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PSYCHOLOGICAL AND EDUCATIONAL ASSESSMENT OF CHILDREN WITH AUTISM AT SPECIALIZED EDUCATION CENTERS IN RIYADH

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ABSTRACT: *The present study aims at identifying the assessment level of psychological and educational performance of children with autism disorder in Kingdom of Saudi Arabia and the extent of psychological and educational assessment according to dimensions of the psychological and educational assessment measurement prepared for this purpose. The study population consists of children with autism disorder in Saudi Arabia at the age category: (6-12) years. Sample of the study consists deliberately of children from autism centers in Riyadh, which are Prince Faisal's Mother Centre, Alwaleed Center, Prince Nasser Center, and Riyadh Center. The study sample includes (74) autistic children. The study adopts an analytical descriptive method based on a field study. The tools utilized for data collection are a primary data questionnaire designed by the author and Scale of psychological and educational performance assessment for children with autism. The study resulted that the level of psychological and educational assessment of autistic children is little high. There are statistically significant differences in psychological and educational assessment at the following dimensions: cognitive, social, emotional, and receptive language in favor of 6-9-year children. There are statistically significant differences in psychological and educational assessment of children with autism due to gender. There is correlation between performance measurement of psychological and educational assessment with age, autism degree, and teacher's experience years.*

KEYWORDS: Educational Assessment, Children, Autism Disorder, Education, Psychology

INTRODUCTION

Autism Spectrum Disorder is considered a part of the human condition, but this type of condition has emerged rather recently since (1943); the American psychiatrist Kanner was the first one who used the name 'Autism' and described the disease case. Previously, Autism was considered as one of the various disabilities from which some individuals suffer. Some scholars define autism as a type of mental deviation or retardation while others believe that it should be included under the list of motor and health disability or it is an emotional and behavioral disorder. Finally, it is called autism. Psychological, medical and educational circles have begun to investigate and conduct research papers on autism. According to Alhisan (2012), attention has been paid to autism since (1998) regarding boys and since (2002) for girls. Saudi Arabia has begun the first steps with regard to autism through three programs which are conducted in Riyadh, Jeddah and Dammam. Then, the number has increased to reach five centers and (88) programs, including (298) classes for boys and girls all over regions and provinces of the Kingdom. Accordingly, shedding light on and investigating autism disorder has become very important, through psychological and educational assessment, which contributes to alleviating this puzzling disorder, which has not been specifically diagnosed yet.

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Statement of the Problem

Taking care of people with disabilities and special needs is considered one of the most important problems faced by communities. No community is free of considerable percentage of disabled people in its population. Autism disability is considered one of the developmental disorders; it is not a rare disability and it represents a percentage which would not be disregarded. Diagnosing autism is of the most important difficulties faced by this group, which requires well-trained and experienced disability specialists guided by the teachers' and parents' opinions. Clear diversity in the results of previous studies is one the most notable causes of the present study; the previous results confirms the diversity of problems and disorders relating to children with autism, whether they are behavioral, emotional, or social problems. The author has not found any study conducted in Saudi Arabia on psychological and educational performance assessment of children with autism in the Kingdom. Therefore, problem of the current study has been stated in the following main question: what is the level of psychological and educational assessment of children with autism in Saudi Arabia. Out of this main question, the following secondary questions can be stated:

1. What is the level of psychological and educational assessment among children with autism on the seven dimensions (cognitive, social, emotional, receptive language, expressive language, gross motor movements, fine motor movements, activities and interests)?

2. Are the seven dimensions of the measurement of psychological and educational assessment among children with autism characterized by highness?

3. Are there statistically significant individual differences on the measurement dimensions of psychological and educational assessment among children with autism due to gender and autism type?

4. Are there statistically significant differences on the measurement dimensions of psychological and educational assessment due to age?

5. Is there a correlation between the measurement dimensions of psychological and educational assessment due to autism type, gender, and teacher's experience years?

6. Is there correlation between each of measurement dimensions of psychological and educational assessment: age, autism type, and teacher's experience years?

Significance

The significance of the study stems from identifying the following factors: interest in caring and qualifying children with autism in Saudi Arabia, the apparent lack of psychological research and studies on psychological and educational assessment of patients with autism in Arab communities, assessment of autistic children centers in Riyadh, the extent of psychological and educational assessment of children with autism in Riyadh centers, correlation between the measurement dimensions of psychological and educational assessment, the differences between male and female groups on the measurement dimensions of psychological and educational assessment, and correlation between the teacher's experience years and the improvement in children's performance on the measurement dimensions of psychological and educational assessment.

