

## Behavioural Patterns and Their Relationship to Autism Children's Eating Problems

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### Abstract

*Eating problems in autism children. Behavioural patterns in autism children. The relationship between behavioral patterns and the eating problems of autism children. The indication of differences in behavioural patterns in autism children according to the sex variable (male, female). Indication of differences in the eating problems of autism children according to the sex variable (male, female). The research sample consisted of 150 children and their children from special education institutes in Baghdad. The two researchers prepared behavioral patterns research tools. The scale consists of (26) Paragraph before each alternative paragraph (applicable, not applicable) And the average hypothesis (39) and the measure of eating problems consists of (19) a paragraph before each paragraph three alternatives (always, sometimes rarely) and a hypothetical average (38). The two researchers extracted the authenticity and consistency of the two tools using the statistical pouch and the appropriate means of research objectives. The results showed that they had high levels of eating problems and behavioral patterns. The results showed that there was a statistically significant exclusive correlation between eating problems and behavioral patterns. The calculated correlation value (0.61) was higher compared to Pearson's extreme tabular freeness factor (0.15) at 0.05. (148) .And there is a difference in eating problems depending on the sex variable (Male, female) For the benefit of the female, the two researchers came up with a number of recommendations and proposals.*

**Keywords:** Behavioral patterns; Eating problems; Autism children.

### Chapter One:

#### Problem of research:

Disability is one of the most important issues facing societies, as it is considered a socio-economic human issue that is cared for by multiple segments such as doctor, psychologist, social worker, pedagogist and others.

Autism is one of the most complex developmental disorders because of the different characteristics of infected children.

The child acquires his/her behaviors from the community around him/her in a natural way, and at every age there are acquisitions that depend on what I earn before them. But the autistic child is different from other children, especially the lack of communication reflected in the lack of behavioral acquisitions unwanted behaviour, parents' lack of understanding of their child's actions leads to misconduct in dealing with them The understanding and expectation of these problems encourage sound and constructive behaviors and discourage disgraceful behaviors (Al Abadi, 2006:139).

Any neglect of autism children would constitute a social dilemma, psychological difficulties and problems for them and their families, as well as the waste of substantial funds that could be invested in other areas.

A child with autism may be stereotypical in his or her food, accustomed to one type of food and refused to do so. When he or she changes, he or she begins to empty, and the food stereotype may lead to permanent and repeated constipation (Al-Abadi, 2006:144).

Some specialists have indicated that having early childhood eating problems may be an early sign of autism. and that the eating problems of autism children and their negative impact on their nutrition, These problems

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limit their food intake and quality, thereby reducing their access to integrated health food and thus becoming vulnerable to malnutrition and associated diseases. Through this review, the two researchers identify the following question: Is there a correlation between behavioural patterns and the eating problems of autistic children?

### **The importance of research**

- The research derives from the importance of the sample: the category of autistic children with behavioral patterns and food problems.
- Highlighting the most behavioral problems experienced by the research category and the foods they are not able to eat.
- The importance of research is that it is one of the few research that has been interested in connecting variables with each other.
- Enrich scientific research and provide the library with such psychological studies and make this research a start
- For other research in the future
- Research is a scientific effort on which researchers and specialists rely with the important tools provided by research used to measure behavioral patterns and food problems of autistic people.
- Research can be used to build a program to reduce negative behavioral patterns and food problems.

### **Research Objectives: The purpose of the research is to identify**

- Eating problems in autism children.
- Behavioural patterns in autism children.
- The relationship between behavioral patterns and the eating problems of autism children.
- The indication of differences in behavioural patterns in autism children according to the sex variable (male, female).
- Indication of differences in the eating problems of autism children according to the sex variable (male, female).

### **Research Limits:**

The research is determined by the autism institutes of the autism spectrum children in Baghdad governorate, beside the Karakh and Russafa.

### **Search Terms: Autism:**

Known (Spring Safety 2005): A condition that affects some children at birth or during early childhood renders them unable to form normal social relationships, unable to develop communication skills and becomes isolated from their social surroundings.

