

## Psychological Stress Experienced by Mothers of Children with Autism Spectrum Disorder: A Field Study at Al-Nibras Association in Guelma

الضغوط النفسية لدى أمهات الأطفال المصابين باضطراب طيف التوحد: دراسة ميدانية بجمعية النبراس، قالمة

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### ABSTRACT:

This study aims to reveal the degree of psychological stress among mothers of children with autism spectrum disorder, and to know the differences according to the variables of the study (gender of the child, educational level, age of the birth mother, economic level). The sample consisted of 20 mothers from the Nebras Association for Autistic Children, Guelma Province. The descriptive approach was relied upon. The results concluded that the level of psychological stress among mothers of children with autism spectrum disorder is moderate, and there are no statistically significant differences in the level of psychological stress among mothers of children with autism spectrum disorder depending on the variable of the child's gender. On the other hand, there are statistically significant differences in the level of stress. Psychological disorders among mothers of children with autism spectrum disorder according to the variable (educational level, age of the birth mother, economic level).

**Keywords:** Psychological stress, Autism spectrum disorder.

### المخلص:

هدفت الدراسة الحالية إلى الكشف عن درجة الضغوط النفسية لدى أمهات الأطفال المصابين باضطراب طيف التوحد، ومعرفة الاختلافات تبعاً لمتغيرات الدراسة (جنس الطفل، المستوى التعليمي، سن الأم المنجبة، المستوى الاقتصادي)، تكونت العينة من 20 أما من جمعية نبراس لأطفال التوحد ولاية قالمة، وتم الإعتماد على المنهج الوصفي. وخلصت النتائج إلى أن مستوى الضغوط النفسية لدى أمهات الأطفال المصابين بالاضطراب متوسط، كما لا توجد فروق ذات دلالة إحصائية في مستوى الضغوط النفسية لدى أمهات الأطفال المصابين باضطراب طيف التوحد تبعاً لمتغير جنس الطفل، من جانب آخر توجد فروق ذات دلالة إحصائية في مستوى الضغوط النفسية لدى أمهات الأطفال المصابين باضطراب طيف التوحد تبعاً لمتغير (المستوى التعليمي، سن الأم، المستوى الاقتصادي).  
كلمات مفتاحية: الضغوط النفسية، اضطراب طيف التوحد.

### 1- Introduction:

Motherhood embodies a profound and transformative experience, marked by its unparalleled joys and significant challenges. Particularly taxing is the journey of mothers raising children diagnosed with Autism Spectrum Disorder (ASD). ASD is a developmental condition that manifests within the first three years of life, characterized by challenges in social interaction, communication, repetitive behaviors, and an increased sensitivity to sensory stimuli. It affects

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multiple developmental dimensions, not limited to the cognitive or social realms, but also including linguistic, emotional, and behavioral aspects (Abdullah, 2011, p.16).

The diagnosis of ASD in a child can precipitate considerable psychological stress within the family, altering its dynamics and the roles of its members. Mothers, often the primary caregivers, experience profound impacts. Ali Abdel Salam (2000) defines this stress as "a sequence of external events that an individual faces through their interactions with the environment, necessitating rapid adaptation to mitigate adverse psychological and social effects and restore equilibrium" (Mohamed, 2008, pp. 131-132).

This stress may stem from numerous factors, including the intense demands of caring for a child who lacks independence, compounded by social and financial pressures, feelings of isolation, and the emotional strain of not feeling accepted by their child. Such factors can severely impede the psychological and social adjustment of the mother, eroding the emotional and interactive bond between her and her child. This scenario often compels the mother to suppress her negative emotions to foster acceptance and coexistence with her child's condition, thereby intensifying her psychological burden.

Empirical research consistently indicates that mothers of children with ASD experience significantly higher levels of stress and psychological pressure than fathers. Studies such as those by Dabrowska and Pisula (2010) have highlighted that mothers bear a greater burden of stress compared to fathers.