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Objectives

To investigate the psychological and educational assessment based on the following seven dimensions: cognitive, social and emotional, receptive language, expressive language, gross motor skills, fine motor skills, activities and interests).

1. To reveal the extent of psychological and educational assessment of children with autism at autism centers in Riyadh according to the measurement dimensions.
2. To identify the differences in the measurement dimensions due to gender and autism type.
3. To identify the correlation between the seven dimensions of measurement due to gender and autism type.
4. To identify the correlation between the teachers' experience years and improvement in children's performance on the seven measurement dimensions.
5. To develop measurement instruments with psychometric properties valid for children with autism environment.
6. To attempt to spread cultural awareness among the families with autistic children that these children have abilities and characteristics which may be similar to normal ones but they only need to care.
7. To provide autism centers with the results of this study, making appropriate environment to a child with autism and activating all educational activities to develop his abilities.
8. To present recommendations and suggestions contribute to the care and qualification of children with autism.

Hypotheses

1. The level of psychological and educational assessment performance among children with autism is characterized by lowness.
2. There are statistically significant differences in psychological and educational assessment regarding the dimensions: cognitive, social and emotional, receptive language in favor of 6-9-year autistic children.
3. There are statistically significant differences in psychological and educational assessment of children with autism due to gender.
4. There are statistically significant differences in psychological and educational assessment of children with autism regarding cognitive, emotional and expressive language dimensions in favor of females.
5. There are statistically significant differences in psychological and educational assessment of children with autism regarding receptive language dimension in favor of males.
6. There are statistically significant differences in psychological and educational assessment of children with autism due to the autism level in favor of slight autism.

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7. There are statistically significant differences in psychological and educational assessment of children with autism due to teacher's experience years in favor of children of 7 years and more).

8. There is correlation between the measurement of psychological and educational assessment and age, autism level and teacher's experience years.

9. There is no correlation between the teacher's experience years and the psychological and educational assessment of children with autism.

Limitations

This study is confined to autism centers in Riyadh (Riyadh Autism Center, Prince Nasser Center, Prince Faisal's Mother Center and Al Waleed Center). In terms of the sample, the study is limited to children with autism from boys and girls whose ages range from 6 to 12 years. The study was conducted during the first half of the academic year (1437/1438).

Definition of Terms

Psychological Assessment: Psychologist uses measuring tools and benchmarking to assess the child's condition, with respect to cognitive, social, emotional, behavioral functions and adaptation. According to this assessment, the family and teachers can identify the aspects of child's deficiency and development.

Educational Assessment: Educational assessment can be carried out by the formal assessment using measuring tools, or by the informal assessment using direct observation and discussion with parents. The purpose of this assessment is to estimate child's skills according to the dimensions of psychological and educational measurement.

Children with Autism: They are children who suffer from qualitative communicative deficiency, inability to establish social communication, behaviors, activities and interests that are useful and they are under the age of three.

Psychological and Educational Assessment: It is an organized process to collect data in order to determine a problem, define, judge and make decision on it (Salvia &Ysseldyke, 2004)

Assessment: The word assessment as Mahmoud (2001) states in al-Akhras and Al-Makaliya (2006), it has no derivative origin in the Arabic language, but it is an Arabic translation that has been interpreted in some educational literature to indicate the value of an object. This word is different from the word evaluation related to the configuration of values, and synonyms of this term in Arabic ((estimation)) i.e. clarification of the amount.

Procedural Definition: Psychological and Educational Assessment: The author thinks that the grades obtained by the examinees on the psychological and educational performance measurement, which is used in the study, are reflected by the grades contents.

Autism Disorder: Kanner (1943), as cited in Al-Zureiqat (2010) and Zorad (2014), thinks that autism disorder appears since birth, and its symptoms become clear after the second year. Symptoms of this disorder are inability to communicate in any way with others (through verbal communication, signs, hints, or expressions), as well as impaired ability to communicate and speak, especially in the early stages of life with repetitive words, repetitive behavior, resistance to any change in the environment around them, and weakness of the ability to imagine or

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connect ideas, sometimes laughing and laughing without a reason, but s/he enjoys normal memory and normal body growth.

