offered the opportunity to participate later.

You will be randomly assigned to one of these two groups.

What Participation Involves: If you agree to participate, you will be asked to:

For the Experimental Group:

- Attend a 12-week Mindful Motherhood program, with one session per week (approximately two hours each).
- Complete a set of questionnaires at three different times:
 1. Before the program begins (Pre-test)
 2. Immediately after the program ends (Post-test)
 3. Six months after the program ends (Follow-up test)

For the Control Group:

- You will not participate in the program during the study period.
- You will complete the same questionnaires at the same three time points as the experimental group.

About the Questionnaires:

- Each set will take about 20 minutes to complete.
- The questions are divided into three sections and ask about:
 - You and your household
 - Your child with ASD
 - Your quality of life
- You are encouraged to answer all questions, but you are free to skip any question or withdraw at any time without penalty.

Voluntary Participation: Your participation in this study is entirely voluntary. You may choose not to participate or to withdraw at any time, and this decision will not affect any services or support you currently receive. You will not receive monetary compensation, but participants in the program will receive a certificate of participation at the end of the intervention.

Confidentiality: All information collected will be kept strictly confidential and used only for research purposes.

- Your name will not appear on any questionnaire; responses will be coded with a unique identification number.
- The list linking your name to this code will be stored separately in a password-protected file.
- Only the research team will have access to the data, and results will be reported in aggregate form only, with no identifying details.

Questions or Further Information:

If you have any questions about the study, now or in the future, please contact the **Principal**

Investigator:

Bashaer Al-Natsheh, (PhD student) 0546177041, besho.natsheh@gmail.com

Thank you for your cooperation and willingness to contribute to this important study.

Statement of Consent

By signing below, you confirm that you have read (or have had read to you) the information above, understand the purpose of the study, and voluntarily agree to participate.

Participant's **Name:** _____

Signature: _____

Date: _____

Researcher's **Name:** _____

Signature: _____

Date: _____

Appendix 6

الأمومة الواعية: برنامج تعليم ودعم أمهات أطفال طيف التوحد

جودة حياة أمهات أطفال التوحد في الضفة الغربية (مجموعة مركزة)

الأمومة الواعية: برنامج تعليم ودعم أمهات أطفال طيف التوحد

إذا تم تشخيص طفلك بالتوحد، فمن المحتمل أن يكون لديك العديد من الأسئلة والمخاوف والقلق حول كيفية التأكد من أنك تفعل كل ما هو ممكن لدعمهم وتفهمهم، وبهذا قد تحتاجين إلى الدعم لفهم تأثير ذلك على صحتك النفسية وجودة حياتك كأم، حيث تواجه أمهات أطفال التوحد تحديات فريدة لا يستطيع فهمها إلا أمهات أطفال التوحد أنفسهم، وتقدم هذه المجموعة للأمهات فرصة للتحدث في بيئة داعمة مع الأمهات الأخريات حول تجربتهن كأمهات، للحصول على لحظة للتأمل الذاتي، والحصول على الدعم والفهم حول رحلتهن كأمهات، وتتيح لهن مساحة لاكتساب المعرفة والفهم لاضطرابات طيف التوحد، والحصول على الدعم العاطفي للتحديات والطقوس المتعلقة بتربية أسرة تضم طفل مصاب باضطراب طيف التوحد، باعتبار هذه المجموعة ملاذ وسط فوضى الطحن اليومي ومكان للشعور بالرعاية لتجديد خزائن المرء المنهكة، كما أنها مكان يمكن للأمهات أن يتعلمن فيه كيف أن أطفالنا هم أعظم معلمينا ويساعدون أمهاتهم على استكشاف خصوصية أمومتهم.

أهداف المجموعة

1. تقييم جودة الحياة للأمهات الأطفال المصابين باضطراب طيف التوحد في الضفة الغربية والعوامل المرتبطة به. (هدف الدراسة)
2. تنفيذ برنامج دعم إرشادي للأمهات أطفال التوحد في الضفة الغربية لتقييم مدى فعالية برنامج الإرشاد والتوجيه لجودة الحياة للأمهات الأطفال المصابين باضطراب طيف التوحد. (هدف الدراسة)
3. دعم الأم في رحلة النمو الشخصي (الوعي الذاتي، عندما ندرك أنفسنا، يمكننا اتخاذ قرارات أفضل، وتحديد أهداف واقعية، وبناء علاقات ذات معنى، أن نكون صادقين مع أنفسنا، نعرف حدودنا، يمكننا العمل على تحسينها ونصبح أفراداً أفضل).
4. تزويد الأمهات بالمعلومات حول اضطراب طيف التوحد لدى الأطفال والمراهقين.
5. إتاحة الفرصة للأمهات للتواصل مع الأمهات الأخريات لمشاركة تجارب مماثلة، ليكن صدى صوت لبعضهن البعض لإتخاذ القرارات والمساعدة في حل المشكلات.
6. فرصة للتفرغ عن الضغط النفسي في بيئة تمنح التقبل والدعم والتعاطف والفهم دون الحاجة إلى الشرح أو التبرير أو التخرج، فقصّة كل أم هي قصّة قيّمة ومفيدة لأم أخرى وتقدم الدعم والتشجيع والنصائح المفيدة للأمهات الأخريات.
7. تقديم معلومات حول العناية بالذات بما في ذلك الاسترخاء لتقليل التوتر وتنمية التعاطف مع الذات وتحسين نوعية الحياة للأمهات.
8. إتاحة فرصة للتعرف على أمهات يحملن تجارب مماثلة واهتمامات مشتركة خارج نطاق تجربة الأمومة وتكوين صداقات جديدة.

طبيعة المجموعة

هذه مجموعة تتكون من 12 جلسة على مدار شهر ونصف (إذا كانت لقاءين أسبوعياً) و3 أشهر (إذا كانت لقاء أسبوعياً). ستتكون المجموعة من 10 أمهات (تقريباً) ممن لديهم أطفال مصابون باضطراب طيف التوحد. وتتألف المجموعة من اثنين من الميسرين الذين سيتناوبون طوال الجلسات لتوفير المعلومات والمساعدة في المعالجة من خلال الأنشطة والمناقشات في سياق من السرية والخصوصية وبيئة آمنة للمشاركة للتعبير عن أنفسهن بكل أريحية.

هذه مجموعة مغلقة للحفاظ على التماسك والعلاقة بين أعضاء المجموعة، وستكون مدة كل جلسة ساعتين، وسيتم تحديد وقت الجلسة بناءً على مدى توفر المشاركات اللواتي أبدین استعدادهن للمشاركة أثناء التقييم. يتوجب حضور جميع الأعضاء لجميع الجلسات حتى تتمكن المشاركات من الحصول على أقصى استفادة. فيما يتعلق بالحفاظ على تماسك المجموعة، سيتم إلغاء تسجيل المشاركات الذين يتغيبون بشكل متكرر عن المجموعة. ستتضمن كل جلسة توفير التنقيف النفسي حول موضوع محدد للأسبوع، ومناقشة حول المعلومات المقدمة، وإكمال الأنشطة و/أو التمارين لتعزيز فهم الموضوع، ومناقشة حول تجربة الأمهات، واختتام الجلسة من خلال المراجعة للجلسة.

الخطوط العريضة للجلسات (الأجندة)

الجلسة التحضيرية: التعارف وحصر الاحتياج

1. الترحيب والتعارف وكسر الجليد
2. التعريف بالبرنامج وأهداف المجموعة
3. وضع ومناقشة قواعد المجموعة
4. بناء علاقة إرشادية
5. حصر الإحتياجات
6. فحص الأيام والأوقات المناسبة لعقد الجلسات والاتفاق عليها.
7. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة الأولى: مقدمة وتعليم نفسي

1. التنقيف النفسي حول اضطراب طيف التوحد، والأعراض، والتشخيص، والانتشار، والسبب (طبيب أعصاب أطفال).

2. أهمية التغذية الصحية المتوازنة (أخصائية تغذية علاجية)

3. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة الثانية: الاستجابات المشتركة وعملية فقدان الحزن

1. التنقيف النفسي والمناقشة حول الاستجابات الشائعة للتشخيص.

2. التنقيف النفسي للحزن والشعور بالفقدان

3. عملية ومراحل الحزن.

4. مشاركة تجارب الأمهات حول شعورهن بالفقد والحزن

5. أهمية الحفاظ على الصحة الجسمية والنفسية للأمهات

6. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة الثالثة: التقبل

1. توفير التنقيف النفسي حول التقبل والتحديات المرتبطة به
2. زيادة الوعي بالقواسم المشتركة بين الوالدين والأشقاء مع الطفل المصاب بالتوحد. مناقشة الإنجازات التي تم تحقيقها فيما يتعلق بالتقبل
3. رحلة التخلي عن التوقعات وتعلم الحب غير المشروط
4. الامتنان والطرق التي تساعد على المزيد من التقبل
5. نقاش التوقعات اليوم وفقاً للواقع
6. التأكيد على مفهوم الرضا في الحياة وإدارة الضغط النفسي
7. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة الرابعة: النموذج المعرفي واضطراب طيف التوحد

1. التنقيف النفسي على نموذج إعادة الهيكلة المعرفية
2. إعادة الهيكلة المعرفية بشكل يساعد على التقبل
3. دور إعادة الهيكلة المعرفية في المساعدة في التغلب على الضغط اليومي والمستمر الناتج عن إنجاب طفل مصاب باضطراب طيف التوحد
4. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة 5: تأثير اضطراب طيف التوحد على الرعاية الذاتية للأمهات

1. التنقيف النفسي ومناقشة تأثير اضطراب طيف التوحد على الرفاهية الشخصية والعاطفية للأمهات.
2. التنقيف النفسي بشأن الرعاية الذاتية للأمهات
3. تقييم الرعاية الذاتية الحالية للأمهات
4. تحديد الالتزامات المتعلقة بتحسين الرعاية الذاتية لكل أم
5. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة السادسة: الحدود الصحية

1. التنقيف النفسي حول الحدود الصحية ووضع الحدود.
2. دعوة الأمهات إلى التفكير في حدودهن الحالية مع أفراد أسرهن، ومناقش الإنجازات التي تم تحقيقها لديهن.
3. مناقشة الحدود كشكل من أشكال الرعاية الذاتية للأمهات
4. استكشاف الحدود لتزويد المشاركات بمساحة للتفكير في كيفية علاقتهن مع أنفسهن ومع أفراد الأسرة إذا تم إجراء تغييرات على حدودهن الحالية، ونقاش الإنجازات التي تم تحقيقها لديهن
5. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة السابعة: الاتصال والتواصل

1. إدراج الموضوعات التي تمت مناقشتها والموضوعات التي يرغب في مناقشتها بين الأمهات فيما يتعلق بطفلهن المصاب بالتوحد
2. أهمية التواصل بين الأمهات والطفل المصاب بالتوحد
3. التنقيف النفسي حول مهارات الاتصال والتواصل

4. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة الثامنة: التكيف والدعم

1. التنقيف حول الضغط النفسي
2. التنقيف النفسي حول طرق وآليات ومهارات التكيف
3. التعرف على مهارات التكيف المستخدمة حالياً من قبل المشاركات
4. نقاش مهارات التكيف الإيجابية والسلبية
5. التنقيف النفسي حول أهمية وجود نظام دعم قوي وتزويدهن بالمهارات اللازمة للقيام بذلك.
6. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة التاسعة: حل المشكلات والاسترخاء

1. التنقيف حول طرق ومهارات حل المشكلات
2. أهمية اتخاذ القرارات بصورة فعالة بعيداً عن الضغط والانفعال النفسي والعاطفي
3. التنقيف حول أهمية الاسترخاء في مواجهة الضغط النفسي والاجتماعي
4. التدريب على فنية الاسترخاء
5. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة العاشرة: المفهوم الإيجابي للذات والحياة

1. نقاش الأفكار السلبية عن الذات والحياة
2. الممارسات الإيجابية البديلة للتفكير السلبي
3. تعميق مفهوم العلاقات الإيجابية للذات في تكوين مفهوم حياة ذاتية وأسرية واجتماعية إيجابية
4. تعزيز وتأسيس المواجهة الذاتية لمصاعب الحياة
5. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة الحادية عشر: المستقبل وتبني مفهوم حياة أفضل

1. نقاش مخاوف الأمهات الحالية بشأن مستقبل طفلهن المصاب بالتوحد
2. التنقيف النفسي بشأن الاهتمامات المشتركة للأمهات والأبناء المصابون بالتوحد
3. تحسين جودة الحياة الصحية الجسمية والنفسية والاجتماعية
4. التركيز على المشاعر والمفاهيم الإيجابية للذات والحياة
5. مراجعة لليوم وتغذية راجعة من الأمهات للجلسة

الجلسة الثانية عشر: غرس الأمل والإنهاء

1. غرس الأمل في المستقبل
2. دعوة المشاركات للتفكير في تجربتهن في المجموعة
3. إنهاء العلاقة الإرشادية
4. الاطمئنان على تحسن جودة الحياة للأمهات
5. مراجعة وتلخيص الجلسات وتغذية راجعة من الأمهات للجلسة والإنهاء

Appendix 7

Session Agendas for The Mindful Motherhood Support Program

Session and Title	Agenda
<u>Preparatory session</u>	1. Welcome, introductions, and icebreakers. 2. Introduction to the program and group objectives. 3. Setting and discussing group goals. 4. Building a mentorship relationship. 5. Assessing needs. 6. Scheduling suitable days and times for sessions. 7. Reviewing the day and gathering feedback from mothers.
<u>Session One</u> Introduction and education about autism	1. Welcome, introductions, and ice-breaking. 2. Establishing and discussing group rules. 3. Building relationships. 4. Psychoeducation on ASD, including symptoms, diagnosis, follow-up, prevalence, and causes. 5. Review of the day and feedback from the mothers on the session.
<u>Session two</u> Common responses and the process of loss and grief	1. Psychoeducation and discussion on common reactions to diagnosis. 2. Psychoeducation on grief and feelings of loss. 3. The process and stages of grief. 4. Sharing mothers' experiences of loss and grief. 5. The importance of maintaining physical and mental health for mothers. 5. Review of the day and feedback from mothers on the session.
<u>Session Three</u> Acceptance	1. Psychoeducation on acceptance and related issues. 2. Raising parents' and siblings' awareness of common experiences with children with ASD. 3. The process of learning unconditional love and letting go of expectations. 4. Practices to promote greater acceptance and gratitude. 5. A conversation on matching everyday expectations with reality. 6. Stress management and life contentment. 7. Review of the session and mothers' input.
<u>Session Four</u> The Cognitive model and ASD: Cognitive restructuring for acceptance and coping	1. Cognitive restructuring psychoeducation. 2. Teaching methods of cognitive restructuring to promote acceptance. 3. Cognitive restructuring's function in daily and long-term stress management. 4. Handling the stress that comes with having a child with autism. 5. Review of the session and mothers' input.
<u>Session Five</u> • The impact of ASD on mothers' self-care • Importance of a balanced diet for mothers and the	1. Psychoeducation and discussion on the impact of ASD on mothers' personal and emotional well-being. 2. Psychoeducation on self-care for mothers. 3. Assessing the current self-care practices of mothers. 4. Identifying commitments related to improving self-care for each

child with ASD	mother. 5. Education on nutritional basics, benefits of a balanced diet, food groups, special dietary needs, healthy eating habits, and nutritional challenges in autism, emphasizing the importance of nutrient-rich foods. 6. Review of the day and feedback from the mothers on the session.
<u>Session Six</u> Establishing healthy boundaries for maternal well-being	1. Psychoeducation on healthy boundaries and setting boundaries. 2. Encouraging mothers to reflect on their current boundaries with family members and discussing the progress they have made. 3. Discussing boundaries as a form of self-care for mothers. 4. Exploring boundaries to provide participants with space to reflect on their relationship with themselves and family members if changes are made to their current boundaries, and discussing the progress they have achieved. 5. Review of the day and feedback from the mothers on the session.
<u>Session Seven</u> • Communication and connection • Parenting	1. Incorporating topics that have been discussed and topics the mothers wish to discuss regarding their child with autism. 2. The importance of communication between mothers and their child with autism. 3. Psychoeducation on communication and interaction skills. 4. Diana Baumrind's parenting style theory, US statistics, culture-related parenting styles, four types, other parenting styles, common behavioral problems, and recommendations for addressing behavioral issues. 5. Review of the day and feedback from the mothers on the session.
<u>Session Eight</u> Coping and support	1. Education on psychological stress. 2. Psychoeducation on coping methods, mechanisms, and skills. 3. Identifying the coping skills currently used by participants. 4. Discussing positive and negative coping skills. 5. Psychoeducation on the importance of having a strong support system and equipping them with the necessary skills to build one. 6. Review of the day and feedback from the mothers on the session.
<u>Session Nine</u> Problem-solving and relaxation	1. Education on problem-solving methods and skills. 2. The importance of making decisions effectively, away from stress and emotional pressure. 3. Education on the importance of relaxation in facing psychological and social stress. 4. Training on relaxation techniques. 5. Review of the day and feedback from the mothers on the session.

	session.
<u>Session Ten</u> Positive self-concept and outlook on life	1. Discussing negative thoughts about oneself and life. 2. Positive practices as alternatives to negative thinking. 3. Deepening the concept of positive self-relationships in forming a positive self, family, and social life perspective. 4. Strengthening and rooting self-empowerment to face life's challenges. 5. Review of the day and feedback from the mothers on the session.
<u>Session Eleven</u> The future and adopting a better outlook on life	1. Discussing mothers' current concerns about the future of their child with autism. 2. Psychoeducation on the shared concerns of mothers and their children with autism. 3. Improving the quality of physical, psychological, and social well-being. 4. Focusing on positive emotions and self-concepts about oneself and life. 5. Review.
<u>Session Twelve</u> Instilling hope and closure	1. Instilling hope for the future. 2. Inviting participants to reflect on their experience in the group. 3. Concluding the counseling relationship. 4. Ensuring the improvement in the quality of life for the mothers. 5. Reviewing and summarizing the sessions, gathering feedback from the mothers on the session, and concluding.

Appendix 8: Published Article 1

Journal of Autism and Developmental Disorders
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ORIGINAL ARTICLE



Navigating Through the Path of Struggle and Building Resilience of Adversity: Lived Experiences of Mothers Having Children With Autism in the West Bank, Palestine

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Abstract

Purpose Autism is a neurodevelopmental disorder that is globally increasing in prevalence. It presents significant challenges, particularly for mothers of children with autism. While extensive research has examined the lived experiences of these mothers in various global contexts, the gap remains in understanding this phenomenon in Palestine, particularly in the West Bank. This study aims to explore the lived experiences of mothers of children with ASD, shedding light on their struggles, challenges, and coping mechanisms.

Methods A qualitative phenomenological hermeneutics design was employed, recruiting sixteen mothers purposively including mothers from various age groups, educational backgrounds, and residential areas across different districts in the West Bank to ensure a diverse sample. Data were collected using in-depth, semi-structured interviews between February and April 2024. The interviews were analyzed using a phenomenological hermeneutics approach to uncover and interpret the meaning of the mothers' experiences.

Results The lived experience of mothers of children with Autism was conveyed in ten subthemes. These subthemes were formulated in condensed descriptions to assemble these three themes: difficult and overwhelming experiences, caregiving challenging and burden, and building resilience.

Conclusion There is a great need for more comprehensive healthcare and social systems that prioritize the unique needs of families with children with autism in the West Bank. Policies and programs should focus on increasing autism awareness, improving access to specialized services, and providing psychological and financial support to mothers and caregivers.

Keywords Mothers · Autism spectrum disorder (ASD) · Phenomenological hermeneutics · Qualitative · Live experience · Palestine

Autism spectrum disorder (ASD) is a pervasive neurodevelopmental disorder characterized by long-term impairments in social communication and restricted, repetitive patterns of behavior, interests, or activities (American Psychiatric Association, 2013). The prevalence of ASD has increased dramatically in recent decades (Chiarotti & Venerosi, 2020),

and the global prevalence of ASD was estimated to be 1 in 100 children (Zeidan et al., 2022). However, the prevalence of ASD has varied widely among different sociodemographic groups. Despite the growing awareness and diagnoses of ASD in Arab countries, a significant gap remains in addressing its prevalence accurately (Al-Khateeb et al., 2019). Likewise in Palestine, despite the growing number of ASD diagnoses among children, its incidence and prevalence have not yet been determined, due to the absence of epidemiological studies and reliable data (Shawhneh, 2017).