Similarly, findings by Ihsan and Nour El-Din (2015), and Selda Koydemir et al. (2009) corroborate the prevalence of high stress levels among these mothers. The resultant psychological distress can manifest as anxiety, sadness, frustration, and a pervasive sense of helplessness, which in turn can adversely affect the mother's mental health, increasing her vulnerability to severe depression, anxiety, and stress disorders.

Given these challenges, this study aims to illuminate the significant psychological pressures encountered by mothers of children with ASD. Our goal is to foster the development of early intervention and support programs that mitigate feelings of sadness and frustration and enhance these mothers' ability to effectively manage the demands associated with ASD.

This research was conducted with mothers of children with ASD at the Al-Nibras Association for Autistic Children in Guelma Province. The study was driven by the following central inquiries:

- What is the level of psychological stress as measured by the Psychological Stress Perception Scale among mothers of children at the Al-Nibras Association in Guelma City with ASD?
- Are there significant statistical differences in the levels of psychological stress due to variables such as the child's gender, the mother's educational level, the age of the mother at childbirth, and economic status?

## **2- Theoretical Framework:**

### **2-1- Study Importance:**

The significance of this study is multi-dimensional, focusing primarily on the mental health of mothers who have children diagnosed with Autism Spectrum Disorder (ASD). The key aspects underlining the importance of this study include:

- Highlighting the psychological stress endured by mothers of children with ASD, which is pivotal for understanding their mental health challenges comprehensively.
- Emphasizing the importance of the study sample comprised of mothers of children with ASD, a group that represents a critical segment of society. Their well-being impacts family dynamics and the broader social fabric.
- The anticipated outcomes of this research aim to inform and refine guidance programs specifically tailored to alleviate the psychological stress encountered by these mothers, thereby enhancing their quality of life and capability to support their children effectively.

## **2-2- Study Objectives:**

The study is driven by specific objectives designed to deepen our understanding of the psychological challenges these mothers face:

- To accurately gauge the level of psychological stress among mothers of children with ASD, utilizing the "Psychological Stress Perception" (P-S-Q) scale.
- To analyze how various factors such as the child's gender, the mother's educational level, her age at childbirth, and economic status influence the intensity of psychological stress among these mothers.

## **2-3- Operational Definitions of Study Terms:**

**Operational Definition of Autism Spectrum Disorder (ASD):** Within this study, Autism Spectrum Disorder is delineated as a developmental disorder that notably impacts a child's ability to interact socially and communicate both verbally and non-verbally. This impedes the child's overall developmental trajectory. Diagnosis is confirmed through established criteria at the Al-Nibras Association for Autistic Children in Guelma Province.

**Operational Definition of Psychological Stress:** In this context, psychological stress is quantitatively assessed based on the scores obtained from the "Psychological Stress Questionnaire" (P-S-Q) as completed by mothers at the Al-Nibras Association for Autistic Children. This instrument, developed by Vanstein in 1993 and adapted for the Algerian context by Ait Hammouda Hakima in 2006, measures stress levels specifically for this demographic for the 2023-2024 season.

**Operational Definition of Mothers of Children with Autism Spectrum Disorder:** This term refers to mothers who have children diagnosed with ASD and are registered with the Al-Nibras Association for Autistic Children located in Guelma Province.

## **2-4- Previous Studies:**

- Study by Ihsan and Nour El-Din (2015): Titled "Psychological Stress among Mothers of Children with Autism: A Field Study," this research explored the psychological stress levels in 33 mothers of children with autism. Utilizing a descriptive approach, the study employed a specially

designed questionnaire to assess psychological stress. Findings indicated a moderate level of stress among these mothers, with no significant differences attributable to variables such as age, educational level, marital status, and employment status.