Autism Centers: Alhisan (2012), autism centers are the centers that provide specialized educational services to overcome the problems of behavioral disorders and communication and develop self-reliance skills in children with autism. The program depends on day-school activities that require the establishment of family cooperation.

Riyadh: Riyadh Governorate: The capital city of Saudi Arabia and its biggest city, the center of Riyadh and one of the largest Arab cities for population.

THEORETICAL FRAMEWORK

Historical Development and the Current Status of Autism

Previously, autism symptoms were considered as an early form of schizophrenia. The real contribution that differentiated autism as a separate case has been referred to by the American psychiatrist Kanner (1943), who first identified the main characteristics of autism disorder (Al-Zureiqat, 2010) such as obsession and liturgical behavior. Focus at the early periods of dealing with autism during1950s and 1960s of the last century was on the symptoms determining autism. Previous studies conclude that there are three areas of behavior among the vast majority of children with autism: failure to develop social relations, delay and language disorder and obsessive or liturgical behavior associated with repetitive and stereotyped play.

In 1970s and early 1980s, there were two main landmarks: First, clinical practice and research that helped to develop structured assessment methods that appear in assessment tools such as the autism diagnostic interview. Second, to identify the types and levels of difficulty of autism, accordingly, interest in differentiating autism from other general developmental disorders emerged. Attention was also paid to language disorders during that period.

From late 1980s to the beginning of 1990s of the last century, studies confirm the role of genetic factors, and there was interest in similarities between autism and behavioral stereotype of children suffering from very severe deprivation. Kanner (1943) investigates (96) cases of autism following-up them to the age of 20, focusing on symptoms of social interaction and communication with others; he comes to the conclusion that (10%) of them improve with age and become more able to communicate with others. Zorad (2014) and Eisenberg (1956) remark that many children with autism depend on others, and only few of them achieve little independence. Some researchers observe that autism cases are characterized by repetition of words or sentences, confusion with pronouns and stereotyped behavior.

Prevalence of Autism Disorder

The latest statistics from National Union for Autism Studies and Research in United States indicate that the prevalence of autism disorder has increased to fifteen times more than it was previously. Center of Disease Control reports that autism disorder rate is about 1:1500in every birth. According to WHO reports in 2004 autism disorder is increasing continuously higher than any another disorder.1999 Statistics from American Society of Autism indicate that autism affects one per five thousand individuals and that it is prevalent among males four times higher than among females. Results of studies do not confirm any impact of the economic or

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social factors on disorder spread (Ibrahim, 2011). The author has observed that diversity of prevalence of autism among studies and those who act in the field due to several causes: high level of human efficiency, improvement of measurement, diagnosis accuracy and high awareness among community.

Prevalence of Autism Disorder in Saudi Arabia

The head of Autism Association in Saudi Arabia, Princess Samira Bint Abdallah Al-Faisal, says that people with autism in Saudi Arabia reach 250,000 children, according to the statistics prepared by King Saud University in cooperation with King Abdulaziz Medical City for Sciences and Technology. That agrees with the world statistics which indicates that there is one child with autism per (100) people. The princess mentions that there are (8400) children who receive treatment and qualification outside Saudi Arabia. In addition, she confirms that there are many children over 15 years who have not been trained or qualified including her own son who is being qualified in Kuwait, and this is what motivated her to establish the association. Al-Othman et al. (2012) points out that the latest statistics of Saudi Autism Association (2005) show that people with autism disorder reach (120,000) cases. Al-Zarraa (2010) reviews many studies and statistics on rates of autism prevalence, which did not agree with each other, and he concludes that prevalence of autism significantly increases during the past 30 years. Ibrahim (2011) states that The King Abdulaziz City of Science and Technology in Saudi Arabia conducts a five-year study to determine the problem size of autism through a research sample of (60,000) children from different regions of the Kingdom. The study concludes that the prevalence of autism in the Kingdom reaches (4-6/1000) child.

Concept of Autism Disorder

Autism is considered one of puzzling enigma because of its variant characteristics. Therefore, it draws the attention of many scientists and several interpretations appear as an attempt to understand it. Hallahan and Kauffman (2006) note that autism is a general developmental disorder characterized by qualitative lack in social relationships, cognitive inability, communication and language disorders. However, US Federal Definition of Autism defines it as a developmental disability that significantly affects verbal and nonverbal communication and social interaction before the age of 3 and negatively affects educational performance.