However, mothers of children with ASD encounter significant challenges that can adversely impact their well-being and quality of life (Gabrial, 2018). These challenges include emotional stress, financial strain, changes in family dynamics, and social stigma (Iliaset al., 2017). In

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Palestine, mothers face additional challenges due to the lack of evidence-based services, shortage of qualified diagnosing professionals, and delayed diagnoses, which can keep them confused and less satisfied (Shawahneh, 2021). Therefore, listening to the voices of Palestinian mothers of children with ASD is crucial for understanding their unique challenges, cultural context, and the support they need. Parents of children with ASD reported a significant shift in their roles and responsibilities following the diagnosis of their child (Papadopoulos, 2021). In particular, the mothers of these children were found to be exhausted as they dedicated substantial time to caring for their children and teaching them various life skills to support their independence and quality of life. The heavy caring responsibilities contribute to sleep disturbances fatigue, headache, anorexia, and palpitations among these mothers (Rafii et al., 2024). It also impacts their emotional well-being throughout their parenting journey (DesChamps et al., 2020). Feelings of anger, anxiety, despair, and depression about the child's condition and future consequences were frequently reported by these mothers (Acharya & Sharma, 2021). Mothers of children with ASD also experience significant social isolation, driven by a combination of the demanding responsibilities of caregiving and the pervasive social stigma surrounding their child's behavior (Nealy et al., 2012). Further, the financial strains of having a child with ASD were reported as a significant challenge for families. The essential therapies of the child often exceed the parents' financial capabilities (Befkadu & Adamek, 2022; Abu-Ras et al., 2018). It deprives the children's opportunity to get services such as specialized therapies, and educational support, which might hinder the developmental progress and quality of life of children with ASD (Al Khateeb et al., 2019).

Studies shown that mothers may cope with challenging experiences through various strategies, such as spiritual coping, seeking medical assistance, utilizing respite care, and gaining support from family and friends (Yaacob et al., 2022; Heydari et al., 2015). The child's welfare became the central focus of the mothers of children with ASD, it enabled them to remain hopeful about the future, despite the challenges that they faced (Iadarola et al., 2019).

However, research on the mother's experiences with ASD children is very limited in the Palestinian context, particularly in the West Bank. Understanding these mothers' experiences is crucial for addressing gaps in health, education, and social systems. There is a great need for narrating and understanding the mothers in the Palestinian context. However, this qualitative study aims to explore the challenges and realities faced by these mothers. The results could provide valuable information for researchers and policymakers to create family-centered interventions and educational programs for children with autism and their families.

Methodology

Research Design

A qualitative Phenomenological hermeneutics design was employed to explore the experience of mothers having children with autism in the West Bank. This approach was guided by Ricoeur's (1976) interpretation theory and further elaborated by Lindseth and Norberg (2004). This design integrates explanation and understanding to uncover the essence of lived experience. Hermeneutic phenomenology emphasizes the exploration of individuals' context to reveal the deeper meaning of lived experiences as they are brought to light through personal narratives. To grasp the meaning of lived experiences, describing and interpreting mothers' narratives is essential.

Setting and Participants

This study was conducted in the West Bank, Palestine, and involved a purposeful recruitment of sixteen mothers of children with autism. The selection process aimed to ensure diversity by including mothers from various age groups, educational backgrounds, and residential areas across different districts in the West Bank. Participants were mothers of children who were clinically diagnosed with ASD. Recruitment was facilitated through health professionals from various rehabilitation centers that serve children with autism across the West Bank, who informed potential participants about the research. Additionally, a snowball sampling method was used to identify more participants. Mothers were eligible to participate if they had at least one child ages 4–12 with a clinical diagnosis of ASD and were willing to participate in the study. Once consent was obtained, interviews were scheduled at the mothers' convenience in the participants' homes or in a private room at the rehabilitation center. Recruitment continued until data saturation was achieved. Saturation was defined as the point at which additional interviews no longer generate new themes or insight into existing ones, and patterns across participants begin to repeat consistently. This iterative assessment was conducted through regular team discussions during data collection and preliminary analysis to confirm that the sample adequately captured the diversity of experiences among Palestinian mothers of children with ASD.

Data Collection and Procedure

An in-depth, semi-structured interview guide was developed by the authors and reviewed by two independent experts in the field. Face-to-face interviews were carried out between February and April 2024. The duration of each interview

varied from 40 to 80 min. Audio recorders and notebooks were used for effective documentation.

Mothers were encouraged to share their experiences freely, using broad, open-ended questions to foster narrative expression. The opening question was, “*Tell me about your experience of having a child with autism.*” Additional follow-up prompts such as, “*Can you tell me more about...*” and “*How did you feel when...*” helped guide the discussion and delve deeper into their experiences. The interview guide is presented in Appendix A. Sociodemographic data was also collected from the mothers about their age, marital status, education level, place of residence, and employment. In addition to the information about the child’s gender, age, and severity of autism disorder.

Ethical Considerations

Approval to conduct the study was obtained from the Research Ethical Review Committee at Al-Quds University, Palestine. Mothers were provided with a clear explanation of the study’s nature and objectives. They were informed that participation is voluntary and were told about their right to withdraw the study without consequence. The collected data was treated with confidentiality. Written informed consent was obtained from the participated mothers after their agreement about the participation and the audio recording of the interviews.

Data Analysis

The researcher also contacted a psychologist to be available on call at the time of conducting each interview. This is to ensure psychological care for the mothers when needed

because disclosing sensitive information from the participating mothers might provoke hidden feelings and stressful reactions in the mothers about the child with ASD.

The recorded interviews and collected notes were all transcribed verbatim. Then, transcriptions were reviewed several times to ensure familiarity with the content. A phenomenological hermeneutic approach, as described by Lindseth and Norberg (2004), was used to analyze the data. This method involves engaging in the hermeneutic cycle that includes moving between understanding and explanation through three methodological steps: naïve reading, structural analysis, and comprehensive understanding.

Naïve reading is the initial step that provides a broad overview and overall impression of the content. It involves reading the text several times to grasp its holistic meaning. The naïve reading serves as a guide for the subsequent structural analysis. The second phase was a structural analysis which involved a more detailed examination of the text to identify and formulate themes. The text was carefully read to extract meaning units relevant to the study’s aim. The meaning units were critically analyzed in light of the naïve reading. This phase incorporates critical thinking, discussions with others, and reviewing relevant literature to enhance understanding and awareness of meaning within the text. This iterative and reflective process ensures a rich and nuanced interpretation of the lived experiences of the participants. Then subthemes and themes were derived from the meaning units, to reflect the essential meaning of the lived experience. For a comprehensive understanding, the whole text was read carefully several times. The dialectical movements between understanding and interpretation allowed for a deeper engagement in understanding the lived experiences of the mothers.

Results

Sixteen mothers participated in this study. The mothers’ ages ranged from 28 to 48 years. Thirteen mothers were married, two were divorced, and one was separated. Half of the mothers had received a university education, while the other half had completed only high school or had fewer qualifications. Approximately three-quarters were unemployed. Geographically, six out of the 16 mothers were from the central West Bank, five from the south, and five from the north. Additionally, eight mothers lived in urban areas, six in rural locations, and two in camps. Among these mothers, fifteen have one child diagnosed with Autism Spectrum Disorder (ASD), while one mother has twins (See Table 1).

The sociodemographic characteristics of the children with ASD as reported by their mothers were as follows: age ranged from 4 to 12 years, with 11 out of 16 being male,

Table 1 Demographic characteristics of mothers and children ($n = 16$)

Mother’s characteristics		Total number (n)
Mean age in years (min-max)		35.5 (28–48)
Marital status	Married	13
	Separated	1
	Divorced	2
Educational level	University	8
	School	8
Employment	Employed	4
	Unemployed	12
Place of residency	North of West Bank	5
	Middle of West Bank	6
	South of West Bank	5
Locality	Urban	8
	Rural	6
	Camp	2
Number of children with ASD in the household	One child	15
	Two child	1

Table 2 Characteristics of children with ASD ($n=17$)

Children's characteristics		Total number (n)
Age of the child with ASD		9 years (4–12)
Mean(min-max)		
Child's gender	Male	11
	Female	6
Severity of ASD	Severe	9
	Moderate	5
	Mild	3

Table 3 Summary of the main study findings: themes, and subthemes

Difficult and overwhelming experience	Caregiving challenging and burden	Building resilience
1. Difficulties in Recognizing and understanding the child's behavior	1. Emotional burden	1. Spiritual coping
2. Struggling to provide care and support	2. Social isolation and stigma	2. Transforming Through
3. Accessing and navigating services	3. Burden on family relationship	Acceptance and Adaptation
	4. Financial burden	3. Cultivating Connections and Prioritizing Well-Being

including two male twins. Among them, 9 were diagnosed with severe autism, 5 with moderate autism, and 3 with mild autism (See Table 2).

Naïve Understanding

Naïve understanding in phenomenological hermeneutic studies involves obtaining a general impression of the phenomena by carefully reading the whole text. Having a child with ASD is considered a difficult experience that burdens the mother's life. Moreover, having children with ASD represents a journey of navigating between challenges and building resilience. When the mother faced the reality of having a child with ASD, they experienced various emotional struggles; denial, endless grief, guilt, and worries. Moreover, they faced practical challenges like financial strain, social isolation, marital conflicts, and time pressure. Despite these burdens, many mothers found that acceptance and truthful faith in God, family support, and increasing their awareness about autism were important elements for overcoming difficulties. By building their resilience, they cope more effectively with their challenges and empower their children, creating a positive cycle of strength within the family.

Structural Analysis

Table 3 shows the structure analysis of the mothers' narratives that revealed ten subthemes that conveyed the meaning of the mothers' experiences of having a child with Autism. These subthemes were formulated in condensed descriptions to assemble the following three themes: difficult and

overwhelming experiences, caregiving challenging and burden, and building resilience.

Theme One: Difficult and Overwhelming Experience

The mothers described the difficulties they faced in understanding the changes in the behavior of their children. They were struggling to meet their child's healthcare needs and to provide effective support services to manage changes in the child's behavior. Three key subthemes emerged from their experiences: difficulties in recognizing and understanding the child's behavior, struggling to provide care and support, and accessing and navigating services.

Subtheme 1.1: Difficulties in Recognizing and Understanding the Child's Behaviors

Many mothers in this study reported difficulties in recognizing and understanding the challenging behavior of their children, particularly when it was their first experience with parenthood. One mother said: "My child did not respond to his name. People around me recognized that he had a problem, but I wasn't paying attention because he was my first child." (M12). During the early stages of symptom recognition, they had difficulties determining whether their children's behaviors fell within typical developmental patterns or indicated potential concerns. One mother, who later discovered that her twins had autism, reflected: "My children had a delay in talking until 2 years of age, but I thought it was normal since I was a first-time mother: the nurse noticed the delay during their vaccinations." (M2). Some mothers did not notice changes in their child's behavior. They initially interpreted behaviors like speech delays or motor difficulties as normal developmental variations. However, the observations or feedback from family members or healthcare providers raised the mother's concerns about their child's development. One mother said: "At 2 years, my child lost eye contact, and did not respond to his name. My aunt suggested he might have autism, but I was unfamiliar with what autism means" (M3). The mothers often reported communication delays, repetitive movements, and difficulties with social interaction as initial signs of ASD. Some mothers conveyed that these signs became more problematic as their children got older. One mother said: "By the age of 3 years, it was clear that my child was different from other children. She had poor eye contact, didn't respond to her name, and was very introverted." (M10).

A common challenge many mothers faced was a lack of awareness and understanding about autism. They reported the confused thoughts that they experienced regarding the

meaning of autism especially when they first received the diagnosis. Mothers were unable to differentiate between typical and atypical child behavior. Without adequate information, the majority of mothers find it challenging to understand what autism is, its symptoms, whether it could be cured, and what it means for their child's future. One mother noted that she only became aware of the condition after searching online. Others mentioned that they noticed developmental delays but were initially told by doctors that their children were normal. One mother said: *"At the age of 1 year and 7 months, my child stopped talking and stopped eye contact and did not respond to his name. So, my husband and I felt that he had a problem, my aunt told me that maybe he had autism but I did not know what autism means"*(M3).

Mothers faced difficulties in coming to terms with their children's diagnosis of autism. They expressed their feelings of denial and disbelief. The unexpected nature of the diagnosis makes it difficult for them to comprehend the situation. Many mothers turn to the internet to seek more information, but the vast amount of data can be overwhelming, further complicating their understanding and acceptance of their child's condition. Although some reported awareness of the problem they could not believe it in their heart. It becomes harder for them to accept and comprehend the realities of their child's condition. One woman said *"unexpected experience to have a child with disability. I never expected to go through such an experience to have a child with a problem like autism. It was shocked"*(M4).

Subtheme 1.2: Struggling to Provide Care and Support

Mothers reported feeling overwhelmed by their caregiving responsibilities and the complete dependency of their children, which involved constant monitoring and teaching. This led to exhaustion and a sense of self-neglect. They explained that they lost their typical life, jobs, and consistent sleep. One woman shared her experience: *"I devoted my life to my child with ASD. He needed my help. Caring for him is not easy, and I lost my job. It is difficult to live my daily life as before"*(M10). Furthermore, mothers faced significant challenges in understanding their children's needs and managing their behaviors, which often led to feelings of frustration and helplessness. While they recognized the importance of behavioral therapy as a means to improve their children's communication and social skills, they struggled with the slow and incremental nature of the progress. This slow improvement often compounded their feelings of uncertainty and doubt about the effectiveness of the therapy. One mother said: *"I'm worried about the ability of my child to communicate. I can't understand what makes him happy,*

angry, or bored. He cries a lot, and it often takes over an hour for me to understand his needs." (M4).

Subtheme 1.3: Accessing and Navigating Services

Mothers of ASD children faced challenges within health services. The diagnostic process is frequently overwhelming, marked by long wait times and poor communication from healthcare providers. Many mothers experienced psychological distress and caregiving responsibilities while seeking clarity about their child's condition. Once a diagnosis is obtained, securing appropriate educational place often requires further advocacy to meet their child's specific needs. All mothers described challenges in navigating the diagnostic process. Achieving a confirmed diagnosis was often a long, exhausting, and confusing process involving several evaluations and visits. In some cases, the diagnosis was unreliable or changeable. They also, expressed frustration over the lack of professional support in terms of explanation, guidance, and follow-up. Some mothers reported receiving inconsistent information, leaving them feeling confused.

The overall sentiment reflects a need for better support and clearer, more consistent explanations regarding autism. One mother said *"I moved from one doctor to another to confirm the diagnosis. When my child was 1 year and 4 months old, one doctor mentioned that there was a problem but did not specify what it was. He referred us to a pediatric neurologist, who finally confirmed the diagnosis"*(M11). Mothers also experienced concerns regarding the quality and accessibility of crucial services. They feel overwhelmed by the scarcity of evidence-based services and qualified professionals, with many available options being private clinics. Additionally, they face inadequate support systems, poor cooperation between relevant ministries, and insufficient legal protections for their children, which exacerbates feelings of marginalization and vulnerability. Another woman stated *"At 1 year and 3 months, my child stopped talking..... I took her to many clinics. Though her hearing test was normal. I was anxious about why she wasn't talking; I just wanted someone to give me answers"*(M14). All mothers reported difficulties in finding suitable kindergartens and schools for their children with ASD. They conveyed their struggles and frustrated feelings about the insufficient resources for integrating these children into mainstream classrooms. The available schools that they found are not well prepared to accommodate their children with developmental delays and are lacking well-trained and qualified teachers who can deal with ASD children. Therefore, these mothers were holding the burden of caring for and teaching the children who were rejected from kindergarten at a young age. One mother expressed: *"My child doesn't respond to*

instructions in the school, constantly screams and won't stay in his place. His condition seems to getting worse with the school's general environment"(M3).

Theme Two: Caregiving Challenges and Burden

The second theme of this study emphasizes the profound impact on mothers' daily lives, revealing that they experienced several challenges, including emotional burdens, social isolation and stigma, burden on family relationship, and financial burdens.

Subtheme 2.1: Emotional Burden

The emotional burden experienced by mothers of children with autism is profound and multifaceted. All mothers reported feelings of sadness, shock, and sorrow following their child's diagnosis. Many had tearful reactions and a strong desire for social isolation. This emotional response often began with denial and a struggle to accept the diagnosis, evolving into feelings of frustration, despair, and guilt over perceived personal responsibility for in their child's condition. This emotional turbulence sometimes led to delays in seeking treatment and follow up as they grappled with their feelings. One mother described her initial reaction: *"When I recognized the diagnosis, I was shocked and stayed in my room several days. I refused to see or to speak with anyone. It was hard to accept and I found myself crying continually"* (M11). Many mothers reported experiencing ongoing emotional distress and mental health challenges, including depression and frustration. One mother reported *"I was so sad, I felt like it was the end of the life"* M2. Another mother said: *"Feeling lonely, always in a bad mood, and have dark outlook on life, not engaging in social gatherings"* (M10). They also faced sleep disturbances, often worsened by their child's own sleep problems, resulting in fatigue and increased stress. One mother noted: *"I have sleeping troubles. My child sleeps late and wakes up several times at night. This make me always distressed and tired"*(M1). Self-blame and guilt is common experiences. Four mothers felt responsible for their child's diagnosis, believing that certain actions, such as allowing prolonged TV watching might have contributed to the child's condition. One mother said: *"I thought that I was responsible because I left my child watching TV for a long time."* (M3).

Many mothers experienced strong emotions such as anger and embarrassment in social situations regarding their child's behavior. These feelings were exacerbated by societal expectations and the challenges of caregiving. One mother said: *"During visits, my child does not calm*

down and begins to move and explore, and I became embarrassed" (M14). The mothers expressed a range of emotions regarding their child's potential for improvement. Some felt deep hopelessness, believing there was little chance for their child to be improved or accepted in the community. One mother remarked: *"Autism feels like frustration. I'm not optimistic for his future. There is no solution and no treatment.....I've given up"*(M8). However, others maintained hope, finding encouragement in early intervention and celebrating any signs of improvement in child's behaviors. One mother shared, *"I felt that my child improved with extensive intervention at an early age. When he reached this stage of improvement, I forgot everything I had done"*(M5.) Most mothers expressed fear or anxiety about future pregnancies, worrying about the possibility of having another child on the autism spectrum. One mother said: *"I fear having children again. I do not think about bringing another baby."*(M2). All mothers expressed deep concerns about their child's future, including fears of dependency and lack of support as the child grows older. They worried about different aspects of their children's lives, such as the ability of their children to integrate into society, find employment, and navigate adolescence and avoid potential harassment. One mother shared her worries: *"My child's future needs someone to care of him, as he may never marry in the future. I'm always thinking about him and teaching his brother to take care of him and not leave him alone in the future. The child needs us and has no one else."* (M12).

Subtheme 2.2: Social Isolation and Stigma

Many mothers experienced social isolation due to fear of judgment, stigma, and the disruptive behaviors of their children. Some chose to withdraw from social interaction to avoid embarrassment, while others minimized their social relationships due to increased demands of childcare. One mother said: *"My social relationships are limited. Not everyone accept my child with ASD. He will jump, move to the kitchen... I feel embarrasses by his behaviors."*(M1). In addition, some mothers described the negative reactions from the neighborhood and people around the society, in which they tend to mock, tease, and label the child's behavior. Sometimes they blamed the mothers for their inability to control the child's behavior and related this to the poor discipline. Accordingly, most of the mothers of children with ASD in this study decided to decrease their social activities and limit their social interactions with the neighborhood to protect the child from negative judgments and bullying. One mother said: *"It frustrates me how people perceive and label my child's behavior. They called him "crazy" for his hyperactivity. I felt sad that people did not accept him and judged him as an aggressive child"*(M11).

Subtheme 2.3: Burden on Family Relationship

Having a child with ASD has increased the burden on the family in different dimensions. Most mothers reported that their time and attention are primarily directed towards the child with autism which took almost all their efforts and little was left to satisfy the needs of other family members. Mothers expressed their worries about the impact of this on their emotional relations with their spouses, and on the socioemotional development and academic achievement of their children for being neglected and deprived of social activities and parental support. These mothers noted that conflicts within the family are exacerbated by the child's behaviors. One mother explained: *"my child takes up all my time and I neglect my husband and everyone else to take care of him. Because of the child's behaviors and continuous screaming, my husband's frustration has increased and the conflict between us has grown"* (M9). Many mothers described feelings of unhappiness within their family dynamics after getting the child's diagnosis. They mainly experienced the unsupportive role of their spouses and rejection or avoidance behaviors towards the child. One mother noted that her husband discouraged her from pursuing the child's treatment to avoid the social stigma, which escalated the conflicts between them. She stated: *"My husband sometimes viewed it as shameful, which led to conflicts between us. He prevented me from going out with her and from taking her treatment counseling sessions"* (M9). Some mothers have reported facing stressful situations with their husbands due to having a child with autism, which occasionally led to temporary separations. Additionally, some individuals have suggested that the husband should remarry, further increasing the family's burden.

