

Effect of Gender on Mindfulness in Parents of Children with Autism

تأثير متغير الجنس في تحديد مستوى اليقظة العقلية

لدى أولياء أطفال اضطراب طيف التوحد

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Abstract

The study examined the impact of gender on mindfulness levels between fathers and mothers of children with autism spectrum disorder at the Al-Yusr Association for Childhood Care in Sidi Bel Abbes. A descriptive methodology was used with a sample of 60 parents, and the Mental Alertness Scale was applied using the Mindfulness Scale developed by Pierre et al., translated and adapted by Mohamed El-Sayed Abdel Rahman. The results revealed significant differences in mindfulness based on gender, with discussions and recommendations provided.

Keywords: Mindfulness; Autism; Parents of Children with Autism

ملخص

تناولت الدراسة تأثير متغير الجنس على مستويات اليقظة العقلية لدى الآباء والأمهات من أطفال اضطراب طيف التوحد في جمعية اليسر لرعاية الطفولة في سيدي بلعباس؛ حيث اعتمدت الدراسة على المنهج الوصفي، كما تم استخدام عينة مكونة من 60 من الآباء والأمهات، مع تطبيق مقياس اليقظة مقياس اليقظة العقلية إعداد بيبير وآخرون ترجمة وتعريب محمد السيد عبد الرحمان. وأظهرت النتائج وجود فروق معنوية في مستويات اليقظة العقلية بناءً على متغير الجنس، وفي الأخير تم تقديم مجموعة من المناقشات والتوصيات بناءً على تلك النتائج.

الكلمات المفتاحية: اليقظة العقلية؛ التوحد؛ أولياء طيف التوحد

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Introduction

The family unit has consistently been a central topic of interest for researchers and scientists, primarily due to its pivotal role as the cornerstone of society. The nascence of a kid a with disabilities introduces profound psychological challenges for parents, who often face immense stress and difficulties in navigating the complexities of caregiving. Among various disabilities, Autism Spectrum Disorder (ASD) stands out as one of the major intricate challenges. Children with ASD often struggle with communication, which can significantly hinder their linguistic, social, and cognitive development. This condition is particularly stressful for families, as its ambiguous nature can lead to uncertainty and anxiety, especially in the period before a clear diagnosis is obtained.

The appearance of a child with autism can adversely influence parents' mental health, frequently resulting in feelings of isolation, anxiety, and depression. These emotional burdens make it essential for parents to cultivate a high level of mindfulness and awareness. Mindfulness enables parents to better understand the needs of their unique to engage with them in ways that are more meaningful. It encompasses a variety of practices that promote mental well-being, enhance communication skills, foster empathy, support emotional growth, improve physical health, and ultimately enhance learning and performance for both the parent and child.

Moreover, the journey of raising a child with autism can also provide opportunities for personal growth and resilience. Many parents report that developing mindfulness practices not only aids in managing stress but also fosters a deeper connection with their child. These practices can include meditation, reflective journaling, and engaging in supportive community groups, all of which can help parents navigate the complexities of their situation.

This investigation would reveal the role of mindfulness among parents of children with autism, examining how it can serve as a vital tool for coping with challenges and enhancing family dynamics. By understanding the interplay between mindfulness and parenting in the context of ASD, we hope to provide valuable insights and recommendations for supporting families in similar situations.

Problem Statement

Parents often encounter life events that disrupt their routines and negatively affect their mental health, hindering their ability to fulfill family roles. This challenge intensifies when a child is diagnosed with Autism Spectrum Disorder (ASD). The arrival of a kid with ASD can evoke feelings of shock and disappointment, particularly for mothers, who usually share a closer bond with their child and are deeply affected by the disability. The aspiration for a healthy, ideal child may diminish, leading to psychological distress and a sense of hopelessness. Mothers frequently find themselves preoccupied with concerns about their child's future and ways to assist them, all while striving to connect with their child amidst misunderstandings from others, especially when interacting with healthcare professionals.