Generally, children with autism are characterized by the following:

- Specific disability in social relations: children with autism have difficulties in recognizing emotional situations of others, and they also have severe problems in expressing emotions (Hobson, 2005).
- Communication and language disability: almost half of children with autism are categorized as deaf people who do not speak, but sometimes they utter simple sounds, they repeat voices heard around them whether directly or late (Heward, 2006).
- Intelligent functional abilities: autistic children may demonstrate a range of mental abilities or very low mental abilities. Studies show that 70% -80% of autistic children have mental disabilities while there are talented ones (Heward, 2006; Tsatsanis, 2005).
- Unusual response to sensual stimuli: Some autistic children may refuse to eat food with a certain odor or color.

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- Insisting on symmetry: many autistic children demonstrate compulsive behavior. They have difficulties when the routine changes inside home or classroom and may be angry.

- Ritual and unusual behavioral stereotype: autistic children engage in routine and repetitive behaviors such as shaking body and waving hands.

- Problematic behavior: this troubles families of autistic children because they demonstrate problematic and disturbing behaviors including aggression against others or even themselves (Heward, 2006; Heflin & Alaimo, 2007).

- Symbolic play: autistic children demonstrate problems in playing symbolic skills and imitating other children. Disability to imitate is one of the fundamental features that characterize autistic children and this reflects intellectual disabilities and dysfunction (Roger, Cook & Meryl, 2005).

Because of the various theories of autism, the treatment methods of this disorder have become different. Specialists began with different ideas about autistic children, and from various perspectives to study the possibility of making change through treatment, and the possibility of overcoming the difficulties facing autistic children and relating to the environment. Those who consider autism as health case focus on drug therapy aiming at relieving symptoms and improving the psychological functional abilities, but they are few. Many autistic children have gained a better life through early treatment programs in life. Psychologists specializing in measuring behavior, problem solving, intelligence, and social or language responses believe that autistic children can be helped to become better and happier, and can be more independent and have appropriate social behaviors.

Causes of Autism Disorder

Researchers on various specializations have identified many causes of autism disorder, but until now there are no specific ,definitive or direct causes. The researchers agree that the causative factors of autism disorder have not yet been finally agreed.

LITERATURE REVIEW

Creedon (1973) identifies the linguistic development in autistic children who are characterized by lack of spoken language. It shows that the children failed to do the role-play skills. Bank (1983) assesses the stereotyped emotional interaction among autistic children and their parents and indicated that the types of emotional communication of children with autism are very limited. Al-Matar (2001) investigates adaptive behavior in a sample of autistic children and mentally disabled children in Saudi Arabia. It is conducted on (151) autistic children and (87) mentally disabled children. The study uses the Vinland measurement for adaptive behavior and concludes that there are statistically significant differences in the performance level of autistic children in the post-communication and daily life skills, language expression, and the field of household activities with age increasing.

It is clear from the previous studies reviewed that autistic children suffer from problems in different developmental fields. Due to the lack of Arab studies in this field, the current study focuses on assessing the performance of autistic children in Riyadh autism centers.

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METHODOLOGY AND PROCEDURES OF THE STUDY

Method

This chapter describes in detail the population and sample of the study and the way the sample was selected, as well as the presentation of the tools used in the study and its procedures, the methodology used and the statistical processing used in processing the data.

Population

The meaning of the study society refers to the total group of elements that the author seeks to generalize the results related to the problem studied (Allam, 2000). The study of community of children of autism in the Saudi capital Riyadh can be described through the following points:

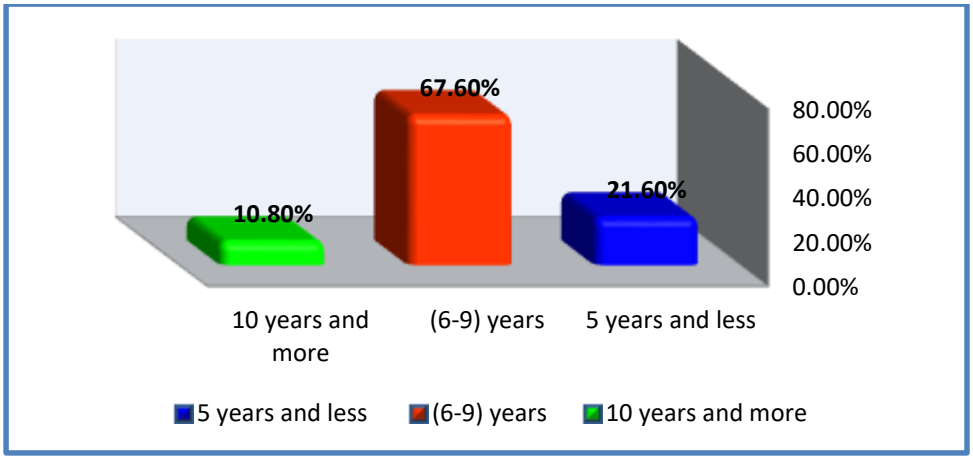
- In terms of geographical dimension: the population of the study is children with autism officially enrolled in the centers for their care.
- Gender: The study population includes autistic children of both males and females in the age group (6-12 years).