- Study by Quaish Magnia (2016): Titled "Psychological Stress and Coping Strategies among Mothers of Children with Autism Spectrum Disorder," this investigation aimed to delineate the relationship between psychological stress and coping mechanisms among mothers of children with autism. The study involved 41 mothers from the Pedagogical Center for Mentally Disabled Children in Mostaganem, using intentional sampling for the academic year 2015-2016. Employing a psychological stress questionnaire and a coping strategies questionnaire, the study concluded a significant correlation between stress levels and the adoption of coping strategies, predominantly positive ones, and highlighted the substantial stress experienced by these mothers.
- Study by Nadia Ali Al-Mahdi Abdul Nabi (2021): Titled "Psychological Stress among Parents of Children with Autism Spectrum Disorder (Children with Autism Spectrum Disorder at Fizan Center as a Model)." This comprehensive study focused on identifying significant psychological stresses among parents of children with autism, examining how these stresses correlate with various demographic variables such as gender, age, educational level, and family size. The research involved all parents of children registered at the Fizan Center for Education and Rehabilitation of Autistic Children, amounting to 50 children. However, the study specifically included 35 parents who volunteered to participate, comprising 24 fathers and 11 mothers. Utilizing a descriptive methodology and a psychological stress questionnaire, the study's reliability and validity were thoroughly verified before data collection. Analysis was performed using the Statistical Package for the Social Sciences (SPSS), revealing that the most significant stressor for parents was their children's inability to meet daily life requirements. Furthermore, no statistically significant differences were observed in stress levels among parents based on the examined demographic variables.
- Study by Ayad Said Amtir and Najat Ahmad Al-Zlaiti (2015): Titled "Psychological Stress among Mothers of Children with Autism." This study aimed to assess psychological stress levels among a sample of 10 mothers, exploring differences in stress levels based on variables such as employment, family size, and family monthly income. Employing a descriptive approach, the study utilized the psychological stress scale by Zidan Ahmad Sartawi and Abdul Aziz Sayed Fax (1998), adapted for the Libyan environment. Findings indicated significant statistical differences in stress levels based on employment status and family monthly income. A direct significant relationship was also identified between family size and psychological stress among these mothers.
- Study by Selda Koydemir et al. (2009): Titled "The Impact of Children with Autism on the Lives of Mothers." This study delved into how having an autistic child affects the lives of Turkish mothers. With a sample of 10 mothers, the researchers conducted interviews to explore various aspects of the mothers' experiences. The study uncovered a range of coping strategies employed by these mothers to manage stress, noting that all participants experienced significant

psychological stress due to financial constraints, the intensive nature of childcare, and concerns over their children's future, all of which intensified their stress levels.

- Study by Dabrowska and Pisula (2010): Titled "Parental Stress and Coping Patterns Among Mothers and Fathers of Children with Autism and Down Syndrome." This research aimed to compare stress levels between parents of children with autism and parents of children with Down syndrome. Utilizing a sample of 162 parents, the researchers applied a 66-item short questionnaire to measure parental stress. The findings demonstrated that mothers of children with autism experienced higher stress levels compared to fathers, highlighting the gender-specific impacts of parenting children with these conditions.

## **2-5- Commentary on Previous Studies:**

Regarding the methodology, there is a notable consistency across the studies, with each employing a descriptive approach to explore psychological stress. In terms of sample selection, the studies exhibit variability in both the community and sample size, reflecting a range of demographic characteristics.

The tools used for data collection and analysis also vary across studies, ranging from the Psychological Stress Perception Scale and the Autism Mothers' Psychological Stress Questionnaire to the Psychological Stress Scale for Mothers of Disabled Children. This diversity in methodologies and tools underscores the complexity of the subject matter and the necessity for tailored approaches to address the unique challenges faced by these individuals.

## **3- Applied Framework:**

### **3-1- Research Methods and Tools:**

This approach allowed for an in-depth exploration of the psychological stress experienced by mothers of children with Autism Spectrum Disorder (ASD), facilitating a detailed analysis of both quantitative and qualitative data.

### **3-2- Temporal and Spatial Framework:**

The primary study was methodically conducted at the Al-Nibras Association for Autistic Children, located in the city of Guelma. This investigation spanned from the end of June to the beginning of September 2023. Due to the prevailing conditions and to ensure the accessibility for all participants, the study was conducted remotely, utilizing various electronic communication platforms to engage with the study participants effectively.

### **3-3- Study Sample:**

The study sample was carefully selected and comprised of 20 mothers of children diagnosed with Autism Spectrum Disorder. The selection was intentional, aiming to ensure that the sample accurately represented the population of interest. The demographic and relevant characteristics of the study sample are systematically presented in Table No. (01).