Although numerous fields contribute to the care of children with autism—from diagnosis to treatment—the family remains the most vital component of the rehabilitation process. Mothers, in particular, bear the heaviest burden of follow-ups, training, and continuous care. They participate in specialized therapies at clinics, manage training at home, and juggle marital duties alongside caring for other children. These significant responsibilities, along with feelings of helplessness and empathy for their child, create considerable psychological strain, often leading to both physical and mental health issues. This pressure can profoundly affect parents' emotional well-being, family relationships, and work life.

In this light, positive psychology has increasingly recognized the importance of mindfulness for its mental health benefits. Mindfulness can enhance parents' capacity to care for themselves and mitigate their susceptibility to psychological disorders. Defined as focusing on this moment and accepting experiences without judgment, mindfulness has emerged as a valuable strategy for individuals coping with ongoing stress, including parents of children with ASD, who frequently experience elevated levels of anxiety and stress due to their caregiving roles (Singer, 2006: 155).

Research has demonstrated that mindfulness training offers significant advantages for parents. Benn et al. (2012) claimed that mindfulness practices and meditation effectively reduced stress levels and improved self-control among mothers of children with disabilities involving autism, including autism. Likewise, Ferraioli and Harris (2013) indicated that mindfulness training led to decreased anxiety and stress, enhancing the ability to cope with daily challenges associated with autism.

Additionally, Bazzano et al. (2015) found that mindfulness internship had a beneficial effect impact on parents' mental and physical health, resulting in lower psychological stress levels among those with children diagnosed with autism. Epel et al. (2014) further discovered that mindfulness contributed to reduced cortisol levels—a hormone linked to stress—thus improving physiological stress responses.

Dykens et al. (2014) also highlighted that mindfulness programs not only enhance parents' mental health but also strengthen their relationships with their children with autism, enabling them to navigate daily challenges more effectively.

In this context, the current study seeks to address the following primary question: Are there statistically significant difference in mindfulness levels based on gender.

Drawing from theoretical frameworks, prior research, and exploratory studies, we hypothesize that there are statistically significant differences in mindfulness level attributable to gender.

Operational Definitions of the Study Terms

Mindfulness

The score obtained on the application of the mindfulness scale by "Bier et al.," translated and adapted by Mohamed Said Abdel Rahman.

Autism

The score obtained on the CARS scale used by the Al-Yusr Association.

Theoretical Framework

First Subtitle

Mindfulness is characterized as a mental state in which attention is intentionally directed to this moment, encompassing thoughts, thinking, feelings, and sensations in the body, without judgment or efforts to alter them. This practice is designed to enhance self-awareness and to accept life experiences as they are. It is believed that mindfulness contributes to better mental health by alleviating stress and fostering overall well-being.

Bishop et al. (2004) define mindfulness as "enhanced self-awareness that involves ongoing monitoring of the present moment with an undistracted focus and admission of thoughts and feelings, rather than ignoring or evading them." Further research has shown that mindfulness can reduce anxiety and depression and improve concentration and emotional control (Chiesa & Serretti, 2010: 125).

Overall, these definitions highlight that mindfulness requires complete awareness of one's thoughts and feelings in the present moment, without categorizing the experience as good or bad. It entails accepting experiences as they are, which includes being open to uncomfortable thoughts, feelings, and unpleasant situations, while maintaining a balanced approach to living in the moment.

The Evolution of Mindfulness

Mindfulness is a concept with a long and rich history, deeply embedded in various spiritual traditions, especially Buddhism. The term "Sati" in Buddhism refers to mindfulness, which includes both awareness and focused attention, and is considered a central component of meditation practices aimed at achieving enlightenment. The practice of mindfulness has its roots in Eastern philosophies, where it was used as a method of meditation and self-reflection, emphasizing inner peace and the acceptance of reality without judgment. In the 20th century, mindfulness was introduced to the Western world primarily through the work of Jon Kabat-Zinn. In 1979, he developed the Mindfulness-Based Stress Reduction (MBSR) program at the University of Massachusetts Medical School, using mindfulness as a therapeutic technique for managing conditions such as anxiety, depression, and chronic pain (Kabat-Zinn, 1990: 180).