Sampling

The sample of the study refers to "the sample in which the characteristics of the community are distributed in the same proportions as in the society. The sample is randomly chosen from the original study. The sample of the study consists of 74 autistic children.

Table (1): The distribution of the subjects of the study sample due to age variable

Age categories	Frequency	Percentage
5 years and less	16	%21.6
(6-9) years	50	%67.6
10 years and more	8	%10.8
Total	74	%100



The table above shows that the majority of children with autism disorder is age category (6-9) years of 67.6%.

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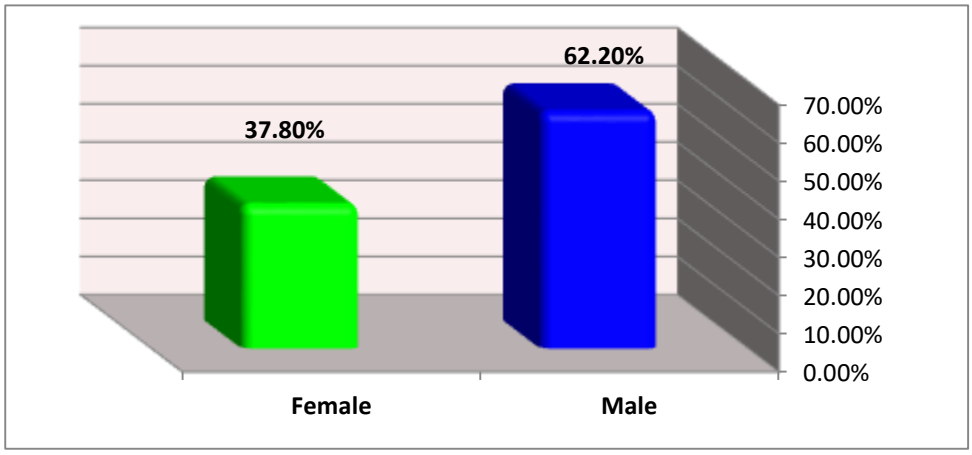
Table (2): The distribution of the subjects of the study sample due to sex variable

Gender	Frequency	Percentage
Male	46	%62.2
Female	28	%37.8
Total	74	%100



From the above table, the majority of children with autism disorder are males (62.2%).

Table (3): The distribution of the subjects of the study sample due to autism level

Autism degree	Frequency	Percentage
Mild	35	47.3%
Acute	15	20.3%
Autism and hyperactivity	18	24.3%
Autism and distraction	6	8.1%
Total	74	100%

As shown in Table (3), children with autism represent 47.3%); their disorder degree is mild.