### *Behavioural Problems*

Arvah Atros, 2010: A kind of unwanted behaviour by the child that causes discomfort and anxiety to the surroundings affects his self-esteem and relationship with others. This behaviour is consistent and frequently manifests itself in similar attitudes. Parents and teachers cannot solve these problems without the help of psychotherapists (Athros, 2010: 143-146)

### *Behavioural Patterns*

Known by Al-Sharpini, 1993: The Consistent and Repeated Pattern of Behaviour Deviant from Aggressive or Non-Aggressive Behaviour in Which It Takes Away the Rights of Others and Other Values Whether at Home, School or Street (Al-Sharpini, 1993:8)

: 2020, Kimberly Zlomke et al- - dining issues Know it:

Abnormal attitudes at the time of eating or to atypical food repertoire and problems (2020, Kimberly Zlomke et al) chronic food can exacerbate student and evolutionary problems

## **Chapter Two:**

### **Conceptual framework**

Behavioral problems are one of the most challenging challenges facing the autistic child. The child's autistic behaviour is defined and limited in range. It is also common in the child's behaviour. It leads to emotional attacks that disturb the surroundings of the child.

The relationship between eating problems and autism dates back to the time when he was prescribed (Leo Canner, 1993) For the first time a group of children with difficulty in relationships with individuals and inability to communicate and write Canner also reported on the multiple eating problems experienced by these children, where the refusal to eat and the selectivity in choosing the quality of food was the means of the autistic child to keep the outside world away and although there was no systematic research, he pointed out that (Profest Wortvo and Freeman, 1987) that eating problems were at one time the primary advantage of autism children (Karakesh, 2017:198)

Previous studies: The researcher did not find a study involving the two variables together, so the researcher wanted to review the previous studies of each variable

Al-Kiki, 2011: Behavioural manifestations of autism children at the Al-Ghasak Institute and Sara from the point of view of their parents

The objective of the research is to identify behavioral manifestations of autism children from: Interpretation of behavioral manifestations of children with autism spectrum disorder in light of modern diagnostic criteria (Their fathers and mothers), the search sample was 46 fathers and mothers of autism children in the institutes of Al-Ghasak and Sara in Nineveh governorate. (32) A paragraph in behavioural manifestations, the researcher used the Gatman method to calculate the stability of identification, and the results showed a number of behavioural manifestations of autism children from their parents' point of view (Kiki, 2011:76).

Abdul, 2018: Explanation of behavioral manifestations of children with autism spectrum disorder in light of modern diagnostic standards

The aim of the study was: to explain the behavioural manifestations of children with autism spectrum disorder in light of modern diagnostic criteria. The sample of the study was composed of all the teachers and teachers of special education centres in the West Bank. (62) Individuals, the researcher used a measure of behavioral characteristics, the results showed that the most common manifestations in children are verbal communication disorders and in the second phase non-verbal communication disorders. The third stage was occupied by four manifestations: (Tradition, adaptation to change, fear of neurology and body use (Abdul, 2018:345)

**Provost, Croy and Sugar, 2010: Eating Time Behaviors for Autism Spectrum Children**

The study aimed to identify the eating time behaviors of young children of the autism spectrum and compared these behaviors to those of ordinary children similar to them with the same age, sex and race. The research sample consisted of autism spectrum children aged between (3 - 6) years, and the researcher used a scanning tool to answer it 24 parents of autism and 24 parents of ordinary children. The results of the research showed that there was a difference between the two groups in attitudes during meal eating because the types of food in autism children were limited and therefore difficult to satisfy and were resistant to good foods and resisted sitting at the table and throwing food opposite ordinary children (Provost, Croy and Sikir, 2010).

**Karakesh, 2017: Problems with eating in autism children and their relationship with some variables**

The study aimed to identify the problems of eating in autism children and their relationship with some variables (Sex, age and degree of disability). The study sample consisted of (75) Parents of autism children enrolled in special education institutes for students and students east of Riyadh, use a scale (Tamimi, Syed Ali, 2014). In children with autism, results showed excessive selectivity in eating followed by the problem of food refusal (Karakesh, 2017:197).

**Jillian Murphy Study, 2016:**

The study aimed to demonstrate the extent of association between behavioral disorders and eating problems among children with autism disorder and ordinary children. The study sample consisted of 157 children with autistic and ordinary disorders, who ranged in age from time to time. (2-8) years in outpatient clinics. Study tools addressed the 8-2 years behavioral nutrition assessment scale for children. (. BPFAS for multiple regression analysis. The results of the study found that children's irritable behaviour greatly predicted the nutritional problems of children with autism disorder.

A- Benefit from previous studies: The two researchers mentioned previous studies with a view to using them to develop the research problem.