Subtheme 2.4: Financial Burden

Financial burden emerged as a major concern of all the participating mothers. Having a child with Autism and the consequent therapies for the child's condition including investigations, psychotherapy, special education, speech, occupational, behavioral therapies, hiring shadow teachers to assist their children in school have increased the financial demands of the family.

A mother said: *"I cannot provide a shadow teacher to integrate my child into mainstream education. The cost is high and may reach 1500 New Israeli Shekel per month in addition to other follow-up costs"* (M4). Many mothers indicated that they could not afford all the necessary therapies. They reported having to neglect or stop these essential services because of financial constraints, compounded by a lack of insurance coverage and financial support. One mother said: *"More financial responsibilities, therapies, regular investigations, and transportation, it is beyond our capacity to offer financial coverage"* (M14).

Caring for a child with autism was on behalf of the mother's responsibility which increased the mother's burden and forced some worker mothers to quit their jobs to spare time for the child's care. This exacerbated their financial difficulties. One mother expressed that she resorted to using some financial assistant (zakat) to cover the session's costs: *"The financial situation is difficult. I have some assistant (zakat) from my family to cover for my child sessions"* (M11).

Theme Three: Building Resilience

The third theme captured by the mother's experience was building resilience. They reported adopting various strategies to build resilience and cope with the challenges of raising a child with ASD. These included spiritual/religious coping, transforming Through Acceptance and Adaptation, and cultivating connections and Prioritizing Well-Being. These approaches helped enhance their emotional well-being and ability to cope with the challenges.

Subtheme 3.1: Spiritual/Religious Coping

Initially, some mothers experienced feelings of sadness and denial upon receiving their child's diagnosis. However, being religious and having a strong faith in God helped these mothers to accept and overcome adversities. Most of the mothers considered the child as a gift given to them by God and took the responsibility of the child's care as surrender to God. This connection with God helps them to manage their emotions and reinforce their commitment to advocating for their children, despite knowing that conditions like autism cannot be cured. One mother said: *"I am responsible for the child and God gave me this responsibility, my child is a gift from God and I have to accept and take care of him"* (M1).

Subtheme 3.2: Transforming Through Acceptance and Adaptation

Mothers of children with autism shared narratives of their journey from denial to acceptance, illustrating profound personal growth and transformation. Acceptance played a pivotal role in fostering a positive outlook and enabling mothers to take proactive steps in supporting their children. Many mothers described overcoming initial struggles with denial and reaching a point of acceptance that reshaped their perspectives. One mother explained: *"After thinking, I was convinced that I should accept the hard situation and do something to help the child by starting treatment."* (M11). This shift in mindset allowed mothers to build stronger emotional bonds with their children. By embracing their children's uniqueness, many mothers moved beyond societal labels, viewing their

children as different rather than disabled. This positive outlook enhanced their relationships and emotional well-being. As one mother articulated: *"my children are not ill or disabled. I started to see them as normal children, just different in characteristics. They are my life and give me strength"* (M2). In parallel with acceptance, mothers adapted to their new realities, acknowledging the permanence of their child's condition. They reorganized their lives to prioritize their children's needs, experiencing personal growth through increased patience, empathy, and tolerance. One mother reflected: *"I have grown more patient and less anxious. I no longer strive for perfection in my tasks as I did in the past."* (M14). Adapting also meant confronting societal challenges and stigma with resilience and advocacy. Many mothers became determined to ensure their children's inclusion in society, actively seeking opportunities for interaction and understanding. One mother shared: *"I often get harsh comments from women at the market about my child being too noisy. I used to cry from their remarks, but now I stand up for him and sometimes explain his condition"* (M11). Another mother demonstrated her advocacy efforts: *"I am not discouraged about finding a place that will accept my child. It's important for my child to interact and play with other children. When I see that my child is being rejected, I start looking for another option."* (M12). By embracing acceptance and adaptation, mothers not only transformed their outlook but also became stronger advocates for their children, navigating challenges with resilience and determination.

Subtheme 3.3: Cultivating Connections and Prioritizing Well-Being

Mothers of children with autism often sought support through various networks and emphasized the importance of self-care to navigate the challenges of caregiving. Building connections with others in similar situations, including spouses, extended family, and especially other mothers of children with autism, proved to be a vital coping strategy. These networks provided emotional solace and practical assistance, enabling mothers to manage daily demands effectively. Peer interaction was particularly valuable for sharing experiences, exchanging advice, and fostering a sense of community. One mother shared: *"I created a Facebook page to connect with mothers of children with ASD to share and exchange our experiences and build support connections."* (M2). Accessing information about autism through workshops, online resources, and peer networks further empowered mothers. These efforts enhanced their understanding and fostered positive attitudes toward their children's conditions. One mother described her proactive approach: *"I utilized YouTube to learn about occupational therapy and how to support a child with autism, and as a result, I became his teacher."* (M1). Recognizing the intense emotional and physical demands of caregiving, many mothers also prioritized

self-care. They understood the necessity of taking personal time to recharge and maintain their well-being, which, in turn, allowed them to be more present for their children. Mothers engaged in activities such as spending time with friends, relaxing, or seeking help from family members or hired caregivers to create space for self-renewal. One mother explained: *"When I'm feeling exhausted, I often ask a family member to stay with my child at home, or I might hire someone to help so I can take a break."* (M3). By cultivating support networks and focusing on self-care, mothers found a balance that helped them meet the demands of raising a child with autism while preserving their emotional and physical health.

Comprehensive Reading

The mother's journey in this study was fraught with challenges. Emotional burdens were the main challenge that faced these mothers compounded by social, economic, and familial difficulties. The difficulties that mothers face in recognizing and understanding the diagnosis aggravated by caregiving demands and accessing and navigating services reflect the mother's struggles.

Despite all the difficulties that the mother's narratives explored, it showed their valuable efforts to handle the necessary daily life skills that promote the child's health and quality of life. They were able to accept the child's behavior and support their children in overcoming adversities. Their spiritual values and family support empowered them to create a new dynamic to promote family health and well-being. Group therapy and meeting other mothers to share similar experiences were important therapeutic measures that helped shift the mother's feelings of sadness and despair to focusing on the child. The lived experience of these mothers described the bath of struggle in which women found the light to continue their lives with self-awareness and an unwavering commitment to their children.

Discussion

Palestinian women play a pivotal role as caregivers for the family members, particularly in nurturing and supporting their children. Traditionally, Palestinian society is patriarchal, with defined gender roles where men are often seen as the primary breadwinners, and women are responsible for domestic duties and child-rearing (UN Women, 2018). This dynamic positions mothers as the central figures in their children's upbringing and daily care. However, the challenges faced by Palestinian women as caregivers have been exacerbated by ongoing conflicts and socio-economic hardships (UN-ESCWA, 2023). The compounded effects of traditional gender roles, economic challenges, and ongoing

conflicts place a significant burden on them, impacting their well-being and that of their children (UN-ESCWA, 2023). These challenges are further intensified when raising a child with autism, amplifying the emotional and physical burden on Palestinian mothers.

The first theme in this study was the difficult and overwhelming experiences of mothers as caregivers. Mothers faced challenges in recognizing and understanding their child's behaviors. The findings support previous studies indicating that mothers have diverse perceptions of autism, interpreting it differently as a behavioral problem, developmental issue, or intellectual disability (Acharya & Sharma, 2021). Mothers in the study reported a lack of understanding about ASD and its management, reflecting similar findings from research in Saudi Arabia that highlighted the need for better explanations regarding ASD's causes, diagnosis, and treatment (AlAlmaei Asiri et al., 2023). Many mothers struggled with denial and disbelief upon receiving their child's diagnosis, which complicated their ability to accept the situation (Abdallah et al., 2022). Mothers in this study felt overwhelmed by the demands of caring for children with ASD, requiring constant monitoring and teaching. This aligns with findings from (Ntre et al., 2018), which indicated that mothers in Greece were the primary caregivers, responsible for coordinating care for their children with ASD. This study highlights that mothers of children with ASD faced stress and confusion due to inconsistent and misleading diagnoses. These mothers struggled with inadequate communication from healthcare providers while navigating healthcare and educational systems. The misdiagnosis often stemmed from varied diagnostic measures leading to incorrect classifications like mental retardation or pervasive developmental disorder. This aligns with findings by Himdi & Delay (2017), emphasizing the urgent need for better public awareness and interventions for diagnosing and supporting children with ASD. They also highlighted a lack of accessible healthcare, rehabilitation, and educational services, primarily operated through expensive private institutions. Mothers also frustrated by the shortage of qualified teachers and resources available for their children, which aligns with findings from a study in India that highlights a gap of treatment centers and effective educational support for children with ASD (Tathgur & Kang, 2021).

Palestinian mothers of children with disabilities face significant challenges due to the political conflict that limited their autonomy and access to essential services, which contribute to psychological, social, and economic hardships (Nahal et al., 2017). The second theme emerging from this study emphasized the challenges and burdens faced by mothers caring for children with ASD. They face significant emotional challenges, including feelings of sadness, denial, frustration, guilt, and anxiety regarding their child's future.

Research indicates that they experience heightened stress and a sense of being overwhelmed, especially concerning their child's independence and safety (Acharya & Sharma, 2021; Tathgur & Kang, 2021). Studies consistently show that mothers of children with ASD are at a higher risk for anxiety and depressive symptoms compared to mothers of children without ASD (Kousha et al., 2016). Mothers of children with ASD in this study face social isolation due to fears of judgment and stigma related to their children's behaviors. This aligns with research showing that negative perceptions cause mothers to limit their social interactions, exacerbated by community misunderstandings and blaming, which are often viewed as reflections of poor parenting (Nealy et al., 2012; Redddy et al., 2019). Close family relationships were significantly influenced by having a child with ASD. Mothers in this study often prioritized their children's needs over those of their spouses, and other children. This created emotional strain, imbalance, divorce, and distance within the family. Similarly, a study in Greece reported significant transformations within the family system, highlighting the challenges mothers faced in maintaining balanced relationships with their spouses and other children (Papadopoulos, 2021). Family emotional strain and marital tension often arise from a lack of awareness of a child's ASD signs, leading to conflicts between couples (Tathgur & Kang, 2021). These issues increased the incidence of divorce among parents of children with ASD (Freedman et al., 2012).

Mothers caring for children with ASD face financial burdens, often limiting necessary therapies due to high costs and insufficient insurance. A study conducted in Ethiopia reveals that raising a child with a disability can cost about three times more than raising a typically developing child (Befkadu & Adamek, 2022). Research indicates that many families, particularly in regions like the West Bank, struggle with the high costs of medical procedures and the lack of access to health insurance. As a result, some parents are compelled to reduce their work hours or leave their jobs altogether to care for their children, exacerbating their financial difficulties (Opoku et al., 2024; Abu-Ras et al., 2018).

Resilience, or 'Sumud', is vital in Palestinian culture, representing steadfastness against challenges. Palestinian women have historically advocated for their rights despite facing occupation, violence, gender discrimination, and patriarchal norms (Marie et al., 2018; Ryan, 2015). Palestinian women show remarkable resilience across many facets of life, particularly in managing the complexities of raising children with autism within their families. The third theme of this study highlights mothers' commitment to fostering resilience where their attitudes and coping strategies significantly influence outcomes. This dynamic process of resilience allows them to adapt positively to adversity. Strong faith in God or deep religious beliefs helps mothers cope with challenges, viewing children

as blessings. Research indicates that the spiritual connection for parents of children with ASD can be a vital source of comfort and resilience and shifting towards acceptance (Gona et al., 2016; Yaacob et al., 2022). However, not all experiences are positive, as some mothers perceive the birth of a child with autism as a form of punishment from God (Tan et al., 2011). Families build resilience by accepting their circumstances, actively seeking solutions, maintaining a positive outlook, and focusing on available options. A study shows that when parents stop viewing their child's disability as a problem and instead recognize their strengths, it reduces stress and fosters resilience, leading to better developmental outcomes for the child (Ghanouni & Eves, 2023; Zhao & Fu, 2022). Mothers have adapted to their circumstances by prioritizing their children's developmental needs and changing family lifestyles. They engage in proactive parenting, focusing on consistent home practices such as structured activities, limiting screen time, and encouraging social interactions. This proactive approach aligns with studies showing that parents modify their routines to support their children's interventions and foster their independence, reflecting a strong commitment to their children's future (Siah & Tan, 2016; Yaacob et al., 2022). Support networks for mothers of children with ASD create a nurturing social environment that enhances emotional well-being and resilience (Zhao & Fu, 2022). These networks facilitate the sharing of resources and knowledge about autism, which allows mothers to set realistic expectations and appreciate small developmental progress in their children, ultimately contributing to their well-being (Yaacob et al., 2022).

Conclusion and Implications

This study provides valuable insights into the experiences of mothers raising children with autism in the West Bank, Palestine. The findings highlight significant challenges, including emotional, familial, social, and financial strains. Mothers identified their children's behaviors, parenting demands, and community stigma surrounding autism as major stressors, compounded by inadequate support during the diagnosis and follow-up process. This lack of support fosters persistent anxiety and despair about their children's futures. Despite these difficulties, the mothers' narratives reveal remarkable resilience and the use of various coping strategies to manage their challenges. The results emphasize the urgent need for comprehensive, family-centered healthcare services that enhance parenting skills, address emotional and practical needs, and improve support for families of children with Autism Spectrum Disorder (ASD). These findings can guide the development of services aimed at improving the well-being of children with ASD and their families.

Appendix A: The Interview Guide

Lived experience of mothers having a child with autism in the West Bank, Palestine.

Interview guides

Interview number.....	Date
Name of interviewer.....	Time.....
Centre.....	

Demographic characteristics of mothers

Age.....	Place of residence.....
Educational level.....	Work

Demographic characteristics of child

Sex.....	Age.....
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- Can you tell me about your experience? How is it to be a mother to a child with Autism?
 - When did you start to notice that something going wrong with your child?
 - What did you notice that urges you to seek help?
 - What did you do when you realized that your child has a problem?
- Can you describe your feelings when you understood the diagnosis? Can you tell me about that?
 - How do you feel about that?
 - How did you react upon the diagnosis of Autism?
 - How did you perceive the initial information you received about (autism) and the treatment?
- How did other members of the family and people around you react to your child's condition (Autism)? How does this make you feel?
 - Could you tell me about the family's relationship before and after the diagnosis?/Marital relationship?
 - How has having a child with autism affected your relationships with others?
 - How did they treat you?
- Can you tell me about your experience with your child's treatment/interventions? Could you give me an example? How do you feel about it?
 - Has your child improved with treatment/interventions?
 - How did it go?

- Can you describe your daily life experience? What are some of the challenges you face on a typical day?
 - What is the best part of your day?
 - Could you describe your relationship with your child and how your child communicates emotions to you?
 - What is the most difficult part about your relationship with your child?
- Could you please tell me about your experience while raising your autistic child after the numbers of years passed with your child?
 - What are your additional responsibilities when raising an autistic child?
 - How do these responsibilities affect your daily life? Your social life/social relationship/marital relationship/your job? Your personal needs?
 - Could you tell me about the effect of your child's condition (Autism) on your financial condition?
 - And 'Looking forward, what worries do you have about your child's future?
 - What have been the main challenges for you as a mother of an autistic child?
 - Do you feel you have changed as a person since the day you had your child? How?
 - What advice would you give to a new mother whose child have autism?
 - Tell me about your experience as a mother of a child with autism in the Palestinian culture? How do you feel about this.
 - What is your experience with community/school/healthcare professionals, social workers/psychologists?
 - How do you see the relationship between a child with autism and society? How do you find social acceptance of your.
 - What type of support and services are available to your child? How would you describe support and services in the community to your child?
 - Would you like to add something else that we have forgotten to discuss?

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Author Contributions B.N. conceived the study, collected, and analyzed data, prepared the manuscript. A.I. supervised the study conception, design and data collection and analyzed the data and revised the manuscript. M.N. analyzed the data and revised the manuscript. Also, all authors contributed significantly to the data analysis, agreed and approved the final analysis for the themes and subthemes. They also agreed on the final revision of the manuscript.

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Declarations

Conflict of interest The authors declare no conflicts of interest with regards to this study.

References

- Abdullah, H., Mohd Asraf, R., Ali, M. A. M., Wahab, A., & Baharudin, D. F. (2022). The challenges in raising autistic children: The voices of mothers. *International Journal of Evaluation and Research in Education*, 11(1), 78–87.
- Abu-Ras, W., Saleh, M., & Birani, A. (2018). Challenges and determination: The case of Palestinian parents of children with disabilities. *Journal of Family Issues*, 39(10), 2757–2780. <https://doi.org/10.1177/0192513X18757830>
- Acharya, S., & Sharma, K. (2021). Lived experiences of mothers raising children with autism in Chitwan District, Nepal. *Autism Research and Treatment*, 2021(1), Article 6614490. <https://doi.org/10.1155/2021/6614490>
- Al Almai Asiri, W. M., Shati, A. A., Al-Qahtani, S. M., Al-Qahtani, Y. A., Aldarami, M. S., Alamri, F. D., & Esam Mahmood, S. (2023). Assessment of parental knowledge, awareness, and perception about autism spectrum disorders in Aseer region, southwestern Saudi Arabia. *International Journal of General Medicine*. <https://doi.org/10.2147/IJGM.S377521>
- Al Khateeb, J. M., Kaczmarek, L., & Al Hadidi, M. S. (2019). Parents' perceptions of raising children with autism spectrum disorders in the United States and Arab countries: A comparative review. *Autism*, 23(7), 1645–1654. <https://doi.org/10.3390/healthcare12161596>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5* (Vol. 5). American Psychiatric Association.
- Befkadu, B., & Adamek, M. E. (2022). The financial challenges of parents of a child with autism in Addis Ababa, Ethiopia: A qualitative study. *Integrated Journal for Research in Arts and Humanities*, 2(1), 5–10. <https://doi.org/10.55544/ijrah.2.1.7>
- Chiarotti, F., & Venerosi, A. (2020). Epidemiology of autism spectrum disorders: A review of worldwide prevalence estimates since 2014. *Brain Sciences*, 10(5), 274.
- DesChamps, T. D., Ibañez, L. V., Edmunds, S. R., Dick, C. C., & Stone, W. L. (2020). Parenting stress in caregivers of young children with ASD concerns prior to a formal diagnosis. *Autism Research*, 13(1), 82–92.
- Freedman, B. H., Kalb, L. G., Zablotzky, B., & Stuart, E. A. (2012). Relationship status among parents of children with autism spectrum disorders: A population-based study. *Journal of Family Issues*, 33(6), 793–814.
- Ghanouni, P., & Eves, L. (2023). Resilience among parents and children with autism spectrum disorder. *Mental Illness*, 2023(1), Article 2925530. <https://doi.org/10.1155/2023/2925530>
- Gobrial, E. (2018). The lived experiences of mothers of children with the autism spectrum disorders in Egypt. *Social Sciences*, 7(8), 133.
- Gona, J. K., Newton, C. R., Rimba, K. K., Mapenzi, R., Kihara, M., Vijver, F. V., & Abubakar, A. (2016). Challenges and coping strategies of parents of children with autism on the Kenyan coast. *Rural and Remote Health*, 16(2), Article 3517.
- Hemdi, A., & Daley, D. (2017). The needs of mothers of children with autism spectrum disorder (ASD) in the Kingdom of Saudi Arabia