From its origins in ancient spiritual practices to its current place as a scientifically supported method for improving mental health, mindfulness has evolved into a vital tool for enhancing self-awareness and resilience, helping individuals navigate the challenges of life.

Benefits of Mindfulness

Mindfulness offers a wide range of benefits that promote mental health and overall well-being, including the following: (Kabat-Zinn, 1990: 190)

- Improved Focus and Attention: Regular mindfulness practice enhances concentration, leading to better performance in both everyday tasks and professional duties.
- Reduced Anxiety and Stress: Mindfulness has been shown to lower cortisol levels, which helps reduce feelings of anxiety and psychological stress.
- Better Psychological Well-being: Mindfulness practice is linked to higher levels of well-being, greater happiness, and a more positive mood.
- Stronger Coping Skills: Mindfulness helps individuals develop resilience, making it easier to handle stress and life's challenges.
- Increased Self-awareness: Mindfulness promotes greater self-awareness, helping individuals gain better insight into their thoughts and emotions, which leads to more informed decision-making.
- Enhanced Social Connections: Practicing mindfulness can improve social interactions by boosting empathy and communication skills.
- Better Physical Health: Research indicates that mindfulness can strengthen the immune system and reduce chronic pain, contributing to better physical health.
- Reduction in Depression Symptoms: Mindfulness has been shown to alleviate symptoms of depression and is widely used in various therapeutic settings.
- Development of Meditation Skills: Mindfulness equips individuals with valuable meditation techniques that can improve relaxation and focus in daily life.
- Increased Creativity: Some studies suggest that mindfulness may enhance creativity and innovative thinking by fostering new cognitive pathways.

Practical Framework of the Study

Methodology Definition

In research, methodology refers to the systematic framework that outlines the principles, procedures, and approaches used to conduct a study. It encompasses the Theoretical foundations, research designs, data collection techniques, and analysis methods employed to investigate specific research questions or hypotheses. The methodology provides a structured approach that ensures the research is conducted rigorously and can be replicated, thereby validating the findings and contributing to the overall body of knowledge within a given field (Creswell, 2017: 190).

Descriptive Methodology Definition

Descriptive methodology is a kind of research intended to offer a comprehensive account of a particular to phenomenon, behavior, or population. It emphasizes observing, documenting, and describing characteristics without manipulating variables or establishing cause-and-effect relationships. This type of research often utilizes various data collection methods, including surveys, observations, and interviews, to gather both qualitative and quantitative data. The principal aim of descriptive research is to provide a clear picture of the subject under

investigation, enabling researchers to identify patterns, trends, and relationships within the data (Creswell, 2014).

Exploratory research or investigation

The exploratory study forms the foundation for the field study, as it allows us to define the study's variables and tools, as well as to understand its psychometric properties and identify the study sample and its location. This enables us to initiate the primary study and achieve its goals, relying on the descriptive method for data collection. We conducted the exploratory study at the Al-Yusr Association for the Care and Promotion of Childhood in Sidi Bel Abbès, with the following objectives:

- To explore the field of the main study.
- To define the sample and tools used in the main study.
- To calculate the study scale psychometric characteristic in the study.
- To identify potential difficulties and obstacles to avoid in the main study.

Population of the Exploratory Study

Table (1): shows the characteristics of the study sample participants according to the gender variable

Gender	Number	Percentage
Female	15	50%
Male	15	50%
Total	30	100%

Source: Prepared by the researcher based on the SPSS program.

The exploratory study involved 30 participants, comprising 15 male and 15 female parent of autistic children.

Scale Definition

The Mindfulness Scale was developed by Bier et al., translated, and adapted by Mohamed Said Abdel Rahman. This scale aims to measure mindfulness skills and consists of 39 items. It has been standardized in many Western cultures, such as Spain, Norway, Italy, Sweden, and Brazil, as well as in Eastern cultures like Iran, Turkey, and China.