The two researchers helped determine the research's objectives.

B- See the size of the sample used and follow the correct rentals by selecting the sample

C- Utilizing statistical means and benefiting the two researchers in interpreting the results.

**Research curriculum and procedures***First: Method of Research:*

Two researchers adopted (descriptive approach) for determining the description of the facts relating to the current situation as it currently exists (at the time of research), describing it as an explanatory description of the facts available. This approach is the most common and widespread type of research; It focuses on what is now in this life and in the field of education and psychology. education ", a survey focusing on an educational or psychological phenomenon as it exists at present for the purpose of diagnosing and detecting its aspects and identifying relationships between its elements or between them and educational, psychological or social phenomena. It does not stand at the limits of the description of the phenomenon in question, but rather analyses, explains, compares and evaluates in order to arrive at meaningful generalizations to learn more about the phenomenon, and that the most important features of objective descriptive research in the diagnosis (Hispanic et al. 1981:53).

*Second: Society of Research*

We mean the research community: the whole group with elements to which the researcher seeks to disseminate the findings related to the problem (Return and others, 1992:159). The research community represents the collection of accidents, persons, cities, works or literature covered by the research topic that enjoy a similar expression of the essence of the subject, which is studied, analyzed and derived from them through samples taken from which that community represents. (Delimi, 2013:5)

The research community is determined by the children of the autism spectrum of Baghdad's Special Education Institutes, beside the Karakh and Russafa, for the year 2023-2024, of the 1,367 male and female children.

### *Third: Sample Research*

The sample is intended as part of the society on which any social, educational or problem phenomenon is studied, which is the source of the information we want to know or the reasons we are trying to identify (Doctor, 1999: 227). The research sample is for autistic children in special education institutes. The research sample was 150 children selected in a random manner from the research community.

## **Tools of Research**

To achieve the research objectives, two tools must be available, the first to measure the behavioral patterns of autism children, and the second to measure the eating problems of autism children. After having seen the literature, research and previous studies related to the research topic, the researchers prepared a measure of behavioral patterns and eating problems.

- Research tools: behavioral patterns and eating problems.
- Validity of paragraphs: The validity of the test is one of the conditions of effective measurement instruments in measuring the measured phenomenon. (To measure what you put in place for), that is, how competent the test is to measure a specific target or aspect. (Abu Jadaa, 2013:399) He extracted apparent truthfulness, performed statistical analysis of the scale paragraphs and found the discriminatory force of the paragraphs, for the purpose of ascertaining the validity of the scale paragraphs in measuring what was put in place for them.

## **Statistical procedures for analysis of paragraphs**

The fundamental objective of the analysis of the paragraphs is to obtain data according to which the discriminatory power of the measurement paragraphs and the discriminatory strength of the paragraph's ability to discriminate against individuals as measured by the scale, and between vulnerable individuals as such, thus maintaining good paragraphs in the scale (Eble, 1972, p.392).

The two-party group method (peripheral balance) and internal consistency (the paragraph grade relationship to the overall scale) are appropriate procedures in the analysis of the paragraphs, and the researcher has therefore resorted to both methods of analysing the paragraphs of the behavioural pattern measurements and eating problems.

### **A- Discriminatory force of scale paragraphs**

In order to achieve this, the researcher has adopted the two-party group method. In this method, two party groups of individuals are selected on the basis of their overall scores in the scale. Each of the two paragraphs of the scale is analysed using the T test. (t-test) for two separate samples to test the difference between the upper and lower sets of the measure of eating problems, and the measure of behavioral patterns was used as Jackson's equation of being a binary alternative scale (Edwards, 1957, p.152).

To this end, the researcher followed the following steps:

1- The researcher applied the measurements of eating problems and behavioral patterns (supplement) to a random sample of autism children numbering 150.

2- Correction of each form and determination of the overall degree of each.

3- Ranking scores obtained by individuals downward (from the highest grade to the lowest grade).

4- Selection of a cut-off ratio for determining the two party groups. The approved ratios vary as a criterion for determining those two groups. Anastasi indicates that the accepted cut-off ratio is between (25% -33%) (Anastasi, 1976:208).

Apple Eble noted that 27% is the best percentage to identify the two extremist groups because according to this percentage a sample is obtained in the largest size and maximum differentiation possible (Eble, 1972, p.261).