- (KSA): A qualitative study. *International Journal of Academic Scientific Research*, 5(3).
- Heydari, A., Shahidi, L. H., & Mohammadpour, A. (2015). Spiritual journey in mothers' lived experiences of caring for children with autism spectrum disorders. *Global Journal of Health Science*, 7(6), 79. <https://doi.org/10.5539/gjhs.v7n6p79>
- Iadarola, S., Pérez-Ramos, J., Smith, T., & Dozier, A. (2019). Understanding stress in parents of children with autism spectrum disorder: A focus on under-represented families. *International Journal of Developmental Disabilities*, 65(1), 20–30. <https://doi.org/10.1080/20473869.2017.1347228>
- Ilias, K., Liaw, J. H. J., Cornish, K., Park, M. S. A., & Golden, K. J. (2017). Wellbeing of mothers of children with "AUTISM" in Malaysia: An interpretative phenomenological analysis study. *Journal of Intellectual & Developmental Disability*, 42(1), 74–89.
- Kousha, M., Attar, H. A., & Shoor, Z. (2016). Anxiety, depression, and quality of life in Iranian mothers of children with autism spectrum disorder. *Journal of Child Health Care*, 20(3), 405–414.
- Lindseth, A., & Norberg, A. (2004). A phenomenological hermeneutical method for researching lived experience. *Scandinavian Journal of Caring Sciences*, 18(2), 145–153.
- Marie, M., Hannigan, B., & Jones, A. (2018). Social ecology of resilience and Sumud of Palestinians. *Health*, 22(1), 20–35. <https://doi.org/10.1177/1363459316677624>
- Nahal, M. S. H., Wigert, H., Imam, A., & Axelsson, Å. B. (2017). From feeling broken to looking beyond broken. *Journal of Family Nursing*. <https://doi.org/10.1177/1074840717697436>
- Nealy, C. E., O'Hare, L., Powers, J. D., & Swick, D. C. (2012). The impact of autism spectrum disorders on the family: A qualitative study of mothers' perspectives. *Journal of Family Social Work*, 15(3), 187–201. <https://doi.org/10.1080/10522158.2012.675624>
- Ntre, V., Papanikolaou, K., Triantafyllou, K., Giannakopoulos, G., Kokkosi, M., & Kolaitis, G. (2018). Psychosocial and financial needs, burdens and support, and major concerns among Greek families with children with autism spectrum disorder (ASD). *International Journal of Caring Sciences*, 11(2), 985–995.
- Opoku, M. P., Ashour, S., Shah, H., Alameri, S., Aldarmaki, A., Gamil, A., & Alghailani, F. (2024). Lived experiences of Arabic working mothers raising children with disabilities: Navigating rehabilitation and support services. *Disability & Society*. <https://doi.org/10.1080/09687599.2024.2368564>
- Papadopoulos, D. (2021). Mothers' experiences and challenges raising a child with autism spectrum disorder: A qualitative study. *Brain Sciences*, 11(3), 309. <https://doi.org/10.3390/brainsci11030309>
- Rafie, F., Seyedfatemi, N., & Asgarabad, H. E. (2024). The life of mothers of children with autism: A grounded theory study. *Revista Latinoamericana De Hipertension*, 19(4).
- Reddy, G., Fewster, D. L., & Gurayah, T. (2019). Parents' voices: Experiences and coping as a parent of a child with autism spectrum disorder. *South African Journal of Occupational Therapy*, 49(1), 43–50. <https://doi.org/10.17159/2310-3833/2019/vol49n1a7>
- Ricoeur, P. (1976). *Interpretation theory: Discourse and the surplus of meaning*. Christian University Press.
- Ryan, C. (2015). Everyday resilience as resistance: Palestinian women practicing Sumud. *International Political Sociology*, 9(4), 299–315. <https://doi.org/10.1111/ips.12099>
- Shawahna, R., Fahed, B., Qadri, D., Sharawi, L., Soroghlhi, M., & Dweik, M. (2017). Awareness and knowledge of autism spectrum disorders among pharmacists: A cross-sectional study in Palestinian pharmacy practice. *Journal of Autism and Developmental Disorders*, 47(6), 1618–1627.
- Shawahna, R., Jaber, M., Yahya, N., Jawadeh, F., & Rawajbeh, S. (2021). Are medical students in Palestine adequately trained to care for individuals with autism spectrum disorders? A multi-center cross-sectional study of their familiarity, knowledge, confidence, and willingness to learn. *BMC Medical Education*, 21(1), 1–13. <https://doi.org/10.1186/s12909-021-02865-8>
- Siah, P. C., & Tan, S. H. (2016). Relationships between sense of coherence, coping strategies and quality of life of parents of children with autism in malaysia: A case study among Chinese parents. *Disability CBR & Inclusive Development*, 27(1), 78–91.
- Tan, H. M., Wilson, A., Olver, I., & Barton, C. (2011). The experience of palliative patients and their families of a family meeting utilised as an instrument for spiritual and psychosocial care: A qualitative study. *BMC Palliative Care*, 10, 1–12. <http://www.biomedcentral.com/1472-684X/10/7>
- Tathgur, M. K., & Kang, H. K. (2021). Challenges of the caregivers in managing a child with autism spectrum Disorder—a qualitative analysis. *Indian Journal of Psychological Medicine*, 43(5), 416–421. <https://doi.org/10.1177/02537176211000769>
- UN ESCWA (2023). *Social and economic situation of Palestinian women and girls July 2020–June 2022*. Available at https://www.un.org/unispal/wp-content/uploads/2023/03/ESCWAREPORT_090323.pdf
- UN Women (2018). *Caught up between a rock & a hard place: Occupation, patriarchy and gender relations a case study of Palestinian women in area C & H2*. Available at <https://palestine.unwomen.org/sites/default/files/Field%20Office%20Palestine/Attachments/Publications/2019/2/English.pdf>
- Yaacob, W. N. W., Yaacob, L. H., Zulkifli, M. M., & Muhamad, R. (2022). A journey towards resilience: Coping strategies adopted by parents with children having autism spectrum disorder in Northeast Malaysia. *International Journal of Environmental Research and Public Health*, 19(4), 2458. <https://doi.org/10.3390/ijerph19042458>
- Zeidan, J., Fombonne, E., Scolah, J., Ibrahim, A., Durkin, M. S., Saxena, S., & Elsabbagh, M. (2022). Global prevalence of autism: A systematic review update. *Autism Research*, 15(5), 778–790.
- Zhao, M., & Fu, W. (2022). The resilience of parents who have children with autism spectrum disorder in china: A social culture perspective. *International Journal of Developmental Disabilities*, 68(2), 207–218. <https://doi.org/10.1080/20473869.2020.1747761>

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Appendix 9: Published Article 2



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Article

Effectiveness of the Mindful Motherhood Support Program on Quality of Life Among Palestinian Mothers of Children with Autism Spectrum Disorder: A Quasi-Experimental Study

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Abstract

Raising a child with autism spectrum disorder (ASD) presents severe difficulties that adversely affect the mother's quality of life (QoL). However, very limited research has examined the impacts of support programs on the QoL of mothers of children with ASD in the Palestinian context. This study assesses the effectiveness of Mindful Motherhood, a comprehensive intervention, in improving QoL in this population. A quasi-experimental design was employed, with 56 mothers assigned to experimental or control groups. Quality of Life (QoL) was measured using the WHOQOL-BREF at baseline, post-intervention, and at a six-month follow-up. The 12-week group-based program led to significant improvements in all QoL domains for the experimental group compared to the controls, with the highest effect sizes in psychological ($|d| = 0.70$) and overall QoL ($|d| = 0.68$) domains; furthermore, these gains were largely sustained at the six-month follow-up assessment. The results are expected to inform policymakers in developing sustainable support systems for mothers and promoting inclusive, family-centered approaches to ASD care in the Palestinian context.

Keywords: quality of life; mothers; caregiving burden; children; autism spectrum disorder; intervention; support program; effectiveness; Palestine

1. Introduction

Autism spectrum disorder (ASD) is a pervasive neurodevelopmental condition characterized by persistent difficulties in social interaction and communication, as well as restricted and repetitive behaviors or interests [1]. Parents experience several difficulties upon learning that their children have ASD [2–4], with research indicating that they tend to feel overwhelmed as they must dedicate significant time and energy to caring for their child and teaching essential life skills, which can lead to physical and psychological health problems [5–7]. Research has shown that parents of children with ASD commonly experience high levels of stress, anxiety, depression, frustration, and guilt [8–10]. These challenges are particularly pronounced among mothers, who frequently bear the primary caregiving role and face unique psychological and social burdens, especially in the Palestinian context, where mothers face ongoing challenges in meeting their child's medical, developmental, and educational needs while also coping with caregiving responsibilities, financial hardship, and social stigma. Additional barriers include delayed diagnosis, a shortage of qualified professionals, and limited access to evidence-based services, all of

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which contribute to confusion and dissatisfaction [11–14]. Collectively, these pressures can severely impact mothers' overall quality of life (QoL) [15,16]. The World Health Organization (WHO) defines QoL as a multidimensional construct reflecting an individual's perception of their life within their cultural and value systems, encompassing physical health, psychological state, social relationships, and environmental factors [17]. For mothers of children with ASD, these domains are often disrupted, necessitating targeted interventions to restore balance [18,19]. Empirical studies have underscored that continuous support addressing these areas through psychoeducation, peer networks, and stress management training can significantly enhance maternal well-being and, consequently, family stability [20–22]. Research has shown that psychoeducational programs can significantly reduce stress by equipping caregivers with the knowledge and skills needed to cope with ASD-related problems [20,23]. It has been observed that parents can overcome problems through problem-focused coping methods, which positively affects their quality of life [24–27].

While a robust body of literature has examined support for mothers of children with ASD in an international context [21,28], research focusing specifically on Arab countries is notably limited [23]. A systematic scoping review by Alallawi et al. (2020) initially highlighted significant gaps and the weak quality of existing studies in Arab countries, calling for more high-quality, culturally sensitive research [23,29]. In the Palestinian context, the needs of mothers raising children with ASD remain critically under-addressed, with minimal formal or community-based support available to alleviate their caregiving while the analytical study by Assaf et al. investigates into the family culture surrounding children with ASD in Palestine, underscoring the critical role of familial support systems and the complex cultural dynamics these mothers navigate [30]. Furthermore, emerging graduate research has directly explored the quality of life and coping mechanisms of Palestinian mothers of children with ASD, consistently documenting high levels of stress and a pronounced need for formal support [31,32]. Our study contributes directly to this gap by developing, implementing, and rigorously evaluating the effectiveness of the Mindful Motherhood program, in terms of the improvement of overall QoL in mothers raising children with ASD. This study further examines the program's impacts on the physical, psychological, social, and environmental domains of QoL, including an assessment of the consistency of these effects at six months post-intervention. It is hypothesized that participants in the intervention group will exhibit statistically significant improvements across all QoL domains compared to a non-intervention control group, with these gains maintained at the six-month follow-up assessment. The findings are expected to inform policymakers in developing sustainable support systems that empower mothers promote more inclusive, family-centered approaches to ASD care within the Palestinian context.

2. Materials and Methods

2.1. Study Design

This study utilized a quasi-experimental design to assess the impact of the support program on the quality of life of mothers of children with ASD. This approach was selected for its robustness and practicality in evaluating interventions within real-world, resource-limited community settings without randomization where random assignment is often not feasible or ethical [33]. Quasi-experimental designs are recognized as a key methodology for generating evidence of intervention effectiveness when randomized controlled trials are not possible, as they allow for the estimation of causal effects through the use of pre-existing groups and controlled comparisons [34,35].

Participants were split into control and experimental groups. QoL was measured for both intervention and control groups at three times: before the program's implementation, at two weeks after completing the intervention and a follow-up assessment conducted six

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months later to evaluate long-term effects. Meanwhile, the control group received no support program, after which a post-test assessment was performed.

This study was conducted at two purposively selected locations to ensure diverse representation of Palestinian communities: Hope Flowers School in Bethlehem (recruiting mothers from the southern West Bank) and Jannati Academy Center (recruiting mothers from the central and northern West Bank). The study followed a longitudinal design. A baseline assessment was conducted on 25 May 2024, prior to the intervention. The program was then implemented from 25 May to 15 September 2024. Follow-up questionnaires were administered at two weeks (1 October 2024) and six months (March 2025) post-intervention.

2.2. Study Sample

Purposive sampling was used to select participants, mostly with the assistance of healthcare professionals at different rehabilitation centers that serve children with ASD, who notified prospective participants of the study. Mothers were eligible to participate if they had at least one child aged 4–12 years with a confirmed clinical diagnosis of ASD and provided informed consent. A total of 56 mothers consented to participate in this study, recruited from the South ($n = 30$) and the combined Middle and Northern regions ($n = 26$). Participants from each region were then evenly divided into experimental and control groups, resulting in 15 per group from the South and 13 per group from the Middle/North.

The sample size was calculated using G*Power version 3.1.9.2 [36,37]. The minimum sample size for each of the two groups was calculated as 26, based on the two-tailed test of the difference between two independent means with a 1:1 ratio, test power of 0.80, significance level of 0.05, and a hypothesized large effect size (Cohen's $d = 0.80$), based on the comprehensive nature of the intervention. Thus, the analysis indicated a required total sample size of 52. To account for the potential lower efficiency of the non-parametric Mann–Whitney U test, this number was inflated by approximately 15%, yielding a target sample size of 60. Although we recruited 60 participants, 2 participants from each group withdrew from the study, resulting in a final analyzable sample of 56. This final sample was deemed sufficient, as it closely approximated the initial target.

2.3. Instruments

2.3.1. Demographic Questionnaire

A structured demographic questionnaire was developed to collect socio-demographic and health-related information from mothers and their children diagnosed with ASD. Maternal variables included age, education level, marital status, employment status, family income, and place of residence. Household composition was also recorded; specifically the number of adults over 18 years, the number of children under 18, and the number of children diagnosed with ASD.

Child-related variables encompassed gender, current age, age at diagnosis, the duration between symptom recognition and formal diagnosis, and health coverage status. These data were collected at the pretest stage and provided a comprehensive profile of participants, allowing for examination of potential associations with quality-of-life outcomes.

<https://doi.org/10.3390/ijerph23010014>

2.3.2. World Health Organization Quality of Life Assessment–Brief (WHOQOL-BREF)

The World Health Organization Quality of Life Assessment–Brief (WHOQOL-BREF) was used to evaluate mothers' perceived quality of life [38]. This instrument consists of 26 items across four domains: Physical health (7 items), psychological well-being (6 items), social relationships (3 items), and environmental health (8 items).

Validity and reliability were assessed for the questionnaire. It was piloted with 10 mothers for clarity, and its content and face validity were confirmed through expert review. Internal consistency was confirmed using Cronbach's alpha, which indicated a high overall reliability of 0.94, while domain-specific Cronbach's alpha coefficients were 0.85 for physical, 0.84 for psychological, 0.72 for social, and 0.86 for environmental health. The test–retest reliability was evaluated by re-administering the questionnaire to the same group 15 days later, showing significant correlation across all items.

2.4. Ethical Considerations

Approval to conduct the study was obtained from the Research Ethical Review Committee at Al-Quds University, Palestine. Mothers received a clear explanation of the study's nature and objectives and were informed that participation is voluntary, with the right to withdraw without consequence, and that all collected data would be treated confidentially. Informed consent was obtained from the participating mothers after they agreed to take part in the study. Following data collection, de-identified data were entered into SPSS and stored in secure files on the researcher's computer with restricted access. The researcher stored hard copies of the completed data sheets in a locked file cabinet. The research team only used the data for research purposes.

2.5. Developing the Intervention — Mindful Motherhood: A Support and Education Program for Mothers Raising Children with ASD

The Mindful Motherhood program is a comprehensive 12–14-week support and education initiative designed specifically for mothers of children with ASD. Developed through collaboration with psychological counselors and experts in family therapy, the program integrates relevant research outcomes to address the emotional, cognitive, and social challenges faced by these mothers [21–23,25,34,39]. Drawing from QoL research and the psychological counseling literature, the program provides a structured yet flexible framework to enhance maternal well-being, foster resilience, and build a supportive community.

Each weekly session lasts two hours and is facilitated by two trained professionals, ensuring a balanced approach between psychoeducation, group discussion, and skill-building exercises. The program maintains a small group setting of 13–15 participants to promote trust, confidentiality, and meaningful engagement. Attendance is carefully monitored to preserve group cohesion, as consistent participation is key to the program's effectiveness.

Crucially, the program was culturally and contextually adapted for Palestinian mothers. This included integrating discussions on navigating social stigma and leveraging extended family networks, framing coping strategies within cultural and religious values, and focusing on practical problem-solving tailored to a context with limited access to professional resources and financial hardship. In addition, recruitment for the intervention was conducted during a period of political instability in Palestine. Consequently, we enrolled only mothers who could safely and reliably access the program site to ensure consistent participation.

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2.6. Intervention Description

The Mindful Motherhood program is a structured, group-based support intervention designed to holistically support mothers of children with ASD. The program is sequenced into three progressive phases to mirror the natural caregiving journey. The initial foundation phase (Sessions 1–3) focuses on building a safe and trusting environment by providing education about ASD and validating common experiences of grief and loss, thereby guiding mothers toward acceptance. This foundational work is essential for engaging in the subsequent skill-building phase (Sessions 4–9), which empowers mothers by teaching practical, actionable skills in cognitive restructuring, self-care, boundary setting, communication, and stress management, moving beyond talk therapy to ensure tangible outcomes.

The final phase (Sessions 10–12) focuses on integration and future-oriented growth, helping mothers to cultivate a positive self-concept, manage future concerns, and instill a sense of hope for sustainable well-being. Throughout all phases, the program adopts a multi-dimensional approach, simultaneously addressing cognitive, emotional, behavioral, social, and physical aspects of the mothers' lives. Furthermore, the group format itself is a key intervention component, actively building a vital peer support network to combat isolation. In essence, the program's compassionate focus is not on changing the child with autism, but on strengthening the mother as the primary caregiver by equipping her with the emotional tools, practical skills, and social support necessary to navigate her challenges with greater resilience and well-being. Table A1 in Appendix A details all session agendas throughout the program. Ultimately, Mindful Motherhood aims to shift mothers from survival mode to empowered advocacy, fostering resilience that benefits both themselves and their children with ASD.

2.7. Statistical Analysis

Statistical analysis was performed using IBM SPSS Statistics, version 23, with a significance level set at $p = 0.05$. Descriptive statistics are used to summarize the data, including frequencies and percentages for categorical variables and means with standard deviations for continuous variables. The Shapiro–Wilk test was conducted to assess the normality of the data, which yielded a significant result ($p = 0.025$), thus indicating that the data were not normally distributed. Accordingly, nonparametric tests were used for subsequent analysis. Within-group comparisons of QoL scores were conducted using Wilcoxon Signed-Rank Tests. Between-group comparisons at three time points (pre-intervention, post-intervention, and six-month follow-up) were performed using the Mann–Whitney U test. Effect sizes for between-group comparisons were calculated using Cliff's Delta (δ), with the following conventional thresholds applied: $|\delta| = 0.147$ (small), $0.147–0.33$ (medium), and ≥ 0.33 (large). Additionally, the Friedman test followed by the Wilcoxon sign test was applied to assess changes in QoL scores across the three time points within each group.

3. Results

3.1. Descriptive Analysis

Table 1 presents the sociodemographic characteristics of the study sample, divided by group (Experimental, $n = 28$; Control, $n = 28$). The majority (approximately 59%) were aged 30–39 years. In terms of education, 37.5% held a bachelor's degree, followed by 30.1% with secondary school education or less. Geographically, 50.0% were from southern governorates, 26.8% from central governorates, and 23.2% from northern governorates. Regarding residence, 53.6% lived in cities, 41.1% in villages, and 5.4% in refugee camps.

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Most participants (92.9%) were married, and 69.6% were unemployed. Additionally, the largest subgroup (37.5%) had three children under the age of three. The vast majority (92.9%) had one child diagnosed with autism. Monthly family income was reported as moderate by 58.9%, while 21.4% reported it as below or well below average. Regarding the diagnosis timeline, 60.7% indicated that less than two years passed between noticing developmental concerns and receiving an ASD diagnosis. Additionally, 55.4% stated that their child was diagnosed at age three or older, while 44.6% received the diagnosis before the age of three.

Table 1. Sociodemographic characteristics of the study sample (Experimental, $n = 28$; Control, $n = 28$).

Variable	Category	Experimental ($n = 28$)	Control ($n = 28$)
Mothers' Age	20–29 years	6 (21.4%)	4 (14.3%)
	30–39 years	15 (53.6%)	18 (64.3%)
	40–49 years	7 (25.0%)	6 (21.4%)
Level of Education	Secondary School or less	11 (39.3%)	7 (25.0%)
	Diploma	9 (32.1%)	4 (14.3%)
	Bachelor	7 (25.0%)	14 (50.0%)
	High education (MSc/PhD)	2 (7.1%)	3 (10.7%)
Place of Residence (Governorate)	South	14 (50.0%)	14 (50.0%)
	Middle	7 (25.0%)	8 (28.6%)
	North	7 (25.0%)	6 (21.4%)
Type of Residence	City	16 (57.1%)	14 (50.0%)
	Village	11 (39.3%)	12 (42.9%)
	Camp	1 (3.6%)	2 (7.1%)
Marital Status	Married	23 (82.1%)	23 (82.1%)
	Divorced	4 (14.3%)	5 (17.9%)
	Widow	1 (3.6%)	0 (0.0%)
Employment Status	No	22 (78.6%)	17 (60.7%)
	Yes, part-time	3 (10.7%)	5 (17.9%)
	Yes, full-time	3 (10.7%)	6 (21.4%)
Number of Children < 18	Less than 3	12 (42.9%)	8 (28.6%)
	3	9 (32.1%)	12 (42.9%)
	More than 3	7 (25.0%)	8 (28.6%)
Family Income	Within average	15 (53.6%)	18 (64.3%)
	Less/much less than average	8 (28.6%)	6 (21.4%)
	Higher than average	2 (7.1%)	7 (25.0%)

Table 2 presents the median and interquartile range (IQR) for QoL domains at baseline, post-intervention, and at the 6-month follow-up. The data reveal a clear divergent trend between the control and experimental groups. In the control group, median scores across all domains—namely, Physical, Environmental, Psychological, Social, and Overall QoL—demonstrated a slight decline or remained relatively stable from pre-intervention to the 6-month follow-up. In stark contrast, the experimental group showed a marked improvement immediately after the intervention, with substantially higher median scores post-intervention compared to their baseline. Notably, these gains in the experimental group were largely sustained at the 6-month follow-up, with scores remaining well above both their own baseline levels and the corresponding scores of the control group at the same time point. This pattern suggests a positive and persistent effect of the intervention on QoL outcomes.