**Table 1. Basic Sample Characteristics**

Independent Variables	Levels of Independent Variables	Frequency	Percentage
Child's Gender	Male	13	65%
	Female	4	35%
Mother's Employment Status	Employed	10	50%
	Unemployed	10	50%
Mother's Age at Childbirth	20 to 30 years	4	20%
	30 to 40 years	8	40%
	Over 40 years	8	40%
Educational Level	Less than Secondary	5	25%
	Secondary	3	15%
	University	13	60%
Economic Level	Low	1	5%
	Medium	17	85%
	High	2	10%
Total		20	100%

### 3-4- Study Tool:

Perceived Stress Questionnaire (P-S-Q):

Definition of the Scale: Developed by researcher Vanstein in 1993, this scale is designed to measure the perception of stress. It consists of thirty (30) statements divided into two types of items: direct and indirect.

**Table 2. Direct Items in the Perceived Stress Questionnaire (P-S-Q):**

Direct Items Numbers
2, 3, 4, 5, 6, 8, 9, 11, 12, 14, 15, 16, 18, 19, 20, 22, 23, 24, 26, 27, 28, 30

These statements indicate a "high" perception of psychological stress when the respondent accepts the situation, and "low" stress indicators when the respondent rejects the situation.

**Table 3. Indirect Items in the Perceived Stress Questionnaire (P-S-Q):**

Indirect Items	Numbers
	1, 7, 10, 13, 17, 21, 25, 29

These statements indicate a "high" perception of psychological stress when the respondent rejects the situation, and a "low" stress perception when the respondent accepts the situation.

Application of the Scale: The questionnaire was distributed to the participants with clear instructions to mark an (x) in the box that most closely reflects their general response, emphasizing that there are no right or wrong answers, and that the responses would solely be used for scientific research purposes.

Scoring the Scale: The method of scoring the test statements ranges from 1 to 4 points, and these scores vary depending on the type of items:

- Direct items: are scored from 1 (almost never) on the right to 4 (usually) on the left.
  - Indirect items: are scored inversely from 4 (almost never) on the right to 1 (usually) on the left.
- After scoring each item, the scores are summed to find the total quantitative score of the test.

**Table 4. Scoring of the Vanstein Perceived Stress Scale:**

Items Statement	Direct Items	Indirect Items
01 Almost Never	1 point	4 points
02 Sometimes	2 points	3 points
03 Often	3 points	2 points
04 Usually	4 points	1 point

Statistical Methods Used in the Scale: The scoring varies depending on whether the items are direct or indirect. The Perceived Stress Index for this scale is derived using the following formula:

$$\text{Perceived Stress Index} = (\text{Raw Score} - 30) / 90$$

The range of the Perceived Stress Index varies from 0, which indicates the lowest level of stress, to 1, representing the highest possible level of stress.

Statistical Methods:

- Mean, standard deviation, and mode.
- T-TEST for significance of differences between mean values.
- F-test.

#### **4- Presentation and Discussion of Results:**

##### **4-1- Presentation and Discussion of the Results of the First Hypothesis:**

Hypothesis Text: Mothers of children at the Al-Nibras Association in Guelma city suffering from Autism Spectrum Disorder experience high psychological stress.

**Table 5. presents the mean, median, standard deviation, and mode of the sample responses on the Perceived Stress Scale.**

Sample	Mean	Median	Standard Deviation	Mode
20	2.738	2.40	0.40	2.03

As demonstrated in Table No. (05), the mothers of children with Autism Spectrum Disorder at the Al-Nibras Association in Guelma city exhibit an average level of psychological stress. This is quantified by a mean score of 2.738 on the Perceived Stress Scale, accompanied by a standard deviation of 0.40, a median of 0.52, and a mode of 2.03. The statistical outcomes delineate a moderate level of psychological stress among the mothers, thereby indicating that the initial hypothesis suggesting higher stress levels is not supported by the data.