In the light of this percentage (27%) the number of forms per group (41) forms, i.e. the number of forms analysed (82) forms, and tables (1-2) show this.

**Table (1)** Discriminatory force of the measure of eating problems using extreme samples

Significance	Calculated T	Standard deviation	Arithmetic mean	Group	Paragraph number
Function	9.19	0.75	2.49	High	1
		0.47	1.22	Low	
Function	12.98	0.67	2.59	High	2
		0.3	1.1	Low	
Function	11.07	0.54	2.76	High	3
		0.62	1.34	Low	
Function	11.19	0.51	2.8	High	4
		0.63	1.39	Low	
Function	11.38	0.52	2.78	High	5
		0.62	1.34	Low	
Function	9.85	0.47	2.78	High	6
		0.63	1.56	Low	
Function	11.86	0.74	2.54	High	7
		0.26	1.07	Low	
Function	12.14	0.42	2.85	High	8
		0.55	1.54	Low	
Function	10.60	0.74	2.56	High	9
		0.42	1.15	Low	
Function	17.39	0.57	2.78	High	10
		0.26	1.07	Low	
Function	15.62	0.58	2.76	High	11
		0.33	1.12	Low	
	14.03	0.66	2.63	High	12

Function		0.26	1.07	<b>Low</b>	
Function	16	0.42	2.85	<b>High</b>	<b>13</b>
		0.46	1.29	<b>Low</b>	
Function	13.05	0.51	2.8	<b>High</b>	<b>14</b>
		0.52	1.32	<b>Low</b>	
Function	15.02	0.57	2.78	<b>High</b>	<b>15</b>
		0.38	1.17	<b>Low</b>	
Function	12.41	0.69	2.66	<b>High</b>	<b>16</b>
		0.36	1.15	<b>Low</b>	
Function	12.81	0.69	2.66	<b>High</b>	<b>17</b>
		0.33	1.12	<b>Low</b>	
Function	12.12	0.52	2.78	<b>High</b>	<b>18</b>
		0.57	1.32	<b>Low</b>	
Function	16.31	0.64	2.71	<b>High</b>	<b>19</b>
		0.16	1.02	<b>Low</b>	

**Table (2)** Discriminatory force in the style of the two extremist groups for the measure of behavioural patterns

<b>Significance</b>	<b>Discriminatory force</b>	<b>Minimum Group Response (one) 27%</b>	<b>Top Group Response (one) 27%</b>	<b>Paragraph number</b>
Function	0.37	19	34	<b>1</b>
Function	0.66	11	38	<b>2</b>
Function	0.56	17	40	<b>3</b>
Function	0.68	2	30	<b>4</b>
Function	0.85	5	40	<b>5</b>
Function	0.73	11	41	<b>6</b>
Function	0.71	12	41	<b>7</b>
Function	0.66	9	36	<b>8</b>
Function	0.76	7	38	<b>9</b>
Function	0.88	2	38	<b>10</b>
Function	0.80	7	40	<b>11</b>
Function	0.76	3	34	<b>12</b>
Function	0.66	13	40	<b>13</b>
Function	0.76	4	35	<b>14</b>
Function	0.39	23	39	<b>15</b>



Function	0.76	7	38	16
Function	0.41	13	30	17
Function	0.90	3	40	18
Function	0.68	7	35	19
Function	0.71	7	36	20
Function	0.73	10	40	21
Function	0.83	6	40	22
Function	0.68	12	40	23
Function	0.80	7	40	24
Function	0.76	8	39	25
Function	0.85	3	38	26

From tables (1, 2), all food problem scale paragraphs are distinct because their calculated T values are higher than the 1.96 (0.05) level and degree of freedom (80), and all behavioral pattern scale paragraphs are distinct because their values are distinct (0.30) according to the IPPL standard.

## B- Relationship of the paragraph's grade to the overall scale (Item Validity)

The veracity of paragraphs is an indication of their ability to measure the concept measured by the test or scale through their connection to the meck, and where there is no external test, the overall score of the scale is

Best Internal Test (201:1988, Anstasi.)