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Table 2. Median and interquartile range for each QoL domain pre- post intervention and six months follow-up for experimental and control groups.

Domain	Pre-Intervention Median (IQR)		Post-Intervention Median (IQR)		6-Month Follow-Up Median (IQR)	
	Control	Experiment	Control	Experiment	Control	Experiment
Physical	3.00 (2.43–3.64)	3.29 (2.46–3.57)	2.71 (2.21–3.57)	3.71 (3.32–4.11)	2.21 (1.89–3.14)	3.50 (3.14–4.00)
Psychological	2.44 (1.88–3.00)	2.81 (2.41–3.34)	2.25 (1.75–2.88)	3.38 (2.91–3.50)	2.13 (1.56–2.75)	3.13 (2.66–3.50)
Environmental	2.58 (2.04–3.29)	3.00 (2.38–3.42)	2.50 (1.88–2.83)	3.67 (3.17–4.00)	2.33 (2.00–3.08)	3.50 (2.67–3.96)
Social	3.00 (2.00–3.58)	3.33 (2.67–3.67)	3.00 (2.00–3.63)	3.67 (3.08–4.00)	2.83 (2.00–3.92)	3.33 (3.00–4.00)
Overall	2.69 (2.08–3.32)	3.00 (2.55–3.38)	2.60 (2.13–3.06)	3.60 (3.13–3.88)	2.38 (1.88–2.98)	3.46 (2.83–3.78)

3.2. Between-Group Comparisons of Overall QoL and Its Domains

Table 3 shows the non-parametric test results. Mann–Whitney U tests were conducted to evaluate the differences in QoL domain scores between the experimental and control groups across three time points: pre-intervention, post-intervention, and at the 6-month follow-up. At baseline, there were no significant differences between the groups in any QoL domain (all Cliff's Delta $|\delta| < 0.147$, negligible effect sizes), indicating that the groups were equivalent before the intervention.

Following the intervention, the experimental group demonstrated statistically significant and large improvements compared to the control group across all four QoL domains and overall QoL at the post-test assessment (all $p < 0.05$; Physical: $\delta = -0.64$; Environmental: $\delta = -0.66$; Psychological: $\delta = -0.70$; Social: $\delta = -0.47$; Overall QoL: $\delta = -0.68$). These substantial gains were largely maintained at the 6-month follow-up, with large effect sizes persisting for the physical ($\delta = -0.63$), environmental ($\delta = -0.59$), psychological ($\delta = -0.70$), and overall QoL ($\delta = -0.68$) domains. Although the social domain showed a sustained improvement, the effect size decreased from large to medium ($\delta = -0.34$).

Table 3. Between-group comparisons of overall QoL and its domains: Experimental vs. Control at Baseline (Pre-I), Post-Intervention (Post-I), and 6-Month Follow-up.

Domain	Time Point	Test Statistic (U, p)	Effect Size(δ), 95% CI
Physical	Pre-I	370.00, $p = 0.812$	−0.06 [−0.35, 0.23]
	Post-I	141.50, $p < 0.001$	−0.64 [−0.82, −0.40]
	6-Month	145.50, $p < 0.001$	−0.63 [−0.81, −0.38]
Environmental	Pre-I	241.00, $p = 0.105$	−0.39 [−0.65, −0.08]
	Post-I	131.50, $p < 0.001$	−0.66 [−0.83, −0.43]
	6-Month	162.50, $p = 0.001$	−0.59 [−0.78, −0.33]
Psychological	Pre-I	300.50, $p = 0.265$	−0.23 [−0.52, 0.10]
	Post-I	118.50, $p < 0.001$	−0.70 [−0.86, −0.48]
	6-Month	119.50, $p < 0.001$	−0.70 [−0.86, −0.48]
Social	Pre-I	298.00, $p = 0.280$	−0.24 [−0.53, 0.09]
	Post-I	208.00, $p = 0.011$	−0.47 [−0.70, −0.17]
	6-Month	259.50, $p = 0.048$	−0.34 [−0.60, −0.01]
QoL	Pre-I	295.50, $p = 0.113$	−0.25 [−0.54, 0.08]
	Post-I	124.50, $p < 0.001$	−0.68 [−0.85, −0.45]
	6-Month	124.50, $p < 0.001$	−0.68 [−0.85, −0.45]

A negative δ value indicates that the experimental group had higher median scores on the QoL domain than the control group. The magnitude of the effect is interpreted using the absolute value, $|\delta|$.

3.3. Within-Group Changes in Quality-of-Life Scores from Baseline to Post-Intervention and 6-Month Follow-Up

To analyze changes over time within each group, Friedman tests were conducted for each QoL domain, followed by Wilcoxon signed-rank post hoc tests as shown in Table 4.

The experimental group showed a significant overall change in physical scores over time ($p = 0.005$), with a highly significant improvement immediately after the intervention ($p < 0.001$). This improvement was maintained at the 6-month follow-up and remained significant in comparison to baseline ($p = 0.015$). No significant change was observed between the end of the intervention and the 6-month mark, indicating a stable improvement. There was no significant change in physical domain in the control group.

In the psychological domain, there was a significant overall change in the experimental group ($p < 0.001$), with the most significant improvement between before and after the intervention ($p < 0.001$). Although the improvement was still statistically significant at six months, there was a trend towards a decline ($p = 0.043$). In contrast, the control group showed no significant change over time in this domain.

Although the overall test for the environmental domain was not significant ($p = 0.120$), the Pre vs. Post difference in the experimental group was significant ($p = 0.004$); meanwhile, the control group showed no significant difference. In addition, a significant improvement in social outcomes was observed in the experimental group ($p = 0.041$), with a significant improvement observed between the pre- and post-intervention timepoints ($p = 0.017$). However, this improvement did not persist at six months. There was no significant difference in the control group between all three time points.

The results demonstrate a significant change in the overall QoL (total score) in the experimental group ($p < 0.001$), with a large and immediate improvement between the pre- and post-intervention timepoints ($p < 0.001$). However, a marginal or borderline significant decline from the post-intervention peak to the 6-month follow-up was observed, indicating that some of the peak benefits were not fully maintained. In contrast, the control group showed no significant change over time, as per the Friedman analysis.

Table 4. Friedman tests followed by Wilcoxon post-hoc analyses.

Domain	Group	Friedman Test (<i>p</i> -Value)	Pre vs. Post (<i>p</i> -Value)	Pre vs. 6-Month (<i>p</i> -Value)	Post vs. 6-Month (<i>p</i> -Value)
Physical	Experimental	0.005 *	0.001 *	0.015 *	0.321
	Control	0.672	0.681	0.399	0.535
Psychological	Experimental	0.001 *	0.001 *	0.043 *	0.080
	Control	0.672	0.681	0.399	0.535
Environmental	Experimental	0.12	0.004 *	0.235	0.235
	Control	0.396	0.949	0.347	0.344
Social	Experimental	0.041 *	0.017 *	0.163	0.320
	Control	0.932	0.428	0.82	0.622
Overall QoL	Experimental	0.001 *	0.001 *	0.021 *	0.050
	Control	0.488	0.738	0.171	0.158

* Significant ($p < 0.05$).

4. Discussion

This study examined the effectiveness of the Mindful Motherhood intervention among mothers of children with ASD in Palestine. The post-test QoL scores for the experimental group increased significantly, with the most significant improvement in psychological and overall QoL domains, while those for the control group remained stable or showed slight declines. These results are consistent with the findings of a study conducted

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in Jordan—which is similar to the Palestinian context—demonstrating the effectiveness of structured support interventions in improving QoL among parents of children with ASD [25]. The significant improvement in QoL could be attributed to the nature of the program, as a comprehensive and holistic intervention that addresses the multifaceted areas of QoL. The findings are further supported by another study reporting that parents of children with ASD need ongoing support for their physical, psychological, social, and environmental health, which can improve families' quality of life and ability to address behavioral difficulties [40,41].

By acquiring knowledge, engaging in psychoeducation, enhancing their skills, and developing practices, mothers can formulate coping strategies and transition from emotional distress to fostering hope and empowerment within a group setting [42]. This environment promotes teamwork and interaction, enabling them to cultivate a sense of value within a supportive social context, thus enhancing overall satisfaction and well-being in a therapeutic manner.

At the six-month follow-up evaluation, the intervention's effectiveness remained significant, with most gains maintained—particularly those in the psychological and overall QoL domains. The effect size remained high, indicating improvement in QoL over time. However, there was some decline in the social and environment domains, suggesting the need for further support to achieve sustained improvements.

The most substantial enhancements were observed in the psychological realm. Initial sessions focused on assisting mothers in accepting their child's diagnosis and processing grief. Research findings have indicated that Acceptance and Commitment Therapy (ACT) enhances psychological flexibility and alleviates stress, with parents adhering to the ACT protocol reporting notable improvements in psychological flexibility, emotional states, personal values in daily life, and a reduction in parental stress and distress regarding their children's behaviors [43,44]. Subsequent sessions used cognitive restructuring strategies—a crucial element of cognitive-behavioral therapy (CBT) models—which focus on altering negative thought patterns to alleviate emotional distress. These findings align with recent research examining the efficacy of group counseling rooted in psychoeducation and cognitive behavioral therapy (CBT) in alleviating depression among mothers of children with ASD [45–47].

The intervention produced a short-term improvement in social outcomes that disappeared by the 6-month follow-up. Group-based interventions improved social domains and reduced feelings of isolation in mothers by creating social support networks facilitated by peers. These networks provide emotional strength, shared problem-solving, and long-term social bonds, enabling mothers to implement strategies in real life contexts [48]. The program also strengthened family relationships through modules on communication, boundary-setting, and culturally sensitive parenting strategies, leading to better balance between caregiving and personal needs.

The study underscores the significance of social support in alleviating caregiver stress and enhancing mother–child relationships through varied participation. This finding aligns with Rayan & Ahmad (2016) [39], who indicated that scores in the health domain of social relationships were significantly improved following a mindfulness-based intervention, resulting from the non-judgmental acceptance of the child's condition, while Rezq et al. highlighted the importance of social support in improving mothers' QoL who are raising children with ASD [39,49].

The impact on the environmental domain was tenuous and inconsistent. A transient effect may have occurred, but it lacked robustness and sustainability. Despite the intervention's emphasis on imparting practical knowledge regarding ASD, problem-solving skills, advocacy for children's needs, self-care, boundary-setting, and strategies for fostering more manageable and supportive home environments, the enhancement in this area

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was not substantial. This finding aligns with a previous study indicating that parents of children with ASD remain unsatisfied with various aspects of the environmental domain, including income, housing circumstances, and healthcare services for their children [39].

Furthermore, maintaining hope is very important. Snyder's concept of hope is a cognitive behavioral structure with three main components: Goals, agency, and pathways. Success generates positive emotions, while failure leads to negative emotions. Hopeless individuals perceive themselves to have less agency and pathways, causing depression and other negative impacts in mothers with autistic children [50,51]. The most commonly suggested helpful method for parents of children with ASD is to learn how to cope and solve problems. Training parents in this way can lead to healthier children, as it helps to better organize their environment, expand their problem-solving skills, and improve the ability to cope with their situation [52,53].

Ultimately, the Mindful Motherhood program appeared to initiate a positive feedback loop in the lives of participants. By first addressing psychological acceptance and distress, then equipping mothers with practical tools for coping, communication, and self-care, the intervention enabled them to reframe their challenges and make meaningful improvements across all QoL domains. This transformation from surviving to thriving underscores the power of well-designed, culturally sensitive, and group-based psychosocial interventions.

Several limitations of this study should be acknowledged. The use of a quasi-experimental design with non-random assignment, while pragmatic, introduced potential for selection bias. Furthermore, the reliance on self-reported measures for the primary outcome may have led to social desirability bias. The use of purposive sampling also limits the generalizability of the findings to all Palestinian mothers of children with ASD. Future research would benefit from a randomized controlled trial design incorporating more objective biomarkers of stress and well-being.

5. Conclusions

Initiatives designed to alleviate stress and enhance the welfare of caregivers of children with ASD provide beneficial results for caregivers and, consequently, for the children themselves. Such an intervention must be a comprehensive procedure that benefits and attends to every family member.

The Mindful Motherhood program was found to be highly effective in improving various QoL domains for mothers of children with ASD, addressing physical, psychological, social, and environmental needs through structured sessions and peer support, helping mothers to transition from crisis management to proactive coping. The peer support component fosters long-term resilience and social connections. Future implementations should consider scaling the program through telehealth and training community health workers, ensuring accessibility in low-resource settings. Local health and education authorities could integrate the Mindful Motherhood curriculum into existing community health centers or parent support networks. Training experienced social workers and special education teachers to be "master trainers" could facilitate the studied intervention's wider dissemination. Additionally, adapting the program to a hybrid or fully telehealth format could overcome geographical barriers and increase accessibility for mothers in remote villages, ensuring a more family-centered approach to ASD care across Palestine.

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Abbreviations

The following abbreviations are used in this manuscript:

ASD	Autism Spectrum Disorder
QoL	Quality of Life

Appendix A

Table A1. Session agendas for the Mindful Motherhood support program.

Session and Title	Agenda
Preparatory session	- Welcome, introductions, and icebreakers. - Introduction to the program and group objectives. - Setting and discussing group goals. - Building a mentorship relationship. - Assessing needs. - Scheduling suitable days and times for sessions. - Reviewing the day and gathering feedback from mothers.
Session One Introduction and education about autism	- Welcome, introductions, and ice-breaking. - Establishing and discussing group rules. - Building relationships. - Psychoeducation on ASD, including symptoms, diagnosis, follow-up, prevalence, and causes. - Review of the day and feedback from the mothers on the session.
Session two Common responses and the process of loss and grief	- Psychoeducation and discussion on common reactions to diagnosis. - Psychoeducation on grief and feelings of loss. - The process and stages of grief. - Sharing mothers' experiences of loss and grief. - The importance of maintaining physical and mental health for mothers. - Review of the day and feedback from mothers on the session.
Session Three Acceptance	Psychoeducation on acceptance and related issues.

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	- Raising parents' and siblings' awareness of common experiences with autistic children. - The process of learning unconditional love and letting go of expectations. - Practices to promote greater acceptance and gratitude. - A conversation on matching everyday expectations with reality. - Stress management and life contentment. - Review of the session and mothers' input.
Session Four The Cognitive model and ASD: Cognitive restructuring for acceptance and coping	- Cognitive restructuring psychoeducation. - Teaching methods of cognitive restructuring to promote acceptance. - Cognitive restructuring's function in daily and long-term stress management. - Handling the stress that comes with having a child with autism. - Review of the session and mothers' input.
Session Five - The impact of ASD on mothers' self-care - Importance of a balanced diet for mothers and the child with ASD	- Psychoeducation and discussion on the impact of ASD on mothers' personal and emotional well-being. - Psychoeducation on self-care for mothers. - Assessing the current self-care practices of mothers. - Identifying commitments related to improving self-care for each mother. - Education on nutritional basics, benefits of a balanced diet, food groups, special dietary needs, healthy eating habits, and nutritional challenges in autism, emphasizing the importance of nutrient-rich foods. - Review of the day and feedback from the mothers on the session.
Session Six Establishing healthy boundaries for maternal well-being	- Psychoeducation on healthy boundaries and setting boundaries. - Encouraging mothers to reflect on their current boundaries with family members and discussing the progress they have made. - Discussing boundaries as a form of self-care for mothers. - Exploring boundaries to provide participants with space to reflect on their relationship with themselves and family members if changes are made to their current boundaries, and discussing the progress they have achieved. - Review of the day and feedback from the mothers on the session.
Session Seven - Communication and connection - Parenting	- Incorporating topics that have been discussed and topics the mothers wish to discuss regarding their child with autism. - The importance of communication between mothers and their child with autism. - Psychoeducation on communication and interaction skills. - Diana Baumrind's parenting style theory, US statistics, culture-related parenting styles, four types, other parenting styles, common behavioral problems, and recommendations for addressing behavioral issues. - Review of the day and feedback from the mothers on the session.
Session Eight Coping and support	- Education on psychological stress. - Psychoeducation on coping methods, mechanisms, and skills. - Identifying the coping skills currently used by participants. - Discussing positive and negative coping skills. - Psychoeducation on the importance of having a strong support system and equipping them with the necessary skills to build one. - Review of the day and feedback from the mothers on the session.
Session Nine	Education on problem-solving methods and skills.

Problem-solving and relaxation	2. The importance of making decisions effectively, away from stress and emotional pressure.
	3. Education on the importance of relaxation in facing psychological and social stress.
	4. Training on relaxation techniques.
	5. Review of the day and feedback from the mothers on the session.
Session Ten	1. Discussing negative thoughts about oneself and life.
Positive self-concept and outlook on life	2. Positive practices as alternatives to negative thinking.
	3. Deepening the concept of positive self-relationships in forming a positive self, family, and social life perspective.
	4. Strengthening and rooting self-empowerment to face life's challenges.
	5. Review of the day and feedback from the mothers on the session.
Session Eleven	1. Discussing mothers' current concerns about the future of their child with autism.
The future and adopting a better outlook on life	2. Psychoeducation on the shared concerns of mothers and their children with autism.
	3. Improving the quality of physical, psychological, and social well-being.
	4. Focusing on positive emotions and self-concepts about oneself and life.
	5. Review.
Session Twelve	1. Instilling hope for the future.
Instilling hope and closure	2. Inviting participants to reflect on their experience in the group.
	3. Concluding the counseling relationship.
	4. Ensuring the improvement in the quality of life for the mothers.
	5. Reviewing and summarizing the sessions, gathering feedback from the mothers on the session, and concluding.

References

1. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed.; DSM-5; American Psychiatric Publishing: Washington, DC, USA, 2013.
2. Reddy, G.; Fewster, D.L.; Gurayah, T. PARENTS' VOICES: Experiences and Coping as a Parent of a Child with Autism Spectrum Disorder. *South Afr. J. Occup. Ther.* **2019**, *49*, 43–50. <https://doi.org/10.17159/2310-3833/2019/vol49no1a7>.
3. Yaacob, W.N.W.; Yaacob, L.H.; Zulkifli, M.M.; Muhamad, R. A Journey towards Resilience: Coping Strategies Adopted by Parents with Children Having Autism Spectrum Disorder in Northeast Malaysia. *Int. J. Environ. Res. Public Health* **2022**, *19*, 2458. <https://doi.org/10.3390/ijerph19042458>.
4. DesChamps, T.D.; Ibañez, L.V.; Edmunds, S.R.; Dick, C.C.; Stone, W.L. Parenting Stress in Caregivers of Young Children with ASD Concerns Prior to a Formal Diagnosis. *Autism Res.* **2020**, *13*, 82–92. <https://doi.org/10.1002/aur.2213>.
5. Kara, K.; Kara, O.K.; Sutcu, G.; Tonak, H.A. The Relationship Between Fatigue and Quality of Life in the Turkish Mothers of Children with Autism Spectrum Disorder. *J. Autism Dev. Disord.* **2025**, *55*, 2696–2705. <https://doi.org/10.1007/s10803-024-06398-z>.
6. Shattnawi, K.K.; Bani Saeed, W.M.; Al-Natour, A.; Al-Hammouri, M.M.; Al-Azzam, M.; Joseph, R.A. Parenting a Child with Autism Spectrum Disorder: Perspective of Jordanian Mothers. *J. Transcult. Nurs.* **2021**, *32*, 474–483. <https://doi.org/10.1177/1043659620970634>.
7. Cloete, L.G.; Obaigwa, E.O. Lived Experiences of Caregivers of Children with Autism Spectrum Disorder in Kenya. *Afr. J. Disabil.* **2019**, *8*, 1–9. <https://doi.org/10.4102/ajod.v8i0.435>.
8. Ilias, K.; Liaw, J.H.J.; Cornish, K.; Park, M.S.A.; Golden, K.J. Wellbeing of Mothers of Children with “A-U-T-I-S-M” in Malaysia: An Interpretative Phenomenological Analysis Study. *J. Intellect. Dev. Disabil.* **2017**, *42*, 74–89. <https://doi.org/10.3109/13668250.2016.1196657>.