This finding is consistent with previous research such as the study by Ghadi Asfour (2012), "Psychological Stress among Mothers of Autistic Adolescents," which highlighted that the psychological stress level among mothers of autistic adolescents was average across various areas of the scale. Similarly, the study by Ihsan and Nour El-Din (2015), "Psychological Stress among Mothers of Children with Autism," found that these mothers experienced a moderate degree of psychological stress.

Contrastingly, the findings diverge from the conclusions drawn by Quaish Magnia (2016) in "Psychological Stress and Coping Strategies among Mothers of Children with Autism Spectrum

Disorder," where it was found that mothers of children with autism encounter high levels of psychological stress. Additionally, the study by Dabrowska and Pisula (2010) underscored that the stress levels in mothers of children with autism are significantly higher than those experienced by fathers.

The results of the present study can be interpreted as reflective of the substantial daily challenges that these mothers face. These challenges encompass the extensive responsibilities associated with caring for a child with Autism Spectrum Disorder, ranging from managing behavior and communication difficulties to addressing the child's daily needs and providing appropriate care.

Moreover, the psychological burden is compounded by feelings of guilt and isolation stemming from societal perceptions that often view the presence of an autistic child as a stigma, disproportionately affecting the mother.

Despite the adversities, it is noteworthy that some mothers perceive the stress not merely as a burden but also as a catalyst, motivating them to navigate and surmount these challenges. This dual perspective on stress highlights its complex role as both a source of significant psychological strain and a potential impetus for resilience and proactive coping.

#### 4-2- Presentation and Discussion of the Results of the Second Hypothesis:

Hypothesis Text: There are statistically significant differences in the level of psychological stress among mothers of children at the Al-Nibras Association in Guelma city with Autism Spectrum Disorder, attributable to the child's gender.

To test this hypothesis, a T-Test was calculated to assess differences between gender variables, and the following table illustrates this.

**Table 6. shows the "T" value for the significance of differences between the child's gender in psychological stress.**

Statistical Methods	Frequency	Mean	Standard Deviation	T	Significance Level
Male	13	2.2179	0.33819	0.032	0.927
Female	7	2.6952	0.33078		

Table No. (06) reveals that the T-value ( $t = 0.032$ ) and the significance level (0.927), which is greater than the proposed significance level (0.05), indicate no statistically significant differences in psychological stress among mothers of children with Autism Spectrum Disorder attributable to the child's gender. Thus, the hypothesis is not supported. The similar mean values for both genders (male: 2.2179, female: 2.6952) explain the lack of differences between genders.

This result is consistent with Ghadi Asfour's (2012) study, which found no differences in the level of psychological stress among mothers of autistic adolescents in Jordan attributable to the adolescent's gender. This absence of differences can be interpreted as both genders suffering from Autism Spectrum Disorder, thus sharing similar social characteristics (qualitative impairments in social relations, deficits in communication and language), cognitive traits (mental abilities, attention and motivation, mood disorders, sensory-motor skills, memory), and sensory characteristics (auditory and visual stimuli).



Therefore, the various stresses that fall on the family, especially the mother, are similar regardless of whether the child is male or female, indicating that gender does not influence the degree of their stress.

#### **4-3- Presentation and Discussion of the Results of the Third Hypothesis:**

Hypothesis Text: There are statistically significant differences in the level of psychological stress among mothers of children at the Al-Nibras Association in Guelma city with Autism Spectrum Disorder, attributable to the educational level variable.

To verify this hypothesis, an "F" value was calculated using one-way ANOVA, and the following table presents the results of this test.

**Table 7. shows the "F" value for the significance of differences between the educational level variable in psychological stress.**

Categories	Frequency	Mean	Standard Deviation	F	Significance Level
Secondary or Less	5	2.6733	0.40920	3.940	0.039
Secondary	3	2.6222	0.19532		
University	12	2.2056	0.35013		

From the data presented in Table (07), we observe that the F-value ( $F = 3.940$ ) and the significance level (0.039) fall below the proposed significance level of 0.05. This statistical evidence confirms that there are significant differences in psychological stress among mothers of children with Autism Spectrum Disorder, with these differences being specifically attributable to the variable of educational level.