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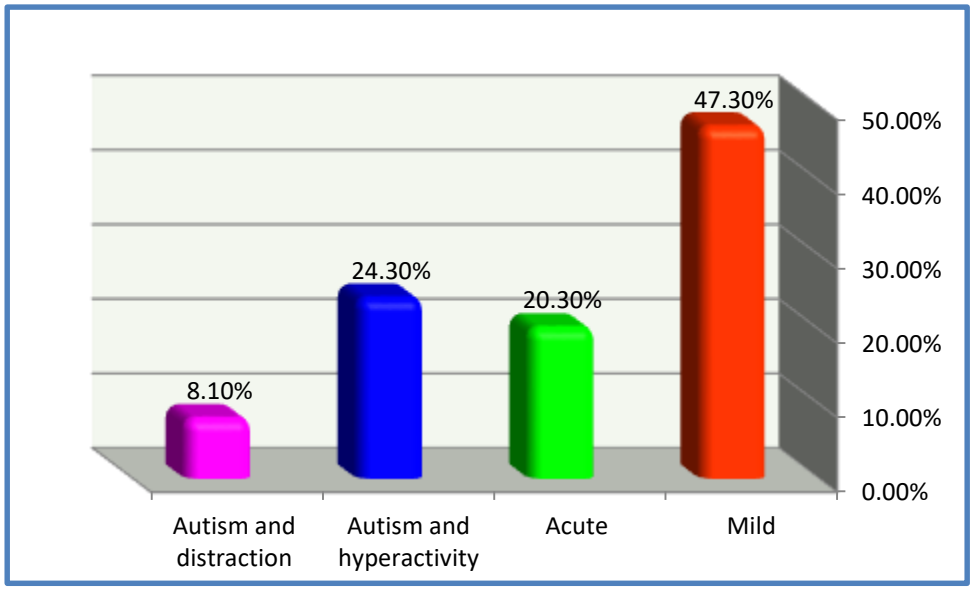
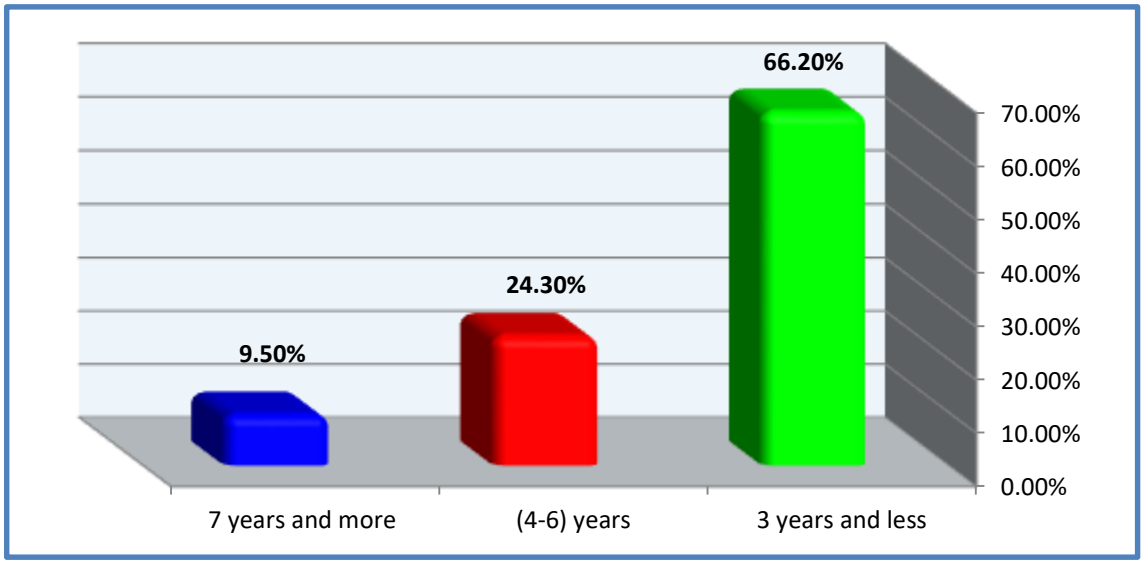


Table (4): The distribution of the subjects of the study sample due to teacher's experience years

Years of experience	Frequency	Percentage
3 years and less	49	66.2%
(4-6) years	18	24.3%
7 years and more	7	9.5%
Total	74	100 %



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The above table shows that the majority of teachers (66.2%) in autism centers who have experience is the category (3 years and less).

METHODOLOGY

This study adopts the cross-sectional analysis, based on field study.

Study Tools: The author uses several tools to collect data necessary to verify the validity of the hypotheses: A primary data questionnaire which has been designed by the author, and Psychological and Educational Assessment measurement for Autistic Children prepared by Schopler et al. (2005) and Al-Zureiqat (2010).

Description of the Study Tools

In order to achieve the objectives of the study, data collection is through the psychological and educational assessment test prepared by Al-Zureiqat and El-Imam (2007) based on a survey study, literature review and previous studies related to the psychological and educational assessment of autistic children such as Schopler et al. (2005); Young, Brewer & Pattiso (2003); and Botting (2004).

1. Cognitive: includes the following items: (responds to the bell sound, places objects in their correct places, arranges shapes according to their size, connects 6 pieces with their correct shapes, matches five objects with their images, chooses four objects by their own name, draws a vertical line, geometric shapes when asked to do so, cares about images in the book, classifies cubes by color, responds to tradition of his behavior, arranges time-picture events, writes seven letters correctly).