<https://doi.org/10.3390/ijerph23010014>

9. Papadopoulos, D. Mothers' Experiences and Challenges Raising a Child with Autism Spectrum Disorder: A Qualitative Study. *Brain Sci.* **2021**, *11*, 309. <https://doi.org/10.3390/brainsci11030309>.
10. Bramhe, V. Depression and Anxiety in Mothers of Children with Autism Spectrum Disorders and Intellectual Disabilities. *Indian J. Ment. Heal.* **2019**, *6*, 272. <https://doi.org/10.30877/ijmh.6.3.2019.272-279>.
11. Dardas, L.A.; Ahmad, M.M. Predictors of Quality of Life for Fathers and Mothers of Children with Autistic Disorder. *Res. Dev. Disabil.* **2014**, *35*, 1326–1333. <https://doi.org/10.1016/j.ridd.2014.03.009>.
12. Dardas, L.A.; Ahmad, M.M. Coping Strategies as Mediators and Moderators between Stress and Quality of Life among Parents of Children with Autistic Disorder. *Stress Heal.* **2015**, *31*, 5–12. <https://doi.org/10.1002/smi.2513>.
13. Abu-Ras, W.; Birani, A. Psychological Stressors among Palestinian Parents of Children with Disabilities: Challenges, Coping, and Determination. *J. Fam. Issues* **2018**, *39*, 2757–2780.
14. Shawahna, R.; Jaber, M.; Yahya, N.; Jawadeh, F.; Rawajbeh, S. Are Medical Students in Palestine Adequately Trained to Care for Individuals with Autism Spectrum Disorders? A Multicenter Cross-Sectional Study of Their Familiarity, Knowledge, Confidence, and Willingness to Learn. *BMC Med. Educ.* **2021**, *21*, 1–13. <https://doi.org/10.1186/s12909-021-02865-8>.
15. Vasilopoulou, E.; Nisbet, J. The Quality of Life of Parents of Children with Autism Spectrum Disorder: A Systematic Review. *Res. Autism Spectr. Disord.* **2016**, *23*, 36–49. <https://doi.org/10.1016/j.rasd.2015.11.008>.
16. Karlov, L.; John, J.R.; Beneytez, C.; Grimes, P.Z.; Kang, Y.Q.; Mardare, I.; Minca, D.G.; Voicu, L.; Volgyesi-molnar, M. Quality of Life in Parents of Autistic Children : A Transcultural Perspective. *Front. Psychol.* **2023**, *14*, 1022094. <https://doi.org/10.3389/fpsyg.2023.1022094>.
17. WHO. WHOQOL-BREF: Introduction, Administration, Scoring and Generic Version of the Assessment: Field Trial Version, December; World Health Organization: Geneva, Switzerland, 1996; pp. 1–16.
18. Seymour, M.; Wood, C.; Giallo, R.; Jellett, R. Fatigue, Stress and Coping in Mothers of Children with an Autism Spectrum Disorder. *J. Autism Dev. Disord.* **2013**, *43*, 1547–1554. <https://doi.org/10.1007/s10803-012-1701-y>.
19. Fante, C.; De Luca Picione, R.; Barbara, P.; Manari, T.; Raffin, C.; Capelli, F. Parental Quality of Life and Impact of Multidisciplinary Intervention for Children with Autism Spectrum Disorders : A Qualitative Study. *J. Autism Dev. Disord.* **2023**, *55*, 310–322.
20. Singh, N.N.; Lancioni, G.E.; Winton, A.S.W.; Karazsia, B.T.; Myers, R.E.; Latham, L.L.; Singh, J. Mindfulness-Based Positive Behavior Support (MBPBS) for Mothers of Adolescents with Autism Spectrum Disorder: Effects on Adolescents' Behavior and Parental Stress. *Mindfulness* **2014**, *5*, 646–657. <https://doi.org/10.1007/s12671-014-0321-3>.
21. Marino, F.; Failla, C.; Chilà, P.; Minutoli, R.; Puglisi, A.; Arnao, A.A.; Pignolo, L.; Presti, G.; Pergolizzi, F.; Moderato, P.; et al. The Effect of Acceptance and Commitment Therapy for Improving Psychological Well-being in Parents of Individuals with Autism Spectrum Disorders: A Randomized Controlled Trial. *Brain Sci.* **2021**, *11*, 880. <https://doi.org/10.3390/brainsci11070880>.
22. Catalano, D.; Holloway, L.; Mpofu, E. Mental Health Interventions for Parent Carers of Children with Autistic Spectrum Disorder: Practice Guidelines from a Critical Interpretive Synthesis (CIS) Systematic Review. *Int. J. Environ. Res. Public Health* **2018**, *15*, 341. <https://doi.org/10.3390/ijerph15020341>.
23. Abdelaziz, E.M.; Alsadaan, N.; Alqahtani, M.; Elsharkawy, N.B.; Ouda, M.M.A.; Ramadan, O.M.E.; Shaban, M.; Shokre, E.S. Effectiveness of Cognitive Behavioral Therapy (CBT) on Psychological Distress among Mothers of Children with Autism Spectrum Disorder: The Role of Problem-Solving Appraisal. *Behav. Sci.* **2024**, *14*, 46. <https://doi.org/10.3390/bs14010046>.
24. Ulu, A.E.; Karacasu, G. Burnout, Anxiety and Coping Attitudes in Parents of Children with Autism Spectrum Disorder. *Int. J. Disabil. Sport. Heal. Sci.* **2022**, *5*, 122–135. <https://doi.org/10.33438/ijdsbs.1181098>.
25. Al-Masa'deh, M.M.; Younis, N.A.; Al-Zoud, N.S.; Homidi, M.A.; Rahahleh, Z.J. The Effectiveness of Counseling Programs in Enhancing Quality of Life for Families of Children With Autism Spectrum Disorder in Jordan. *Humanit. Soc. Sci. Lett.* **2022**, *10*, 75–87. <https://doi.org/10.18488/73.v10i1.2944>.
26. Hajat, C.; Stein, E. The Global Burden of Multiple Chronic Conditions: A Narrative Review. *Prev. Med. Rep.* **2018**, *12*, 284–293. <https://doi.org/10.1016/j.pmedr.2018.10.008>.
27. Kasem, A.; Abuhammad, S.; Jamal, N. Parents of Children with Autism Spectrum Disorder Quality of Life in Jordan: A Comparative Study. *Futur. Sci. OA* **2024**, *10*, FSO909. <https://doi.org/10.2144/fsoa-2023-0096>.
28. Alkhateeb, J.M.; Hadidi, M.S.; Mounzer, W. The Impact of Autism Spectrum Disorder on Parents in Arab Countries: A Systematic Literature Review. *Front. Psychol.* **2022**, *13*, 955442. <https://doi.org/10.3389/fpsyg.2022.955442>.
29. Alallawi, B.; Hastings, R.P.; Gray, G. A Systematic Scoping Review of Social, Educational, and Psychological Research on Individuals with Autism Spectrum Disorder and Their Family Members in Arab Countries and Cultures. *Rev. J. Autism Dev. Disord.* **2020**, *7*, 364–382. <https://doi.org/10.1007/s40489-020-00198-8>.

<https://doi.org/10.3390/ijerph23010014>

30. Assaf, M.; Al-Hayeh, H. Family Culture in Dealing with Children with Autism Spectrum Disorder (Analytical Study). *J. Educ. Sci.* **2024**, *8*, 534–546.
31. Qaddan, E. Investigating the Coping Strategies and the Needs of Parents of Children with ASD Applied During Confrontation with Community Stigma in the West Bank. Master's Thesis, Arab American University, Jenin, Palestine, 2025.
32. Muhsen, W.N.H. Exploring Mental Health Status and Occupational Balance among Palestinian Mothers of Children with Autism Spectrum Disorder (ASD): A Cross Sectional Study. Master's Thesis, Arab American University, Jenin, Paletsine, 2024.
33. Capili, B.; Anastasi, J.K. An Introduction to the Quasi-Experimental Design (Nonrandomized Design). *Am. J. Nurs.* **2025**, *124*, 50–52. <https://doi.org/10.1097/01.NAJ.0001081740.74815.20>.
34. Kousha, M.; Eslamdoust-siahestalkhi, F.; Rafieian, S.; Shoar, Y. Effectiveness of Supportive and Educational Group Therapy on Mental Health Improvement of Mothers of Children with Autism Spectrum Disorder. *SRPH J. Med Sci. Heal. Manag.* **2021**, *3*, 1–6. <https://doi.org/10.47176/sjmsmsh.3.3.1>.
35. Ndata, C.W.; Studies, G.; Elechi, C.; Polytechnic, A.; Harcourt, P.; Ineme, M.E.; Umoh, D.I. Improving Quality of Life among Primary Caregivers of Children with Autism Spectrum Disorder: The Efficacy of Psychoeducation. *Int. J. Psychother. Afr.* **2025**, *10*, 89–101.
36. Erdfelder, E. G * Power 3: A Flexible Statistical Power Analysis Program for the Social, Behavioral, and Biomedical Sciences. *Behav. Res. Methods* **2007**, *39*, 175–191.
37. Han, J.W.; Park, J.; Lee, H. Analysis of the Effect of an Artificial Intelligence Chatbot Educational Program on Non-Face-to-Face Classes: A Quasi-Experimental Study. *BMC Med. Educ.* **2022**, *22*, 1–10. <https://doi.org/10.1186/s12909-022-03898-3>.
38. WHO; Whoqol Group. The World Health Organization Quality of Life Assessment (WHOQOL): Position Paper from the World Health Organization. *Soc. Sci. Med.* **1995**, *41*, 1403–1409.
39. Rayan, A.; Ahmad, M. Effectiveness of Mindfulness-Based Interventions on Quality of Life and Positive Reappraisal Coping among Parents of Children with Autism Spectrum Disorder. *Res. Dev. Disabil.* **2016**, *55*, 185–196. <https://doi.org/10.1016/j.ridd.2016.04.002>.
40. Frantz, R.; Hansen, S.G.; Machalick, W. Interventions to Promote Well-Being in Parents of Children with Autism: A Systematic Review. *Rev. J. Autism Dev. Disord.* **2018**, *5*, 58–77. <https://doi.org/10.1007/s40489-017-0123-3>.
41. Wang, R.; Liu, Q.; Zhang, W. Coping, Social Support, and Family Quality of Life for Caregivers of Individuals with Autism: Meta-Analytic Structural Equation Modeling. *Pers. Individ. Dif.* **2022**, *186*, 111351. <https://doi.org/10.1016/j.paid.2021.111351>.
42. Mhango, W.; Crowter, L.; Michelson, D.; Gaysina, D. Psychoeducation as an Active Ingredient for Interventions for Perinatal Depression and Anxiety in Youth: A Mixed-Method Systematic Literature Review and Lived Experience Synthesis. *BJPsych Open* **2023**, *10*, e10.
43. Ryan, C. Everyday Resilience as Resistance: Palestinian Women Practicing Sumud. *Int. Polit. Sociol.* **2015**, *9*, 299–315. <https://doi.org/10.1111/ips.12099>.
44. Panahpouri, S. Effectiveness of Acceptance and Commitment-Based Therapy on Psychological Flexibility and Resilience in Mothers of Children with Autism Spectrum Disorders. *J. Health Sci. Surveill. Syst.* **2022**, *10*.
45. Cachia, R.L.; Anderson, A.; Moore, D.W. Mindfulness, Stress and Well-Being in Parents of Children with Autism Spectrum Disorder: A Systematic Review. *J. Child Fam. Stud.* **2016**, *25*, 1–14. <https://doi.org/10.1007/s10826-015-0193-8>.
46. Zaki, R.A.; Moawad, G.E.N.A. Influence of Autism Awareness on the Psychological Well-Being of Mothers Caring for Their Children with Autism. *J. Nurs. Educ. Pract.* **2016**, *6*, 90–100. <https://doi.org/10.5430/jnep.v6n9p90>.
47. Wolgensinger, L. Cognitive Behavioral Group Therapy for Anxiety: Recent Developments. *Dialogues Clin. Neurosci.* **2015**, *17*, 347–351. <https://doi.org/10.31887/dcms.2015.17.3/twolgensinger>.
48. Paynter, J.; Gilmore, L. Social Support and Coping Strategies of Parents Raising a Child with Autism Spectrum. *Early Child Dev. Care* **2021**, *188*, 1392–1404.
49. Rezq, K.A.; Albalawi, H.M.H.; Alharbi, H.F. Exploring Social Support and Quality of Life Among Mothers of Children with Autism Spectrum Disorders: A Cross-Sectional Study. *Healthcare* **2025**, *13*, 95. <https://doi.org/10.3390/healthcare13020095>.
50. Snyder, C.R. (Ed.) *Hand Book of Hope*; Academic Press: NewYork, NY, USA, 2000.
51. Rasheed, A. Hope, Quality of Life, and Self-Efficacy among Mothers with Special Needs Children. *Inspira Indones. J. Psychol. Res.* **2022**, *3*, 1–7.
52. Navroodi, S.O.S.; Nicknam, M.; Ahmadi, A.; Roodbarde, F.P.; Azami, S. Examining the Effectiveness of Group Positive Parenting Training on Increasing Hope and Life Satisfaction in Mothers of Children with Autism. *Iran. J. Psychiatry* **2018**, *13*, 129–135.

<https://doi.org/10.3390/ijerph23010014>

53. Zhou, T.; Luo, Y.; Xiong, W.; Meng, Z.; Zhang, H.; Zhang, J. Problem-Solving Skills Training for Parents of Children With Chronic Health Conditions: A Systematic Review and Meta-Analysis. *JAMA Pediatr.* **2024**, *178*, 226–236. <https://doi.org/10.1001/jamapediatrics.2023.5753>.

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Appendix 10: Article Under Publication

Journal of Autism and Developmental Disorders

Quality of Life among Mothers of Children with Autism in the West Bank: Associated Factors and Policy Recommendation

--Manuscript Draft--

Manuscript Number:		
Full Title:	Quality of Life among Mothers of Children with Autism in the West Bank: Associated Factors and Policy Recommendation	
Article Type:	Article	
Keywords:	Mothers; Quality of life; caregiver burden, children; Autism spectrum disorder, Palestine	
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Abstract:	Parenting children with autism spectrum disorder (ASD) significantly affects mothers' quality of life (QoL) throughout their lifespan. However, research specifically examining the QoL of mothers in the West Bank (WB) who have children with ASD is limited. Purpose This study aimed to assess the QoL of mothers raising children with ASD in the WB, and examine the factors associated with their QoL. Methods This cross-sectional study included 119 mothers of children aged 4-12 diagnosed with ASD. Participants were purposively recruited through rehabilitation centers. Data collection took place from May to August 2024 using WHOQOL-BREF tool, a validated self-administered questionnaire designed to assess overall QoL and its four dimensions: physical, psychological, social, and environmental. Statistical analysis was used to analyze the data and identify factors associated with QoL. Results The findings indicated moderate overall QoL (M=2.85), with the environmental domain scoring the lowest (mean=2.64), followed by psychological (mean=2.77) and social domains (mean=2.99), while the physical dimension scored highest (mean=3.01). Factors significantly associated with QoL included mother's age, educational level, family income, and sleep duration. Conclusion This study provides valuable in-sights into the QoL of mothers raising children with ASD in the WB. The findings highlight the critical need comprehensive policy interventions, including mental health support, socioeconomic assistance, and tailored services to improve the mother's QoL. Policymakers and healthcare providers should prioritize these strategies. Further research should focus on policies that improve the environmental conditions and psychological well-being of these mothers in Palestine.	

Quality of Life among Mothers of Children with Autism in the West Bank: Associated Factors and Policy Recommendation

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Authors' Contributions: B.N. conceived the study, collected, and analyzed data, prepared the manuscript. A.I. supervised the study conception, design and data collection and analyzed the data and revised the manuscript.

Statement of Declarations

Conflict of interest: The authors declare no conflicts of interest with regards to this study.

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Abstract

Parenting children with autism spectrum disorder (ASD) significantly affects mothers' quality of life (QoL) throughout their lifespan. However, research specifically examining the QoL of mothers in the West Bank (WB) who have children with ASD is limited. **Purpose** This study aimed to assess the QoL of mothers raising children with ASD in the WB, and examine the factors associated with their QoL. **Methods** This cross-sectional study included 119 mothers of children aged 4-12 diagnosed with ASD. Participants were purposively recruited through rehabilitation centers. Data collection took place from May to August 2024 using WHOQOL-BREF tool, a validated self-administered questionnaire designed to assess overall QoL and its four dimensions: physical, psychological, social, and environmental. Statistical analysis was used to analyze the data and identify factors associated with QoL. **Results** The findings indicated moderate overall QoL ($M=2.85$), with the environmental domain scoring the lowest (mean=2.64), followed by psychological (mean=2.77) and social domains (mean=2.99), while the physical dimension scored highest (mean=3.01). Factors significantly associated with QoL included mother's age, educational level, family income, and sleep duration. **Conclusion** This study provides valuable insights into the QoL of mothers raising children with ASD in the WB. The findings highlight the critical need comprehensive policy interventions, including mental health support, socioeconomic assistance, and tailored services to improve the mother's QoL. Policymakers and healthcare providers should prioritize these strategies. Further research should focus on policies that improve the environmental conditions and psychological well-being of these mothers in Palestine.

Keywords: Mothers; Quality of life; caregiver burden, children; Autism spectrum disorder, Palestine

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Keywords: Mothers; Quality of life; caregiver burden, children; Autism spectrum disorder, Palestine

Quality of Life among Mothers of Children with Autism in the West Bank: Associated Factors and Policy Recommendation

The Autism Spectrum Disorder (ASD) is a pervasive neurodevelopmental condition characterized by persistent difficulties in social interaction and communication, as well as restricted and repetitive behaviors or interests of activities (American Psychiatric Association, 2013). The prevalence of ASD has significantly increased globally during the last few decades. While global ASD prevalence is approximately 1 in 100 children (Zeidan et al., 2022), estimates in Arab countries remain inconsistent due to diagnostic and reporting disparities (Alkhateeb et al., 2022). In Palestine, the absence of epidemiological studies further obscures the true burden of ASD (Shawahna, 2021).

Following the child's diagnosis of ASD, parents experience a significant change in their responsibilities and commitments. Mothers, as primary caregivers, often experience overwhelming stress as they dedicate extensive time and effort to impart essential life skills to their children (Magalhães et al., 2021). This intense caregiving burden leads to physical health challenges for these mothers, such as sleep disturbances, fatigue, head-aches, loss of appetite, and palpitations (Alansari & Jahrami, 2018). Moreover, their emotional well-being is deeply impacted throughout their parenting journey (Ilias et al., 2017; Acharya & Sharma, 2021; Fatima et al., 2024), with many reporting feelings of anger, anxiety, despair, and depression related to their child's condition and future uncertainties. Research indicates that Parents of children with ASD often experience elevated levels of stress, depression, anxiety, frustration, and guilt. They also struggle with financial responsibilities, societal stigma, and the persistent challenges of meeting their child's medical, developmental, and educational needs while fulfilling caregiving duties (Hosseinpour et al., 2022; Veroni & Veroni, 2019). These combined demands can

substantially degrade their overall quality of life (Ali et al., 2021). Palestinian mothers encounter additional barriers, such as limited access to evidence-based therapies, a lack of qualified professionals for diagnosis, and protracted diagnostic delays that lead to uncertainty and anxiety (Taslaq et al., 2017).

The Quality of Life (QoL) has been recently noted as one of the major health concerns for parents following a lifelong complex experience such as raising a child with disability (Yamada et al., 2012). Quality of life is a broad concept that captures, together with an individual's hopes, expectations, and concerns, their appraisal of their life situations within the framework of their culture and values. It covers several spheres, including physical health, psychological well-being, autonomy, social ties, personal opinions, and environmental interactions (World Health Organisation, 2012). Studies reveal that parents of children with ASD have a lower quality of life than parents of typically growing children and those with other disabilities (Dey et al., 2019), as they experience ongoing challenges that compromise their quality of living. Therefore, understanding the different dimension of their QoL can guide healthcare workers and policymakers to have a better insight into the struggle faced by parents for planning and implementing different interventions.

Research suggests that QoL among parents of children with ASD could be associated with several factors. Parental gender significantly affects the adaptation to a child's disability. Some studies found that mothers have a higher burden of care, more physical health problems, and poorer QoL than fathers (Picardi et al., 2018). In addition, higher education and higher socioeconomic status have been associated with higher parental QoL (Dardas & Ahmad, 2014; Scrimin et al., 2022). Research also indicates that there is a relationship between severity of autism and mother's QoL. Mothers who have a child with severe behavioral problem tend to have

poorer QoL(Zhou et al., 2019). While other study found no association between severity and quality of life of mothers (McStay et al., 2014).