This outcome substantiates the hypothesis that educational level does influence stress levels, affirming its significance in the research.

Further detailed analysis presented in Table (05) offers a breakdown of stress levels by educational category among mothers at the Al-Nibras Association in Guelma city. Mothers with an educational level of less than secondary reported a mean stress level of 2.6733, accompanied by a standard deviation of 0.40920.

Mothers who attained a secondary education level recorded a slightly lower mean stress level of 2.6222 with a standard deviation of 0.19532. In contrast, mothers with a university level education exhibited a significantly lower mean of 2.2056, and a standard deviation of 0.35013. These statistics clearly illustrate the inverse relationship between educational level and perceived stress among the mothers studied.

This result contrasts sharply with the findings from the study by Ghadi Asfour (2012), titled "Psychological Stress among Mothers of Autistic Adolescents," which indicated no significant differences in psychological stress among mothers of autistic adolescents in Jordan based on educational level.

It also diverges from the findings of the study by Ihsan and Nour El-Din (2015), "Psychological Stress among Mothers of Children with Autism," which similarly found no significant differences in psychological stress based on the educational level among mothers of autistic children.

Additionally, it is in contradiction to the results from the study by Nadia Ali Al-Mahdi Abdul Nabi (2021), "Psychological Stress among Parents of Children with Autism Spectrum Disorder," which also reported no statistically significant differences in psychological stress among parents due to variables such as gender, age, educational level, or family size.

The implications of these findings can be interpreted to suggest that a lower educational level may confer increased psychological stress due to a lack of necessary knowledge and skills to effectively manage and care for an autistic child.

This includes challenges such as employing sensory integration activities to mitigate stereotypic movements and difficulties in utilizing various advanced technological and educational tools that could aid in fostering the child's skills towards achieving greater self-independence.

This interpretation highlights the critical role of educational attainment in equipping mothers with the requisite resources and strategies to better handle the complexities associated with raising a child diagnosed with Autism Spectrum Disorder.

#### **4-4- Presentation and Discussion of the Results of the Fourth Hypothesis:**

Hypothesis Text: There are statistically significant differences in the level of psychological stress among mothers of children at the Al-Nibras Association in Guelma city with Autism Spectrum Disorder, attributable to the age of the mother at childbirth.

To test this hypothesis, an "F" value was calculated using one-way ANOVA, and the following table displays the results of this test.

**Table 8. shows the "F" value for the significance of differences between the mother's age at childbirth variable in psychological stress.**

Categories	Frequency	Mean	Standard Deviation	F	Significance Level
20 to 30 years	4	2.1917	0.35629	1.118	0.330
30 to 40 years	8	2.5417	0.42230		
Over 40 years	8	2.3250	0.38944		

From the data presented in Table (08), we derive the following statistics on psychological stress levels among mothers of children at the Al-Nibras Association in Guelma city, categorized by the mother's age at the time of giving birth to a child with Autism Spectrum Disorder: For mothers who gave birth between the ages of 20 and 30 years, the mean stress level recorded was 2.1917, with a standard deviation of 0.35629. Mothers who gave birth between the ages of 30 and 40 years exhibited a mean stress level of 2.5417, with a standard deviation of 0.42230. For mothers over 40 years, the mean stress level was slightly lower at 2.3250, with a standard deviation of 0.38944.

These findings indicate a variance in psychological stress levels dependent on the age at which mothers gave birth to their autistic child. This result does not correspond with the findings from the study by Ihsan and Nour El-Din (2015) in "Psychological Stress among Mothers of Children with Autism," which concluded that there were no statistically significant differences in psychological stress among mothers of autistic children based on the age variable.

Additionally, these findings diverge from those in the study by Nadia Ali Al-Mahdi Abdul Nabi (2021), "Psychological Stress among Parents of Children with Autism Spectrum Disorder," which

also reported no statistically significant differences in psychological stress among parents due to age, alongside other demographic factors such as gender, educational level, or family size.