2. Social emotional: It includes the following items: (uses symbolic play in game, responds to social interactions, take the right role in playing with children, cooperate with others when asked, visually communicates with others during contact with them, asking for help when needed, Smiling to others, enjoying his relationship with others, enjoying playing with others, expressing his emotions in a suitable way).

3. Receptive language: contains the following items: (points to the circle, square, rectangle and triangle when called to refer to large and small things, give three things by hand to the examiner when asked, points to five colors when called for, responds to the word "no", responds to the "come here" command, understands three verbs, responds to the question, understands words he literally hears, executes two-step instructions, follows four step-by-step instructions).

4. Expressive language: Contains the following items: (utters square shapes, circle and triangle, utter the small and large form, utter five things, pronounce five types of fruit and five types of vegetables correctly, utters five characters correctly, read numbers from 1-10 He answers two questions to my reader's text, reads his sentence and follows the instructions, counts from 2-7 cubes, asks for food and drink, produces three correct semicolons, specifies a name when asked to do so, called a female name when asked, uses the correct grammar structures, "I" correctly, uses the pronoun "is" correctly, uses the pronoun "you" correctly, reads three words , Reads a sentence consisting of two

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names successfully, reads a sentence consisting of a recipe name successfully, reads a sentence consisting of a name and does successfully).

5. Gross motor skills: It includes the following items: (Stands on one foot, jumps with the feet, climbs the stairs with his legs properly, shows the control of one hand, clapping hands, raises his hands to the top, moving his head in different directions, Throws the ball).

6. Fine motor skills: Contains the following items: (Holds the pincer or scissors correctly, uses the pincer in the holding of objects, holding one bead of beads, moves six beads, holds the suspension properly, holds the cup correctly, moves the pen on three Shapes, colored by lines, cuts paper in a correct way, puts one cube in a box, puts cubes on top of some, lights the light and closes it).

7. Activities and interests: It includes the following items: (cares for familiar things, carries out a variety of activities, cares about the game as a whole, diversifies in its games, maintains itself and its integrity, practices familiar, varied and acceptable behaviors, responding appropriately to smells, Accepts his or her everyday interests or routine).

The level of performance of the study subjects is judged on the psychological and educational assessment test as follows:

- Very good: If the child performs the autistic task successfully and without help. Good: If the autistic child performs the task successfully with help.

- Weak: If the autistic child shows some knowledge of how the task is performed and fails to implement it.

- Very weak: If the autistic child does not perform the task successfully even after repeated explanations. The correction was followed in the quadratic test (very good, good, weak, very weak). The absolute statistical standard was adopted.

Table (5): Correlation coefficient, validity and reliability for the total degree

Measurement	Correlation	Validity	Reliability
Social skills list of a child with autism	0.73	0.84	0.91

These coefficients show the author that they are high, it can be applied on the study sample.

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Table (6): The internal consistency of Sensory dimensions problems through correlation coefficients.

Dimensions	Cognitive	Socio-emotional	Receptive language	Expressive language	Gross motor Skills	Fine motor skill	Activities & Interests	Total
Cognitive	__	0.562	0.661	0.620	0.570	0.563	0.634	0.573
Socio-emotional	0.562	__	0.561	0.520	0.611	0.662	0.560	0.621
Receptive language	0.661	0.561	__	0.610	0.580	0.692	0.563	0.632
Expressive Language	0.692	0.645	0.672	__	0.530	0.634	0.610	0.576
Gross motor Skills	0.634	0.561	0.563	0.512	__	0.560	0.630	0.582
Fine motor skill	0.563	0.662	0.692	0.634	0.560	__	0.590	0.620
Activities & Interests	0.634	0.560	0.563	0.610	0.630	0.590	__	0.570
Whole	0.573	0.621	0.632	0.585	0.540	0.620	0.570	__

All correlation coefficients above are statistically significant at level of significance (0.01).

Procedures of the Study

The survey method is used to select population and sample of the study. A questionnaire was then distributed and analyzed according to the Statistical Package for Social Sciences (SPSS). Then, the findings of the study are discussed in the light of the theoretical framework and previous studies.