However, very limited research has examined the QoL of mothers of children with ASD in the Palestinian context. This study aims to assess the overall QoL of these mothers and examine the factors associated with their QoL. The findings will help guide interventions to alleviate caregiving burdens and support policy reforms aimed at enhancing maternal QoL.

Methodology

Study design and participants

This cross-sectional quantitative study was conducted in the West Bank, Palestine, and included 119 mothers of children diagnosed with ASD. Participants were recruited through a purposive sampling approach, primarily through the assistance of health professionals at various rehabilitation centers serving children with autism. These professionals informed potential participants about the study. Mothers were eligible to participate if they have at least one child aged 4-12 years with a confirmed clinical diagnosis of ASD and provided informed consent.

Data collection procedure

The researcher contacted 10 educational and rehabilitation centers for children with Autism ASD across various regions in the West Bank, and engaged with the center directors to inform them about the study. From these centers; a list of 127 mothers whose children with ASD were attending the centers during the data collection period was compiled. Out of these, 119 of mothers agreed to participate, resulting in a 94% response rate. Data was collected from May to August 2024 using a WHOQOL-BREF tool (World health Organisation, 2012). Participants

completed the questionnaire in private rooms at the centers. In addition, an online questionnaire (created using Google Forms) was used to gather data from participants who were unable to visit the center during the study period because of political barriers. Completing the form took approximately 15-20 minutes.

Study instrument

The questionnaire consists of three distinct sections: the first section focuses on maternal characteristics that collected sociodemographic data including age, education level, marital status, employment status, family income, and place of residence. It also gathers data on household composition such as the number of adults over 18 years and children under 18 as well as the number of children diagnosed with ASD. Additionally, the section explores mother's health coverage, existing health problems, average hours of sleep at night, and the positive and negative impacts of caring for a child with ASD on various aspects of life.

The second section collects data on the child's characteristics including gender, current age, age at ASD diagnosis, the duration between noticing the symptoms and receiving a diagnosis, and whether the child lives in a nuclear or extended family. Furthermore, it includes information on the child's health coverage, any current health issues requiring treatment, sleep duration, and the therapy services the child is receiving. This section also provides information about the primary source of information for mothers on raising a child with ASD, and the main provider of emotional support to the mother.

The third section assesses the QoL using the WHOQOL-BREF questionnaire, developed by the WHOQOL group in 1996[WHO, 1996]. It consists of 26 items evaluating four domains: physical (7 items), psychological (6 items), social (3 items), and environmental health (8 items).

The items are rated on a 5-point Likert scale ranging from 1-5 (strongly disagree to strongly agree) or from (very dissatisfied to strongly satisfied), where higher scores indicate a better QoL, except for specific items (3, 4, and 26) which are reverse scored. The first two items (self-rated QoL and health satisfaction) were analyzed separately. Mean score categorized QoL as low (1-2.33), moderate (2.34-3.66), and high (3.67-5) as indicated in the literature (Ahmed et al., 2023).

Psychometric characteristics (Validity and reliability) were assessed for the questionnaire. The questionnaire was translated into Arabic, back-translated, and pilot tested with 10 mothers. Seven expert reviewers established content and face validity.

Internal consistency was confirmed using Cronbach's alpha, which indicated high overall reliability of 0.88. Domain-specific Cronbach's alpha coefficients were 0.85 for physical, 0.83 for psychological, 0.75 for social, and 0.86 for environmental domain. Test-retest reliability (15-day interval) showed significant correlations ($p < 0.01$) for all items.

Ethical considerations

Approval to conduct the study was obtained from the Research Ethical Review Committee at Al-Quds University, Palestine. Mothers received a clear explanation of the study's nature and objectives and were informed that participation is voluntary, with the right to withdraw without consequence. All collected data were treated with confidentiality. Informed consent was obtained from the participating mothers after they agreed to take part in the study. Following data collection, de-identified data were entered into SPSS and stored in secure files on the researcher's computer with restricted access. The researcher stored hard copies of the completed data sheets in a locked file cabinet. The research team only used the data for research purposes.

To ensure psychological support, the researcher arranged for a psychologist to be available on call while mothers completed the questionnaire. This measure was taken to provide psychological care, as disclosing sensitive information about their child with ASD could trigger hidden emotions or stressful reactions.

Statistical analysis

The data was entered into IBM SPSS Statistics version 23 for analysis, with a significance level of 0.05 set for all statistical tests. Normality distribution was assessed via Shapiro-Wilk test. Descriptive statistics were utilized to present frequencies and percentages for categorical variables, along with means and standard deviations for continuous variables, depicting the characteristics of mothers and children as well as overall quality of life and its domains. To examine the relationships between overall QoL and socio-demographic variables (independent t-tests, ANOVA with post-hoc test, and correlation analyses were conducted. To control for confounding factors, binary logistic regression was employed to determine the predictors and their relative significance applying a cutoff of 2.5 to distinguish between high and low QoL (Ahmed et al., 2023).

Results

Demographic

Table A1 in Appendix A indicates that 46.6% of the mothers were under 35 years old, 41.2% had bachelor's degrees, and 93.3% were married. The majority (71.4%) were unemployed. Mothers were distributed across West Bank, with 38.7% from the south, 31.1% from the north, and 30.1% from the middle. Over half lived in urban areas. Around 50% reported an average income, and 32.7% reported below-average income. On average, households had three adults and three

children less than 18 years (67.5%). Around 92% of mothers had one child with ASD, and 84% of these children were male, with a mean age of 8.1 years. About 52.1% reported a two-years and more gap between noticing the symptoms and receiving a diagnosis.

Approximately 58.8%, of children had health coverage, while 69.7% experienced behavioral problems. Currently, 31.1% of the children receive special education services, 30.3% have undergone occupational therapy, and 14.3% are not receiving any therapy services.

Furthermore, 58.8% of mothers relied on therapists and health providers for information in raising the child with ASD, whereas 14% used the internet and social media. Emotional support was received by 69% from their families, while 25.2% indicated a lack of emotional support. Approximately half of the mothers slept 6 hours per night, 20% less than 6 hours, and they spent an average of 8 hours daily in caring for their children with ASD. The most significant negative impact reported of caring for a child with ASD was on social life and family relationship of mothers with (41.1 %) and physical and mental health with 35.3%, whereas spirituality was the most positively affected (27.7%). Around 68% of mothers had health coverage, 31.1% had psychological distress, and 12.6 % had arthritis. Mothers' quality of life ratings were split, with 32% rating it poor or very poor, 35.4% good or very good, and 33.6 % neutral. Health satisfaction was fairly low, with 47.8% dissatisfied or very dissatisfied.

Overall QoL and domain scores

Table 2 shows that the mean of the perceived overall QoL (out of 5) was 2.85, indicating a moderate level of QoL. The highest scored dimension is “physical QoL” with a mean of 3.01 and SD of 1.11. However, the least scored dimension is “Environmental QoL” with a mean of 2.64 and SD of 1.10 followed by the “psychological QoL “ with a mean of 2.77 and SD of 1.08.

Physical quality of life score

Table 3 shows that the mean of the perceived physical quality of life is 3.01. Indicating a moderate level of quality of life. The least scored statement is "Do you have enough energy for everyday life?" with a mean of 2.61 and SD 0.84.

Psychological quality of life score

Table 4 shows that the mean of the perceived psychological quality of life is 2.77, indicating a moderate level of quality of life. The least scored statement is "How often do you have negative feelings such as bad mood, hopelessness, anxiety, depression?" with mean of 2.23 and SD of 1.17, and "How much do you enjoy life?" with a mean of 2.25 and SD of 0.87.

Environmental Quality of Life score

Table 5 shows that the mean of the perceived environmental quality of life is (2.64) indicating a moderate level of quality of life. The least scored statement is "To what extent do you have the opportunity for leisure activities?" with a mean of 1.93 and SD 0.97.

Social Quality of Life score

Table 6 shows that the mean of the perceived social quality of life is 2.99, indicating a moderate level of perceived social quality of life. The least scored statement is "How satisfied are you with the support you get from your friends?" with a mean of 2.76 and SD of 1.14.

Association between Sociodemographic Characteristics and Quality of Life Scores

The findings reveal a statistically significant difference in overall QoL and the age of mothers, with those under 35 reporting higher average QoL scores than those aged 35 and above ($t=2.590$,

p=0.013). Additionally, significant differences were noted in the environmental QoL ($t=2.972$, $p=0.004$) and social QoL scores ($t=2.415$, $p=0.017$). However, no significant differences were found in the physical and psychological domains of QoL.

Additionally, the analysis revealed no significant difference between mothers' education levels and their overall QOL score ($F=0.749$, $P=0.525$). However, there were significant differences in the social dimension of QoL ($F=3.03$, $P=0.032$), indicating that mothers with higher education levels reported better scores in this area. In contrast, no statistically significant differences were found in the physical, psychological, and environmental dimensions of QoL.

The results reveal a statistically significant difference between the means of the three categories of family income and overall QoL ($F=8.370$, $P<0.001$), mothers of children with ASD with higher incomes (much higher and higher than average) tend to have better QOL scores compared to those with lower incomes (less than average and much less), and those with average incomes also have significantly better QoL scores compared to those with lower incomes. Additionally, a significant differences were found in the psychological dimension ($F=4.88$, $P=0.009$) and the environment dimension of QoL ($F=15.50$, $P<0.001$), The "much higher and higher than average" group has the highest mean psychological and environmental QoL score, followed by the "within average" group. However, no significant differences were found in the physical and social QoL dimensions.

In addition, a statistically significant difference was found between the number of hours mother sleep at night and the overall QoL score ($F=3.100$, $P=0.049$). Likewise, significant differences were observed in physical ($F=3.45$, $P=0.027$) and psychological QoL scores ($F=3.710$, $P=0.035$),

indicating that mothers who sleep 6 hours per night had notably higher scores. However, no significant differences were noted in the environmental and social dimensions scores. See table 7

The results also indicated a weak negative correlation between the current child's age and overall QOL ($r = -0.238$, $p = 0.006$). Additionally, negative correlations were observed with the four dimensions: physical ($r = -0.159$, $p = 0.012$), psychological ($r = -0.121$, $p = 0.014$), environmental ($r = -0.316$, $p = 0.000$), and social QOL ($r = -0.238$, $p = 0.017$). See Table 8

Marital status, employment, place of residency of mothers, number of adults and number of children in the household, health coverage, gender of the child, , Time between noticing the symptoms and receiving a diagnosis, child's health problems, were not statistically significant with the QoL.

Logistic Regression

A cutoff score of 2.5 out of 5 was used based on prior literature to categorize the sample units into low ($n=44$, 37%) and high ($n=75$, 63%) QoL groups for the binary logistic regression[(Ahmed et al., 2023)]. After checking all the required assumptions, the researcher utilized the binary logistic regression model to examine the effect of a combination of independent variables (mother's age, education level, family monthly income, mother's sleeping hours at night, and child's age).

Table 9 shows the logistic regression results. The model was statistically significant, Chi-square ($df = 24$, $p < 0.001$). The five combined independent variables explained 56.7% of the variance in the cutoff overall QoL score (Nagelkerke $R^2 = 0.567$). The results indicated that mothers under 35 years old are significantly more likely to report a better QoL than those over 35 years ($OR=3.359$; 95% $CI= 1.203;9.377$; $P=0.021$). Mothers with a diploma have much higher odds of

reporting better QoL compared to those with only secondary education or less (OR= 7.345; 95% CI=1.056; 39.071; P=0.044). Mothers with higher and much higher than average family incomes had 19.215 more odds of having a high QoL than those with below-average incomes, and mothers within average family incomes also had 10.426 more odds of having a chance to report a better QoL than those below average family income. Finally, mothers who sleep less than 6 hours a night have a lower QoL compared to those who sleep more than 6 hours (OR= 0.111; 95% CI 0.18;0.698, P=0.019). Child's age was not statistically significant.

Discussion

In Palestinian society, where women typically assume primary caregiving roles (Foaahaa, 2018; UN ESCWA, 2023)], mothers of children with autism face particularly severe pressures (Vasilopoulou & Nisbet, 2016). Beyond managing child-rearing and household duties, they must manage additional ASD-related care needs while navigating limited support services, creating physical, emotional and economic burdens (Abu-Ras & Birani, 2019) that adversely affect their QoL (Sánchez Amate & Luque de la Rosa, 2024; Sinha et al., 2024).

Understanding the different aspect of QoL is important for mothers of children with ASD to guide policymakers and health workers to develop and implement specific in-tervention. In this study, mothers of children with ASD in the WB reported border-line-moderate QoL scores, with nearly half reported fair or very dissatisfaction with their health. Notably, 37% demonstrated low QoL, highlighting significant challenges related to both their overall QoL and their health.

The environmental domain showed the lowest QoL scores with particularly low scores observed for leisure activity opportunities. This aligns with a Jordanian study, which similarly reported the environmental domain as the lowest-scoring QoL dimension (Ahmed et al., 2023). The restricted

access to recreational facilities and community resources appears to be a significant challenge for caregivers across similar cultural contexts. Moreover, It was linked to the socioeconomic level for the families (Vasilopoulou & Nisbet, 2016), highlighting the critical challenges faced Palestinian families raising children with disabilities. They face financial burden, which limit their access to essential resources and cover medical expenses and follow-up services (Abu-Ras & Birani, 2019).

Following the environmental domain, the psychological domain exhibited the second-lowest score of QoL, with mothers reported negative feeling such as bad mood, hopelessness, anxiety and lack of enjoyment in life. These feelings are often linked to stress from caregiving responsibilities, socioeconomic pressures, and environmental obstacles. The quality of life of caregivers depends on their coping strategies, which are crucial for their emotional well-being (Sánchez Amate & Luque de la Rosa, 2024). Interventions targeting parents of children with ASD should also consider their psychological health.

In the social domain, they also reported moderate QoL scores, reflecting that social support remains a significant challenge, consistent with prior studies highlighting the pivotal role of social support in reducing self-reported stress levels among mothers of children with ASD. Key barriers include persistent social stigma associated with autism-related behaviors, limited public awareness, and inadequate institutional support systems (Sinha et al., 2024),(Raju et al., 2023). However, the physical domain showed slightly better QoL ratings, suggesting that some aspects of physical well-being, such as health services and care resources, are easier for these mothers to manage. Furthermore, mothers with higher education reported an enhanced quality of life, especially in social aspects. Education promotes stable work, reduces financial burdens, and improves access to mental health services. The mother's educational level can influence her

understanding of the condition, access to rehabilitation services, and ability to employ coping strategies, potentially leading to improvements in several aspects of quality of life (Raju et al., 2023; Sinha et al., 2024). Higher education may empower mothers to advocate for services, interpret medical advice, and adopt problem-focused coping mechanisms.

Several factors were significantly affect mother's QoL in this study. The results indicated that mothers under 35 years old are more likely to report a better QoL than those over 35 years. Some studies found also a negative correlation between the age of the mother and QoL as the QOL scores was found to worsen with increasing age of the mother (Tekinarslan, 2013). This may be due Older mothers may experience more physical exhaustion from caregiving due to age-related declines in energy, strength, and overall health.

A higher socioeconomic status, mainly mother's education was also significant.. Mothers with higher education tend to have better QoL, particularly in social domains. It promotes stable work, reduces financial burdens, and enhances access to mental health services. Education also influences understanding of conditions, rehabilitation services, and coping strategies, potentially improving overall quality of life (Ahmed et al., 2023). This finding aligns with some studies in the literature (Raju et al., 2023; Christodoulou et al., 2020). Similarly, family income significantly influences mothers' QoL, particularly in psychological and environmental domains. Families with financial stability have access to more resources, support, and activities. This is consistent with result indicated a positive correlation between socio-economic status and QOL in parents of children with ASD (Raju et al., 2023; Christodoulou et al., 2020).

This study emphasizes the significant impact of sleep length on the mother's QoL, particularly in psychological and physical domains. While sleep deprivation aggravates physical health

problems and mental health issues (Baattaiah et al., 2023) & Leader et al. (2022) investigated the relationship between sleep and factors like stress, anxiety, depressive symptoms, social support, and QoL in parents of children with ASD (Leader et al., 2022). Enough sleep corresponds with improved QoL and enhancing caregiving capacity, so addressing sleep-related issues is crucial to support mother's well-being

Policy recommendations

Based on the findings of this study, several evidence-based policy recommendations are proposed to improve the QoL among mothers of children with ASD in the WB, Palestine:

Enhancing Mental Health Support Services: Given mothers reported low psychological QoL, with high levels of anxiety, depression, and emotional distress, it is essential to integrate mental health services into ASD care programs by establishing counseling and stress management programs for mothers as well as establishing peer support groups to reduce isolation and share coping strategies.

Addressing Environmental Barriers to QoL: Since the environmental QoL domain scored the lowest, with limited leisure opportunities and financial constraints. Intentions should invest in community-based recreational programs for families of children with ASD.

Strengthen Socioeconomic Support for Families: This study revealed that Lower family income and financial strain were strongly associated with poorer QoL, particularly in environmental and psychological domains. It is crucial to provide financial assistance for families of children with ASD to cover therapy and medical costs and Expand health insurance coverage for ASD-related therapies (e.g., occupational therapy, speech therapy).

Promoting Education & Advocacy for Mothers: Higher maternal education was linked to better QoL, particularly in social domains. Empower mothers through education by Offer free parent training programs on ASD management and advocacy skills.

Supporting Maternal Sleep & Physical Well-being: Mothers sleeping <6 hours had significantly lower QoL, affecting physical and psychological health. Provide respite care services to allow mothers time for rest and self-care.

Study limitation

Some limitation should be acknowledged. First, the use of purposive sampling from rehabilitation centers may be introducing sampling bias that excludes mothers without access to services, limiting generalizability. Future studies should aim to include more diverse and representative samples to ensure that the findings can be applied more broadly. Second, cross-Sectional Design cannot establish causality between factors (e.g., income, education) and QoL outcomes. Third, Subjective QoL measures (WHOQOL-BREF) may be influenced by recalling bias and emotional states.

Conclusions

The findings of the current study reveal that mothers of children with ASD reported a moderate overall QoL. The lowest scores were observed in the environmental and psychological domains, suggesting these areas are particularly challenging for these mothers. Factors such as the mother's age, educational level, family income, and sleep duration are significantly associated to their QoL.

Furthermore, the findings highlight the critical need for comprehensive policy interventions targeting mental health, financial stability, healthcare access, and social support for mothers of children with ASD in Palestine. Policymakers should prioritize mental health integration in ASD care programs, financial aid and insurance reforms for therapy affordability, Community-based support networks to enhance social inclusion, and training programs on ASD management and advocacy skills, and encourage public awareness campaigns to reduce stigma and promote understanding of ASD. Future re-search should evaluate the impact of these interventions on their QoL.

References

- Abu-Ras, W., & Birani, A. (2019). Psychological stressors among Palestinian parents of children with disabilities: Challenges, coping, and determinati. September.
<https://doi.org/10.1177/0192513X18757830>
- Acharya, S., & Sharma, K. (2021). Lived Experiences of Mothers Raising Children with Autism in Chitwan District, Nepal. *Autism Research and Treatment*, 2021, 1–12.
<https://doi.org/10.1155/2021/6614490>
- Ahmed, E. A., Alkhaldi, S. M., Alduraiddi, H., Albsoul, R. A., & Alhamdan, M. Z. (2023). Quality of Life of Mothers and Fathers of Children with Autism Spectrum Disorder in Jordan. *Clinical Practice & Epidemiology in Mental Health*, 19(1), 1–8.
<https://doi.org/10.2174/17450179-v19-e230529-2022-40>
- Alansari, A. M., & Jahrami, H. A. (2018). Health of mothers of children with autism spectrum disorders and intellectual disability. *Bahrain Medical Bulletin*, 40(3), 157–161.
- Ali, U., Bharuchi, V., Ali, N. G., & Jafri, S. K. (2021). Assessing the Quality of Life of Parents of Children With Disabilities Using WHOQoL BREF During COVID-19 Pandemic. *Frontiers in Rehabilitation Sciences*, 2(August), 1–9. <https://doi.org/10.3389/fresc.2021.708657>
- Alkhateeb, J. M., Hadidi, M. S., & Mounzer, W. (2022). The Impact of Autism Spectrum Disorder on Parents in Arab Countries: A Systematic Literature Review. *Frontiers in Psychology*, 13(July), 1–13. <https://doi.org/10.3389/fpsyg.2022.955442>
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders (5th DSM-5)*. American psychiatric publishing.