The observed differences in psychological stress based on the mother's age at childbirth can be interpreted through various lenses. It appears that older mothers may experience higher levels of psychological stress compared to their younger counterparts. This could be attributed to several factors including the personal characteristics of the mother, such as her physical and mental resilience, which may diminish with age.

The demands of continuous care for a child with Autism Spectrum Disorder are substantial, necessitating considerable energy and effort, which might be more taxing for older mothers. Additionally, older mothers may face a depletion in their social support networks over time, leading to increased feelings of isolation and a lack of external assistance in managing their responsibilities.

These elements, coupled with concerns about the long-term care and future of their child as they themselves age, contribute to elevating the levels of psychological stress among older mothers.

#### **4-5- Presentation and Discussion of the Results of the Fifth Hypothesis:**

Hypothesis Text: There are statistically significant differences in the level of psychological stress among mothers of children at the Al-Nibras Association in Guelma city with Autism Spectrum Disorder, attributable to the variable of economic level.

To verify this hypothesis, an "F" value was calculated using one-way ANOVA, and the following table presents the results of this test.

**Table 9. shows the "F" value for the significance of differences between the economic level variable in psychological stress.**

Statistical Methods	Frequency	Mean	Standard Deviation	F	Significance Level
Low	1	2.7000	0.42127	0.533	0.596
Medium	17	2.3902	0.21213		
High	2	2.1833	0.40167		

From the data presented in Table (09), it is evident that the F-value ( $F = 0.533$ ) and the significance level (0.596) exceed the proposed significance level of 0.05. This statistical outcome indicates that there are no significant differences in psychological stress levels among mothers of children with Autism Spectrum Disorder (ASD) at the Al-Nibras Association in Guelma city based on the economic level variable, thus refuting the hypothesis.

Further detailed data from Table (09) show that the mean psychological stress level for mothers of children with ASD and a low economic level was recorded at 2.7000, with a standard deviation of 0.42127. Mothers representing a medium economic level had a mean stress level of 2.3902, with a standard deviation of 0.21213, and for mothers with a high economic level, the mean was 2.1833, with a standard deviation of 0.40167.

These findings are consistent with those of Ghadi Asfour (2012) in "Psychological Stress among Mothers of Autistic Adolescents," which noted no statistically significant differences in psychological stress among mothers based on the economic level. Additionally, the results align with the observations made by Selda Koydemir et al. (2009) in "The Impact of Children with Autism on

the Lives of Mothers," which acknowledged that mothers experience psychological stress due to financial difficulties and the demanding nature of child care.

However, these findings contrast with those in the study by Ayad Said and Najat Ahmad Al-Zlaiti titled "Psychological Stress among Mothers of Children with Autism," which found significant differences in psychological stress based on the family's monthly income level.

This result can be interpreted as suggesting that while the economic level may influence the stress levels experienced by these mothers, the differences are not statistically significant. This could imply that while all economic levels (low, medium, high) face challenges due to the substantial financial demands of caring for a child with ASD, including costs for child care and rehabilitation—the overall impact on psychological stress does not differ significantly among different economic groups.

This lack of significant variation might be influenced by the universal high costs associated with ASD care, which pose a substantial burden irrespective of the economic status.

## **5- Conclusion:**

Mothers of children with Autism Spectrum Disorder are among the most psychologically stressed parental groups. This study aimed to assess the level of psychological stress among these mothers and to examine the impact of various factors, such as the child's gender, the mother's educational level, the mother's age at childbirth, and economic status on their stress levels.

The following results were obtained:

- The psychological stress level among mothers of children with ASD is moderate.
- There are statistically significant differences in psychological stress among mothers at the Al-Nibras Association in Guelma city attributed to the mother's educational level.
- There are statistically significant differences in psychological stress among mothers at the Al-Nibras Association in Guelma city attributed to the mother's age at childbirth.
- There are statistically significant differences in psychological stress among mothers at the Al-Nibras Association in Guelma city due to economic status.

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***Psychological Stress Experienced by Mothers of Children with Autism Spectrum Disorder: A Field Study at Al-Nibras Association in Guelma***

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