That is, the consistency of paragraphs is an indication of their sincerity and measurement of what they were designed to measure (Faraj, 1980, 315)

To achieve this, the researcher used the Pearson correlation coefficient to extract the correlation between the degree of each of the food problem scale paragraphs and the overall degree of the (150) sample form as a whole. The astrophotometer was used the binomial link coefficient (Point-Baiseral). The answer to the paragraph is interrupted bilaterally (Verkson, 1991: 515), and all the paragraphs of the two measurements have been found to be linked to the overall grade D statistically because the correlation values are higher than the tabular correlation value of 0.15 at the level (0.05) and the degree of freedom (148) and tables (3-4) show this.

**Table (3)** Authenticate the Food Problem Scale paragraphs using the method of subparagraph degree relationship to the overall grade

Signif icanc e	Corr elatio n value	Para grap h	Signif icanc e	Corr elatio n value	Para grap h	Signif icanc e	Corr elatio n value	Para grap h	Signif icanc e	Corr elatio n value	Para grap h
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Function	0.72	16	Function	0.81	11	Function	0.60	6	Function	0.70	1
Function	0.71	17	Function	0.76	12	Function	0.77	7	Function	0.73	2
Function	0.72	18	Function	0.72	13	Function	0.65	8	Function	0.72	3
Function	0.83	19	Function	0.66	14	Function	0.75	9	Function	0.68	4
			Function	0.78	15	Function	0.81	10	Function	0.67	5

**Table (4)** Authenticate the paragraphs of the stereotype scale using the method of the subparagraph's total degree relationship

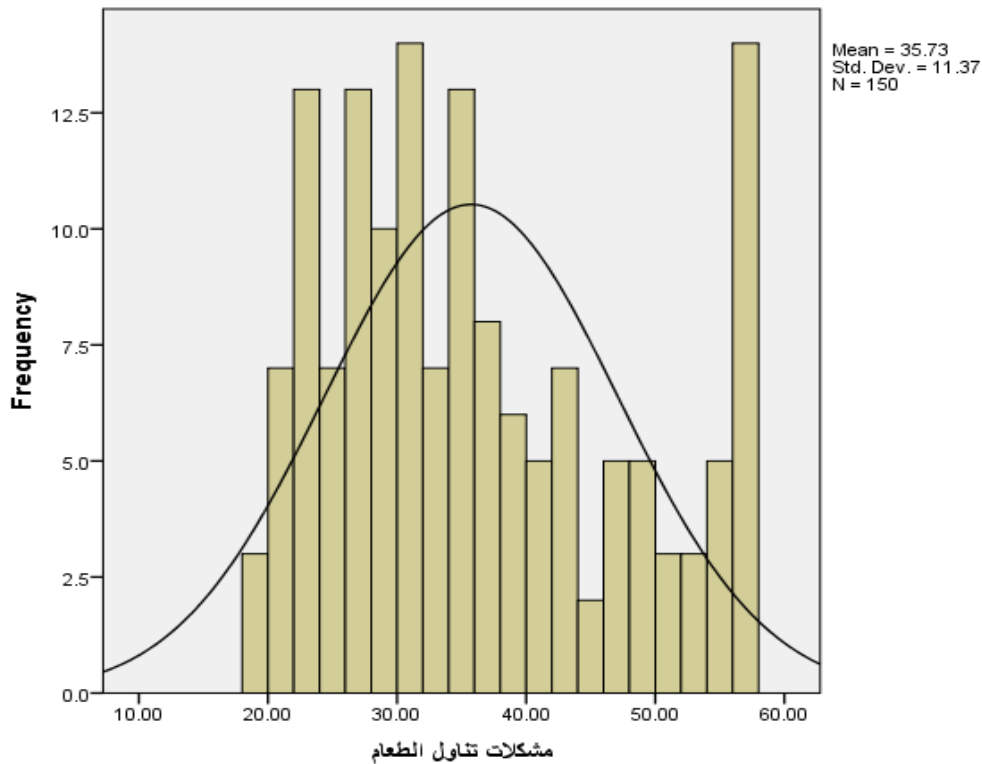
Significance	Correlation value	Paragraph	Significance	Correlation value	Paragraph	Significance	Correlation value	Paragraph	Significance	Correlation value	Paragraph
Function	0.66	22	Function	0.36	15	Function	0.56	8	Function	0.34	1
Function	0.63	23	Function	0.63	16	Function	0.57	9	Function	0.54	2
Function	0.64	24	Function	0.38	17	Function	0.71	10	Function	0.48	3
Function	0.60	25	Function	0.70	18	Function	0.61	11	Function	0.58	4
Function	0.65	26	Function	0.61	19	Function	0.59	12	Function	0.68	5
			Function	0.58	20	Function	0.53	13	Function	0.61	6
			Function	0.63	21	Function	0.61	14	Function	0.61	7