- Baattaiah, B. A., Alharbi, M. D., Babteen, N. M., Al-Maqbool, H. M., Babgi, F. A., & Albatati, A. A. (2023). The relationship between fatigue, sleep quality, resilience, and the risk of postpartum depression: an emphasis on maternal mental health. *BMC Psychology*, 11(1), 1–17. <https://doi.org/10.1186/s40359-023-01043-3>
- Christodoulou, P., Christopoulou, F., Stergiou, A., & Christopoulos, K. (2020). Quality of Life of Parents of Children With Disabilities. *European Journal of Education and Pedagogy*, 1(1), 1–6. <https://doi.org/10.24018/ejedu.2020.1.1.1>
- Dardas, L. A., & Ahmad, M. M. (2014). Predictors of quality of life for fathers and mothers of children with Autistic Disorder. *Research in Developmental Disabilities*, 35(6), 1326–1333. <https://doi.org/10.1016/j.ridd.2014.03.009>
- Dey, M., Paz Castro, R., Haug, S., & Schaub, M. P. (2019). Quality of life of parents of mentally-ill children: A systematic review and meta-analysis. *Epidemiology and Psychiatric Sciences*, 28(5), 563–577. <https://doi.org/10.1017/S2045796018000409>
- Fatima, S., Sajjad, M., Salman, F., & Sarfraz, S. (2024). Mental Health Outcomes in Parents of Children with Autism: Implications for Practice and Policy. *Pakistan Journal of Humanities and Social Sciences*, 13(01), 3409–3414. <https://doi.org/10.52131/pjhss.2024.v12i4.2637>
- Foqahaa, N. S. (2018). Caught Up Between a Rock & a Hard Place : Occupation , Patriarchy and Gender Relations a Case Study of Palestinian Women in Area C & H2. In *UN Weomen* (Issue March). http://healthclusteropt.org/admin/file_manager/uploads/files/1/5cd15586228d8.pdf
- Hosseinpour, A., Biglarian, A., Younesi, S. J., Azkhosh, M., & Safi, M. H. (2022). Exploring Challenges and Needs of Parents Providing Care to Children with Autism Spectrum Disorders: A

Qualitative Study. *Iranian Journal of Psychiatry and Behavioral Sciences*, 16(3).

<https://doi.org/10.5812/ijpbs-127300>

Ilias, K., Liaw, J. H. J., Cornish, K., Park, M. S. A., & Golden, K. J. (2017). Wellbeing of mothers of children with “A-U-T-I-S-M” in Malaysia: An interpretative phenomenological analysis study. *Journal of Intellectual and Developmental Disability*, 42(1), 74–89.

<https://doi.org/10.3109/13668250.2016.1196657>

Leader, G., Glynn, C., Kirkpatrick, B., Chen, J. L., O’Suilleabháin, P. S., & Mannion, A. (2022). Familial sleep and autism spectrum disorder: a pilot actigraphy study of sleep quality, quality of life and psychological distress. *Irish Journal of Psychological Medicine*, 39(3), 261–271.

<https://doi.org/10.1017/ipm.2021.24>

Magalhães, J. M., Rodrigues, T. A., Neta, M. M. R., Damasceno, C. K. C. S., Sousa, K. H. J. F., & Arisawa, E. Â. L. S. (2021). Experiences of family members of children diagnosed with autism spectrum disorder. *Revista Gaucha de Enfermagem*, 42, 1–9.

<https://doi.org/10.1590/1983-1447.2021.20200437>

McStay, R. L., Trembath, D., & Dissanayake, C. (2014). Stress and Family Quality of Life in Parents of Children with Autism Spectrum Disorder: Parent Gender and the Double ABCX Model. *Journal of Autism and Developmental Disorders*, 44(12), 3101–3118.

<https://doi.org/10.1007/s10803-014-2178-7>

Picardi, A., Gigantesco, A., Tarolla, E., Stoppioni, V., Cerbo, R., Cremonese, M., Alessandri, G., Lega, I., & Nardocci, F. (2018). Parental Burden and its Correlates in Families of Children with Autism Spectrum Disorder: A Multicentre Study with Two Comparison Groups. *Clinical*

Practice & Epidemiology in Mental Health, 14(1), 143–176.

<https://doi.org/10.2174/1745017901814010143>

Raju, S., Hepsibah, P. E. V., & Niharika, M. K. (2023). Quality of life in parents of children with Autism spectrum disorder: Emphasizing challenges in the Indian context. *International Journal of Developmental Disabilities*, 69(3), 371–378. <https://doi.org/10.1080/20473869.2023.2173832>

Sánchez Amate, J. J., & Luque de la Rosa, A. (2024). The Effect of Autism Spectrum Disorder on Family Mental Health: Challenges, Emotional Impact, and Coping Strategies. *Brain Sciences*, 14(11). <https://doi.org/10.3390/brainsci14111116>

Scrimin, S., Mastromatteo, L. Y., Hovnanyan, A., Zagni, B., Rubaltelli, E., & Pozzoli, T. (2022). Effects of Socioeconomic Status, Parental Stress, and Family Support on Children's Physical and Emotional Health During the COVID-19 Pandemic. *Journal of Child and Family Studies*, 31(8), 2215–2228. <https://doi.org/10.1007/s10826-022-02339-5>

Shawahna, R. (2021). Self-rated familiarity with autism spectrum disorders among practicing nurses: a cross-sectional study in the palestinian nursing practice. *BMC Nursing*, 20(1), 1–11. <https://doi.org/10.1186/s12912-021-00764-3>

Sinha, R., Rajpoot, K., Uniyal, A., & Sabid Syed, V. (2024). Perceived Mental Health and Quality of Life in Mothers of Children with Autism Spectrum Disorder in Armed Forces in a Tertiary Care Center of North India: A Cross-Sectional Study. *Annals of Child Neurology*, 32(4), 245–249. <https://doi.org/10.26815/acn.2024.00612>

Taslaq, N., Russo, S., Sciences, H., Campus, O., Street, N., Sciences, H., Campus, O., & Street, N. (2017). Parents ' Experience during the Diagnostic Process of Autism Spectrum Disorder in

the West Bank . A Descriptive Phenomenological Study (Vol. 7, Issue 6). An-Najah National University.

Tekinarslan, Il. C. (2013). A comparison study of depression and quality of life in Turkish mothers of children with Down syndrome, cerebral palsy, and Autism Spectrum Disorder. *Psychological Reports*, 112(1), 266–287. <https://doi.org/10.2466/21.02.15.PR0.112.1.266-287>

UN ESCWA. (2023). Social and economic situation of Palestinian women and girls July 2020–June 2022. https://www.un.org/unispal/wp-content/uploads/2023/03/ESCWAREPORT_090323.pdf

Vasilopoulou, E., & Nisbet, J. (2016). The quality of life of parents of children with autism spectrum disorder: A systematic review. *Research in Autism Spectrum Disorders*, 23, 36–49. <https://doi.org/10.1016/j.rasd.2015.11.008>

Veroni, E., & Veroni, E. (2019). The Social Stigma and the Challenges of Raising a Child with Autism Spectrum Disorders (ASD) in Greece. *Exchanges: The Interdisciplinary Research Journal*, 6(2), 1–29. <https://doi.org/10.31273/eirj.v6i2.200>

WHO. (1996). WHOQOL-BREF : introduction, administration, scoring and generic version of the assessment : field trial version, December. In World Health Organization (pp. 1–16).

World health Organisation. (2012). WHOQOL: Measuring Quality of Life. <https://www.who.int/tools/whoqol>

Yamada, A., Kato, M., Suzuki, M., Suzuki, M., Watanabe, N., Akechi, T., & Furukawa, T. A. (2012). Quality of life of parents raising children with pervasive developmental disorders. *BMC Psychiatry*, 12. <https://doi.org/10.1186/1471-244X-12-119>

Zeidan, J., Fombonne, E., Scora, J., Ibrahim, A., Durkin, M. S., Saxena, S., Yusuf, A., Shih, A.,
& Elsabbagh, M. (2022). Global prevalence of autism: A systematic review update. *Autism
Research*, 15(5), 778–790. <https://doi.org/10.1002/aur.2696>

Zhou, W., Liu, D., Xiong, X., Xu, H., & Manchia, M. (2019). Emotional problems in mothers of
autistic children and their correlation with socioeconomic status and the children's core
symptoms. *Medicine (United States)*, 98(32). <https://doi.org/10.1097/MD.00000000000016794>

Table A1: Sociodemographic characteristics of participating mothers and their children with ASD

Variable	Category	N(%),Mean ($\pm$ SD)
Mother's age	<35 years	55(46.6)
	$\geq$ 35 years	63(53.4)
level of education	Secondary School or less	25(21.0)
	Diploma	25(21.0)
	Bachelor	49(41.2)
	High education	8(6.7)
Place of residence in the West Bank	South	46(38.7)
	Middle	36(30.3)
	North	37(31.1)
Employment status	Employed	34(28.6)
	Unemployed	85(71.4)
Monthly family income		
(average income is 3000 NIS)	Higher and much higher than the	20(16.8)

	More than 6 hours	34(28.6)
Current age of the child		
		8.1(±3)
Time between noticing the symptoms and receiving a diagnosis		
	Less than 2years	57(47.9)
	2 years and more	62(52.1)
The child's health problems		
	Behavioral problems	83(69.7)
	Sensory integration disorder	13(10.9)
	Psychological problems	8(6.8)
	Neurological problems	4(3.4)
The child with ASD is currently receiving the therapy services		
	No therapy services	17(14.3)
	Occupational therapy	36(30.3)
	Special education	37(31.1)
	Speech therapy	29(24.4)
Mothers' life negatively affected by caring for a child with ASD		
	Social activities and family relationship	49(41.1)

	Physical and psychological health	42(35.3)
	Sporting and recreational activities	2(1.7)
Mothers' life positively affected by caring for a child with ASD	Social activities and family relationship	18(15)
	Physical and psychological health	13(10.9)
	Spiritually	33(27.7)
The majority of information in raising the child with ASD is provided by	Health care providers and therapists	70(58.8)
	Family members and spouse	18(14.2)
	Internet, social media, and support groups	21(17.7)
	No one	30(25)
The most emotional support for coping with the responsibilities is provided by	Family members and spouse	82 (69)
	friends	6(5)

Self-rated quality of life	Poor and very poor	38(32)
	Neither poor nor good	40(33.6)
	Good and very good	41(35.4)
Perceived satisfaction with own health	Fairly dissatisfied and very dissatisfied	57(47.8)
	Neither satisfied not dissatisfied	22(18.5)
	Satisfied and very satisfied	40(33.6)

Table 2. Means, standard deviation and percentages for overall QoL and domain scores (N=119)

QoL domain	Mean ^a (SD)	level ^b
Physical QoL	3.01(1.11)	Moderate
psychological QoL	2.77(1.08)	Moderate
Environmental QoL	2.64(1.10)	Moderate
Social QoL	2.99(1.11)	Modertae
Overall QoL	2.85(1.10)	Moderate

Note: a: score out of 5, b: levels are: 1-2.33 low, 2.33-3.67= moderate and 3.67 – 5 High

Table 3. Means, standard deviation and percentages to examine the extent of perceived physical QoL (N=119)

Statement	Mean(SD)	Percentage
1.Pain and discomfort	3.43(1.31)	68.6%
2.Dependence on medical substances and medical aids	3.42(1.32)	68.4%
3.Energy and fatigue	2.61(0.84)	52.3%
4.Mobility	2.82(1.09)	56.5%
5.Sleep and rest	2.88(1.09)	57.6%
6.Activities of daily living	2.92(1.04)	58.3%
7.Work capacity	2.99(1.09)	59.8%
Mean	3.01(1.11)	60.2%

Table 4: Means, standard deviation and percentages to examine the extent of perceived psychological QoL. (N=119)

Statement	Mean(SD)	Percentage
1.Positive feeling(enjoying life)	2.25(0.87)	45.0%
2.Spiritually,religion,and personal beliefs	2.97(1.23)	59.3%

3. Thinking, learning, memory and concentration	2.36(1.08)	52.6%
4. Bodily image	3.21(1.05)	64.7%
5. Self-esteem	3.24(1.11)	64.7%
6. Negative feeling such as bad mood, hopelessness, anxiety, depression	2.23(1.17)	46.6%
Mean	2.77(1.08)	55.45

Table 5. Means, standard deviation and percentages to examine the extent of perceived environmental QoL (N=119).

Statement	Mean(SD)	Percentage
1. Feeling of safety	2.91(1.18)	58.15%%
2. Healthy Physical environment	2.55(1.22)	50.92%
3. Financial resources	2.45(1.00)	48.91%

4. Opportunities for acquiring new information and skills	2.91(0.88)	58.15%
5. Participation in and opportunities for recreation/leisure activities	1.93(0.97)	38.66%
6. Satisfaction with living place condition	2.68(1.26)	53.61%
7. Accessibility to health services	2.71(1.08)	54.12%
8. Transport	2.97(1.18)	59.33%
Mean	2.64(1.10)	52.73%

Table 6. Means, standard deviation and percentages to examine the extent of perceived social quality of life. (N=119)

Statement	Mean(SD)	Percentage
1.Personal relationship	3.09(1.15)	61.8%
2.Sexual activity	3.10(1.04)	62.0%
3.Social support	2.76(1.14)	55.3%
Mean	2.99(1.11)	59.7%

Table 7. Association between socio-demographic characteristics and QoL overall and domain scores (N=119)

Independent Variable ^a	Overall	Physical QoL	Psychological	Environmental	Social QoL
	QoL		QoL	QoL	
	Mean(SD)	Mean(SD)	Mean (SD)	Mean(SD)	Mean(SD)
Mother's age	2.95(0.69)				3.20(0.89)
	<35 years)	2.85(0.57)	3.06(0.93)	2.87(0.57)	
	2.67(0.51)				2.81(0.88)
	≥35years)	2.70(0.42)	2.91(0.75)	2.45(0.42)	
	t 2.50	1.71	0.92	2.97	2.42
	P 0.013*	0.091	0.403	0.004*	0.017*
Education level	(Less				
	than high school) 2.71(0.63)	2.84(0.58)	2.84(0.27)	2.42(0.78)	2.94(0.93)

1						33
2						
3						
4		2.86(0.56)				2.96(0.92)
5						
6						
7	Diploma	)	2.82(0.43)	3.16(0.76)	2.69(0.75)	
8						
9						
10						
11	(BA and					
12						
13	higher	2.81(2.79				3.17(0.87)
14						
15			2.69(0.04)	2.98(0.89)	2.74(0.78)	
16	education	)				
17						
18	)					
19						
20						
21	F	0.52	1.27	0.91	1.94	3.03
22						
23	P	0.59	0.29	0.40	0.14	0.032*
24						
25						
26	(higher					
27						
28						
29	and much					
30						
31	higher	3.63(0.78				3.14(0.89)
32						
33			2.80(0.48)	3.22(0.86)	3.16(0.66)	
34	than the	)				
35						
36	average)					
37						
38						
39						
40						
41						
42	Family income					
43	(Within	2.91(0.75				2.79(0.85)
44						
45			2.82(0.49)	3.11(0.77)	2.79(0.68)	
46	Average)	)				
47						
48						
49						
50						
51	(Less and					
52						
53	much less	2.49(0.78				2.51(0.90)
54						
55	than	0	2.67(0.54)	2.64(0.86)	2.15(0.75)	
56						
57						
58	average)					
59						
60						
61						
62						
63						
64						
65						

22 Sleeping hours at
23 night
24
25

*Statistically significant, $p < 0.005$

Table 8: Correlation between current child's age and QoL overall and domain scores (N=119)

*Statistically significant, $p < 0.005$

Table 9: Binary logistic regression of mother's age, child's age, educational level, family monthly income, and sleeping hours on cutoff overall QoL (N=119).

Independent variables(Ref)	OR	P value	IC 95% (Minimum; Maximum)
Mother's age (≥ 35 years)			
> 35 years	3.359	0.021*	1.203;9.377
Educational level (Secondary school or less)			
diploma	7.345	0.044*	1.056;39.071
Family income (less than average)			
Much higher and higher than average	19.215	0.004*	1.962;38.910
Within average	10.426	0.001*	2.595;21.713
Sleep hours at night (more than 6 hours)			
less than 6 hours at night	0.111	0.019*	0.018;0.698
Childs' age			
		.446	

Note: a Reference category in parenthesis, *Statistically significant, $p < 0.5$

التجارب المعيشية وجودة الحياة لدى أمهات أطفال التوحد: دراسة مختلطة الأساليب في الضفة الغربية، فلسطين

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الملخص

المقدمة: يُشكّل اضطراب طيف التوحد تحدياتٍ جسيمة لمُقدّمي الرعاية، مؤثراً بشكلٍ كبير على جودة حياة الأمهات. ورغم ثبوت هذا التأثير العالمي، إلا أن الأبحاث حول التجارب الحياتية وجودة حياة الأمهات في السياق الفلسطيني لا تزال محدودة. كما توجد فجوةٌ حرجة في تصميم و تقييم فعالية برامج الدعم المُصمّمة لتحسين جودة حياة الأمهات في هذا السياق الاجتماعي والثقافي الفريد. الهدف: هدفت هذه الدراسة إلى استكشاف التجارب المعيشية للأمهات اللواتي يربين أطفالاً مصابين باضطراب طيف التوحد في الضفة الغربية، فلسطين؛ وتقييم جودة حياتهن والعوامل المرتبطة بها؛ وتقييم فعالية برنامج دعم "الأمومة الواعية" في تحسين جودة حياة الأم.

المنهجية: استخدم تصميم مختلط الأساليب. استخدمت المرحلة النوعية نهجاً تفسيريّاً ظاهريّاً، حيث أجريت مقابلات معمقة مع أمهات الأطفال (الذين تتراوح أعمارهم بين 4 و 12 عاماً) المصابين باضطراب طيف التوحد لتفسير تجاربهن المعيشية. بدأت المرحلة الكمية بدراسة مقطعية (عددها 119) باستخدام أداة WHOQOL-BREF لتقييم جودة الحياة في المجالات الجسدية والنفسية والاجتماعية والبيئية وتحديد العوامل المرتبطة بها. بعد ذلك، واستناداً إلى النتائج الأولية واستشارات الخبراء، تم تطوير تدخل "الأمومة الواعية" القائم على المجموعات لمدة 12 أسبوعاً. تم تقييم فعاليته باستخدام تصميم شبه تجريبي، حيث تم توزيع 56 أمّاً بشكل مقصود على مجموعتين تجريبيتين وضابطة. تم قياس جودة الحياة في البداية، وبعد التدخل، وبعد ستة أشهر من المتابعة.

النتائج: حدد التحليل النوعي عشرة محاور فرعية ضمن تجارب الأمهات، تم تجميعها في ثلاثة محاور رئيسية: التجارب الصعبة والمرهقة؛ وتحديات الرعاية وأعبائها؛ وبناء القدرة على الصمود. وسجل المجال البيئي ($M=2.85$). أشارت الدراسة المقطعية إلى جودة حياة متوسطة بشكل عام أدنى مستوى، يليه المجالان النفسي والاجتماعي، بينما سجل البعد البدني أعلى مستوى. وشملت العوامل المهمة المرتبطة بجودة الحياة عمر الأم، وتعليمها، ودخل الأسرة، ومدة نومها. أظهرت

دراسة التدخل تحسنات كبيرة في جميع مجالات جودة الحياة للمجموعة التجريبية مقارنةً بالمجموعة ($|\delta| = 0.70$). وجودة الحياة الشاملة ($|\delta| = 0.70$) الضابطة، مع أكبر حجم تأثير في المجال النفسي في المتابعة التي أجريت بعد ستة أشهر، تم الحفاظ على مكاسب جودة الحياة بشكل عام (0.68) إلى حد كبير، على الرغم من ملاحظة انخفاض طفيف في الفوائد، بشكل أكثر وضوحاً في المجالات البيئية والاجتماعية.

الخلاصة: تسلط النتائج الضوء على التجارب الصعبة وجودة الحياة المتوسطة للأمهات الفلسطينيات اللاتي لديهن أطفال مصابون باضطراب طيف التوحد، مع تحديد المجالات البيئية والنفسية الأكثر احتياجاً. وقد أثبت برنامج "الأمومة الواعية" فعاليته في تحسين جودة الحياة. تُبرز الدراسة الحاجة الملحة إلى سياسات رعاية صحية شاملة تُركّز على الأسرة، وأنظمة دعم مُستدامة - تشمل خدمات الصحة النفسية، والمساعدات الاجتماعية والاقتصادية، والتدخلات المُصمّمة خصيصاً - لتحسين رفاهية هؤلاء الأمهات في فلسطين.

الكلمات المفتاحية: الأمهات، الأطفال، اضطراب طيف التوحد، التأويلات الظاهرية، النوعية، جودة الحياة، التدخل، برنامج الدعم، فلسطين