Validity

The validity of the scale was established through internal consistency, assessed using 30 parents of autistic children were included in the sample (15 fathers and 15 mothers). The correlation coefficients were computed between the score of each item and the overall score the results presented in the following table:

Table (2): The correlation coefficient between the score of each item and the total score of the scale

Significance at 0.05

The Item	Correlation Coefficient	The Item	Correlation Coefficient	The item	Correlation Coefficient
1	**0.67**	14	**0.74	27	**0.85
2	**0.85	15	**0.82	28	**0.87
3	**0.93	16	**0.82	29	**0.85
4	**0.62	17	**0.72	30	**0.87
5	**0.90	18	**0.81	31	**0.90
6	**0.83	19	**0.86	32	**0.88
7	**0.82	20	**0.87	33	**0.76
8	**0.88	21	**0.84	34	**0.66
9	**0.83	22	**0.88	35	**0.55
10	**0.89	23	**0.89	36	**0.75
11	**0.77	24	**0.85	37	**0.75
12	**0.85	25	**0.87	38	**0.84
13	**0.79	26	**0.87	39	**0.52

Source: Prepared by the researcher based on the SPSS program.

Reliability

Trustworthiness of the scale was calculated using Cronbach's alpha, and the results are as follows:

Table (3): Represents Cronbach's Alpha coefficient

Variable	Cronbach's alpha coefficient
Entire scale	0.75

Source: Prepared by the researcher based on the SPSS program.

Main Study

The primary research comprised a sample of 60 caregivers of autistic of kids, consisting of 30 fathers and 30 mothers, who were selected from the Al-Yusr Association for Child Care and Development.

Table (4): Represents Cronbach's Alpha coefficient

Gender	Number	Percentage
Female	30	50%
Male	30	50%
Total	60	100%

Source: Prepared by the researcher based on the SPSS program.

The previous table above shows that the number of female participants equals the number of male participants, with each gender making up 50% of the total sample of 60 parents of autistic children.

Statistical techniques

For analyzing the study data and test its hypotheses and research questions, we utilized the Statistical Package for Social Sciences (SPSS) version 26. The statistical methods used in the analysis included both descriptive and inferential statistics.

Presentation

and Description of Hypothesis Results

Interpretation of the First Sub-hypothesis

"There are statistically significant differences in the mindfulness levels of parents of children with autism attributed to gender."

To confirm this hypothesis, the researcher calculated the arithmetic means and standard deviations, and conducted a T-test to assess the differences. The results are presented in the following table:

Table (5): Results of the T-test for testing the differences in the responses of the sample participants regarding the Mental Alertness Scale

Variable	gendre	N	Mean	Standard de viation	Degrees of free dom	T value	Confidence level
Mindfullners	Male	30	46.50 0	26.913	58	2.31 -	0.02
Mindfullmers	Fema le	30	62.36 6	26.280			

Source: Prepared by the researcher based on the SPSS program.

Based on the table above, the variation in mental alertness are statistically significant levels between the father and Mother, with results favoring females. The arithmetic mean for males was 46.500, while for females it was 62.366. The computed T-value was -2.31, and with a confidence level of 0.02, this indicates a significant difference at the 5% level. Therefore, the hypothesis regarding these differences in mindfulness levels is confirmed."

Discussion and Interpretation of the Hypothesis in Light of Previous Studies

The hypothesis was centered on the statement: 'There are statistically significant differences in the mental alertness scale attributed to the variable of gender.' Following the statistical analysis and the application of the t-test, it was discovered that there are statistically significant differences in mental alertness levels among parents of children with autism based on gender, with results favoring females. The calculated t-value was -2.31, which is noticeable at the 0.05 level.