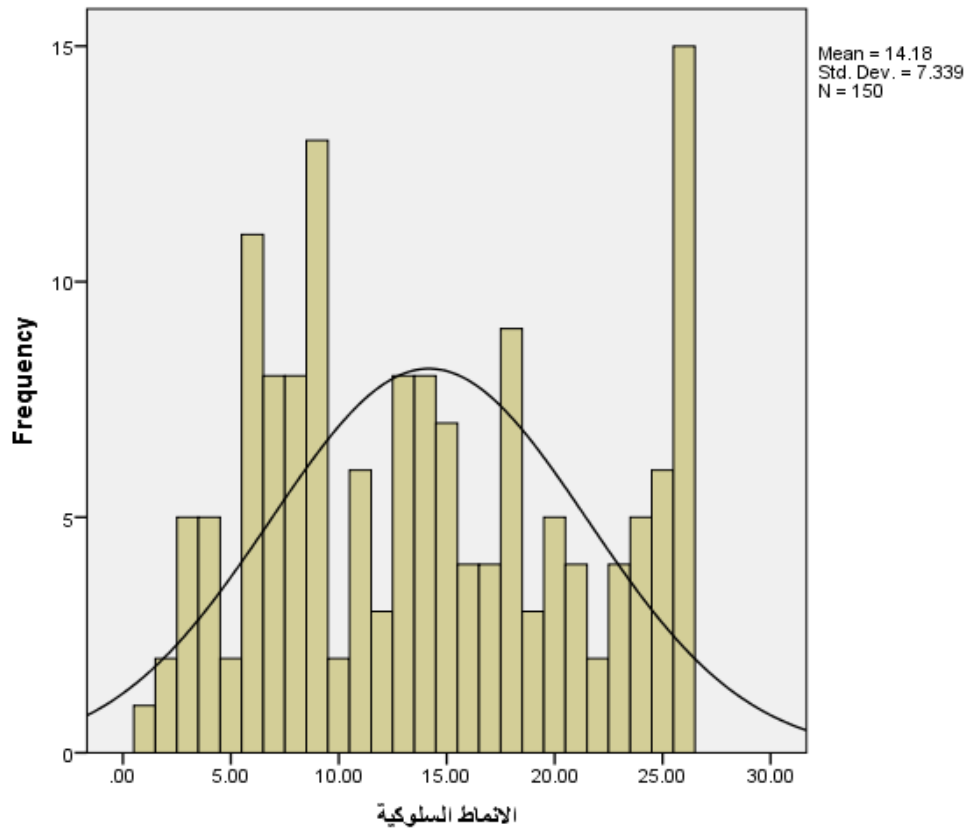
### Statistical descriptive indicators

When applying the measurements of eating problems and behavioral patterns to the research sample's many individuals (150) The researcher obtained a number of statistical indicators shown in table (5). and since the distribution of sample personnel 'scores to the two measurements was moderate (1. 2) If the values of twisting and splitting within a standard range are acceptable ( $1.96 \pm$ ) (Cleophas & Zwinderman, 2017, p.107), so the researcher used Parametric Statistic to analyze her research data statistically.

**Table (5)** Description Statistical Characteristics of Sample Research on Measurements of Eating Problems and Behavioral Patterns

Behavioural Patterns	Eating issues	Indicator	T
14.18	35.73	Medium	1
14	34	Meditator	2
26	57	Mood	3
7.34	11.37	Standard deviation	4
0.19	0.54	Skewness	5
-1.17	0.85	Kurtosis	6
1	19	Minimum degree	7
26	57	Maximum degree	8



**Form(1)****Alpha Cronbach persistence for measurements of eating problems and behavioral patterns**

The researcher verified the consistency of the alpha-cronbach food and behavioral patterns measurements based on the total sample data. The constant coefficient in this way (0.95) for eating problem measurements was (0.92)

**Description of the two final measures**

A measure of behavioural patterns (26) consists of a paragraph before each substitute paragraph (applicable, not applicable), an average hypothesis (39) and a measure of eating problems consisting of (19) a paragraph before each substitute paragraph (always, sometimes rarely) and an average hypothesis (38).

**Statistical means**

The two researchers used the Statistical Pouch (SPSS) to analyze data whether in test preparation, scale preparation or final data.

**Presentation, Interpretation and Discussion of Results**

This chapter contains the presentation and interpretation of the findings of the research, in the light of its objectives and discussion based on the theoretical framework and the results of previous studies, as well as a number of recommendations and proposals.

Below is a presentation of the research findings in the light of the initial data and their statistical processing in order to achieve the objectives as follows:

Goal (1): Eating problems in autism children.

To achieve this goal, the researcher applied a measure of eating problems to the research sample's number of individuals (150) individuals, the results showed that their average score on the scale was (35.73) degree and standard deviation of (11.37) degree, when balancing this average with the hypothetical average Measurement of 38 degrees, using the T test (t-test) for a single sample showing that the difference is statistically D and in favour of the hypothetical average, as the calculated T value is higher than the tabular T value and excess (1.96) with a degree of freedom (149) and an indicative level (0.05) and table (6) shows this

**Table (6)** T test for difference between sample average and hypothetical average for measure of eating problems

Significance level	Free degree	Tabular T value	Calculated T value	Hypothetical average	Standard deviation	Average arithmetic	Sample size
Function	149	1.96	3.52	38	11.37	35.73	150

The result of table (6) indicates that the research sample has high-level eating problems

**1- The hypothetical average of the metric (eating problems) was extracted by combining the weights of the three metric alternatives and dividing them by their number and then multiplying the output in the number of the scale paragraphs of 19 paragraphs**

### Goal (2): Behavioral Patterns in Autism Children

To achieve this goal, the researcher applied a behavioral pattern scale to the research sample's number of individuals (150) individuals, the results showed that their average score on the scale was (14.18) degree and standard deviation of (7.34) degree, when balancing this average against the hypothetical average Measurement of 39 degrees, using the T test (t-test) for a single sample showing that the difference is statistically D and in the interest of the average calculation, as the calculated T value is higher than the tabular T value and excess (1.96) with a degree of freedom (149) and an indicative level (0.05) and table (7) shows this.

**Table (7)** T test for difference between sample average and hypothetical average of behavioral pattern scale

Significance level	Free degree	Tabular T value	Calculated T value	Hypothetical average	Standard deviation	Average arithmetic	Sample size
Function	149	1.96	1.97	39	7.34	14.18	150

The result of table (7) indicates that the research sample has high behavioral patterns

### Goal (3): The correlation between eating problems and behavioral patterns in the research sample

To achieve this goal, the Pearson correlation coefficient was used to calculate the correlation coefficient between the total grades obtained by the sample individuals on the scale of eating problems and behavioral patterns. The results showed that there was a statistically significant expulsive correlation between eating problems and behavioral patterns as the calculated correlation was valued. (0.61) which is higher than Pearson's tabular correlation factor value of 0.15 at the level (0.05) and degree of freedom (148).

**2- The hypothetical average of the measure (behavioural patterns) was extracted by combining the weights of the two alternatives and dividing them by their number and**

**then multiplying the output by the number of paragraphs of the measure and the amount of 26 paragraphs.**

**Goal (4): Recognize the difference in eating problems depending on sex variables**

To achieve this goal, t-test has been used for two separate samples to identify differences in eating problems depending on the sex variable (male, female) and table (8) shows this:

**Table (8)** T test for two separate samples to identify differences in eating problems depending on sex variable (male, female)

Significance	Tabular T	Calculated T	Standard deviation	Average	Number	Type	Sample
Function	1.96	2.04	10.92	34.35	97	Male	150
			11.83	38.26	53	Female	

Table 8 shows that there is a difference in eating problems depending on the sex variable (male, female) and the female's interest, as the calculated T value is higher than the tabular T value of 1.96 at the level (0.05) and the degree of freedom (148).

**Goal (5): Indicate the difference in behavioural patterns depending on sex variables (male, female)**

To achieve this goal, t-test has been used for two separate samples to identify differences in behavioural patterns depending on the sex variable (male, female) and table (9) shows this:

**Table (9)** T test for two separate samples to identify differences in behavioural patterns depending on the sex variable (male, female)

Significance	Tabular T	Calculated T	Standard	Average	Number	Type	Sample
Function	1.96	2.23	6.65	13.21	97	Male	150
			8.23	15.96	53	Female	

Table 9 shows that there is a difference in behavioural patterns depending on the sex variable (male, female) and the female's interest, as the calculated T value is higher than the tabular T value of 1.96 at the level (0.05) and the degree of freedom (148).