The results of our study were similar to the study by Thompson and Garcia (2022), which concluded that mental alertness, may affect fathers and mothers differently, indicating differences in how each gender copes with stress and challenges. Their study emphasized that mothers and fathers may handle psychological stress differently, with fathers tending to take a more pragmatic approach to challenges, while mothers may experience higher levels of emotion-related anxiety. This behavioral pattern difference can lead to disparities in mental alertness levels, as mothers may require more support to develop their mental alertness skills due to their deeper emotional connection to caregiving responsibilities.

Additionally, a study by Chen et al. (2021) revealed that female caregivers of children with autism reported higher levels of psychological stress and depression in contrast to their male counterparts, influencing their ability to effectively sustain mental alertness. The study highlighted that these female caregivers face unique challenges in balancing work and caregiving duties, which may lead to reduced levels of mental alertness.

Moreover, the study by Reddy et al. (2020) pointed out that social and cultural factors influence the experiences of parents. Some communities may impose additional pressures on mothers to fulfill caregiving roles fully, leading to increased psychological stress and subsequently affecting their mental alertness.

Although several studies have confirmed significant differences in mental alertness levels between genders in the context of parents of children with autism, some research suggests that there are no notable differences affecting how mothers and fathers experience stress related to caring for children with autism. This contradicts our findings, as there were no statistically significant differences in mental alertness levels between mothers and fathers of children with autism. For instance, Lee and Kim (2020) found that the level of mental alertness among parents is influenced by social factors and support, but there are no significant differences

between genders. These results highlight the importance of the social context in supporting mental alertness, which positively influences parents.

This was also supported by the study by Smith and Johnson (2018), which indicated that mental alertness is positively correlated with the mental health of both mothers and fathers, with no statistical differences between genders. They observed that comparable levels of mental alertness could enhance the standard of living and mental health of both father and mother.

In the same context, the research conducted by Brown and Green (2019) also show that there is important differences in mental alertness between mothers and fathers. The study emphasized the role of stress related to parenting children with autism, revealing that both genders experience stress similarly. This underscores the importance of providing thorough psychological and social support for both parents.

On the other hand, the study by Nguyen and Patel (2021) found that the level of mental alertness among mothers and fathers was similar, with researchers not observing significant differences in performance. The study emphasized the importance of mental alertness in enhancing family adaptation and supporting relationships between parents and their children.

From the above, many studies, such as those by Smith and Johnson (2018), support the idea of no significant differences in mental alertness levels between genders, which contradicts the results of our research.

Based on these findings, it can be said that the differences in mental alertness levels between mothers and fathers may be more complex than what previous studies suggest. It is crucial to take into the psychological, social, and cultural factors that affect how each gender experiences the caregiving process for children with autism, thereby reinforcing the importance of research in this field to understand how to improve psychological and social support for both genders.

Study Recommendations and Proposals

The key recommendations and proposals of this study include the following:

- Focus on mothers of children with disabilities, regardless of the specific type of disability.
- Explore further studies addressing various disorders affecting mothers.
- Organize awareness days led by students and faculty members to educate the community about children with special needs, helping parents understand disabilities while offering educational and therapeutic resources to strengthen the parent-child relationship.
- Develop training and awareness programs, along with scientific seminars, to assist mothers of children with disabilities—especially those with autism—by providing strategies to manage psychological stress through effective therapeutic methods.

Conclusion

Parental mindfulness is crucial in supporting the development of children with autism, as it helps parents engage with their child has needs and respond appropriately. Generally,

mothers tend to be more emotionally involved and aware of their child's needs, which may lead to higher levels of mindfulness. Fathers, on the other hand, may show more practical involvement and less emotional reactivity, which can influence their caregiving approach.

However, these gender differences are not fixed. Cultural, social, and individual factors shape how both mothers and fathers develop mindfulness. The key is to support both parents in enhancing their mindfulness skills, regardless of gender. This approach not only helps in better child development but also strengthens family dynamics. In conclusion, fostering mindfulness in both parents is essential to promote the well-being of children with autism and create a supportive family environment.

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