### Summary of Results:

- The result of table (6) indicates that the research sample has high-level eating problems. This result is consistent with the study (Provost, Croy and Sicker, 2010), the study (Karakesh, 2017) and the study of Jillian Murphy, 2016. The researchers attribute this to developmental disorder in autism children. Parents were ignorant of dealing with their children's training to reduce food problems.
- The result of table (7) indicates that the research sample has high behavioral patterns. This result is consistent with the study (Kiki, 2011) and the study (Abdul, 2018). The researchers attribute the high behavioral patterns caused by developmental disorder suffered by autism children.
- Table 8 shows that there is a difference in eating problems depending on the sex variable (male, female) and female interest, because the calculated T value is higher than the tabular T value of 1.96 at 0.05 and the degree of freedom (148). The researchers attribute this to the environment and social upbringing.
- Table (9) shows that there is a difference in behavioural patterns depending on the sex variable (male, female) and the female interest, because the T value calculated is higher than the TD of 1.96 at the level of (0.05) and the degree of freedom (148). The researchers attribute this to the parents' differing interaction with children of the autism spectrum with different sex.

### Recommendations:

- The need for a nutritionist in autism spectrum disorder institutes.
- Emphasize the importance of preparing training programmes for autistic children to reduce food problems.
- Proposals:
- Conducting further studies on food problems and linking them to other variables.
- Research the impact of a training programme in reducing eating problems.
- Research the impact of a training programme in reducing the problems of negative behavioral patterns in the autism spectrum.

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## Measure of behavioural patterns and their relationship to autism children's food problems

University of Baghdad

Faculty of Education for Girls Dear Esteemed Teacher

Greetings

The researchers aim to conduct the tagged research (behavioral patterns and their relationship to the food problems of autism children), and a service for scientific research. Please help us by answering the following paragraphs by marking (right) under the alternative, which represents your opinion and does not need to be named. Your response will not be seen for scientific research purposes only.

Thanks for your cooperation

Please answer the following information

Researchers: Prof-Doc. Jameela Rahim

Prof-Doc. Sally Taleb

### Behavioral Patterns Measure in Autism Children

Don't apply	Apply	Paragraphs	T
		Overly preoccupied with parts of things and takes up in them	1
		He has stereotypical behaviour as a carcass of hands and body shaking.	2
		He hears when he likes to hear.	3
		He walks on his fingertips.	4
		It's hard for him to focus his sight on anyone.	5
		He rejoices and laughs with his giggles for no reason.	6
		He gets upset and angry for no reason.	7
		His behaviour is aggressive towards the others.	8
		It shows physical inactivity	9



		He hurts himself by hitting his head or body against the wall.	10
		Avoid asking for help from others.	11
		When he hurts or gets hurt, he has no feelings.	12
		He finds it difficult to talk to others when he needs something.	13
		He has stereotypical behavior circling things.	14
		Echoes unclear words.	15
		indifferent to dangerous things without fear or hesitation.	16
		He puts the games on a long line.	17
		Crying and writhing for no reason.	18
		He screams if one of the parents wants to embrace him.	19
		Loves isolation	20
		He has poor attention to respond to other people's calls.	21
		Find it difficult to keep looking at others.	22
		It shows boredom when he's asked to do something.	23
		Avoids looking at the eyes	24
		It shows weak use of non-verbal behaviors such as gestures and signals	25
		Refrain from participating in social events.	26

### Measure of autism children's eating problems

Rarely	Some times	Always	Paragraphs	T
			He makes annoying noises when he's eating.	1
			Run away from food.	2
			Food scatters when forced to eat it.	3
			Excessively moving food time	4
			Prefers certain forms of dining tools.	5
			Prefers a certain taste in food.	6
			He throws himself up when he sees food.	7
			Refuses to taste food when asked	8
			Eating mashed foods	9
			He closes his mouth severely when he serves him food.	10
			Spit the food he eats	11
			He keeps food in his mouth for a long time.	12
			Afraid to eat new foods.	13
			One type of food is preferred.	14
			He hates most types of food.	15
			He throws food on the floor during the food.	16
			Depends on others when eating	17
			Make random moves while eating.	18
			Close his eye when you bring food.	19