Analysis and Discussion of the Findings

This section includes the review, discussion and interpretation of the findings of the study, in the light of the study hypotheses using the (T) test, one-way analysis of variance (ANOVA), and percentage:

First Hypothesis: (Psychological and educational assessment level of autistic children is characterized by very little rise)

To verify this hypothesis, the percentage is used.

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Table (7): The distribution of psychological and educational

Assessment level / Dimensions	High	Low
Cognitive	(54.1%) 40	(45.9%) 34
Socio-emotional	(50%) 37	(50%) 37
Receptive language	(52.7%) 39	(47.3%) 35
Expressive Language	(39.2%) 29	(60.8%) 45
Gross motor Skills	(52.7%) 39	(47.3%) 35
Fine motor skill	(50%) 37	(50%) 37
Activities & Interests	(43.2%) 32	(56.8%) 42
Total	(51.4%) 38	(48.6%) 36

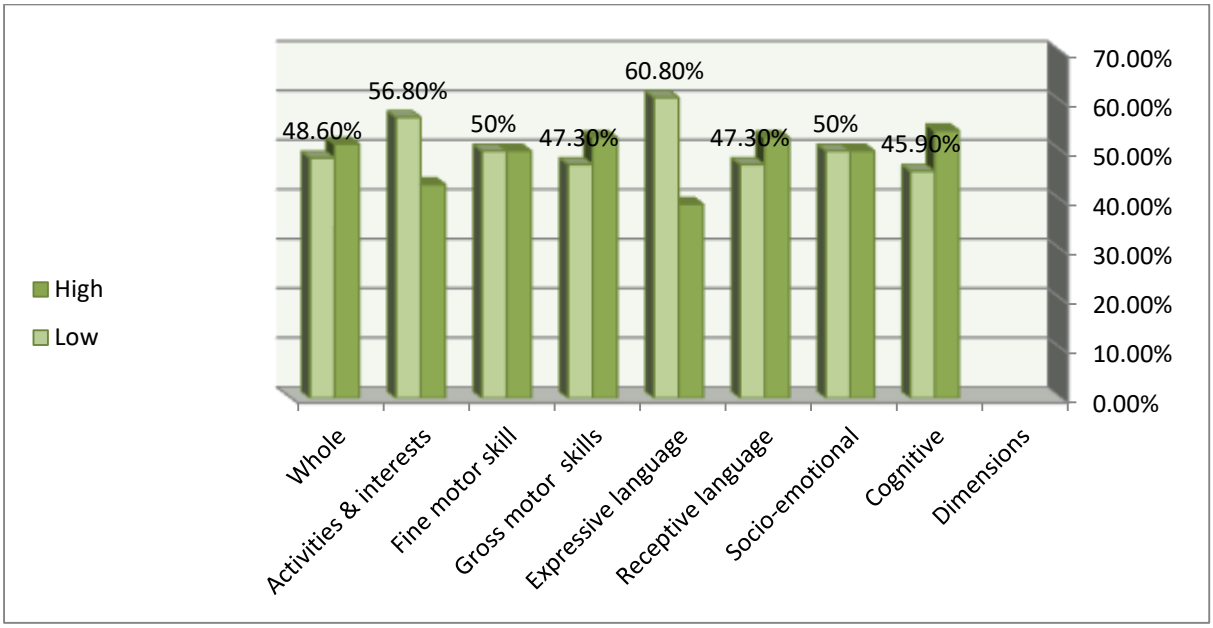

Table (7) shows that the high level of the cognitive dimension assessment is 54.1% as the highest percentage, which is considered a weak percentage, and the lowest percentage is the expressive language dimension assessment which is (39.2%). While 45.9% is the lowest percentage for the low level of cognitive dimension assessment and the highest percentage for the expressive language dimension assessment**.**

Discussion of the first hypothesis

The author has not found any Saudi studies that agree or disagree with the present study on the assessment of psychological and educational performance of autistic children in Saudi Arabia. However, the findings of the study are consistent with the findings of the study conducted by Al-Zureiqat and El-Imam (2007), which show that the overall performance was weak on the questionnaire dimensions. It is also in agreement with the study carried out by Harris and Fagley (1987), which aims at assessing 29 children with autism using the developmental

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profile**.** The results indicate that children with autism face severe difficulties in the areas of self-care, motor skills, social skills, schoolwork and speech. The present study also agrees with the results of Miller's study (1990) which show that the autistic children's weak ability to communicate and develop cognitively and socially.

Second hypothesis: (There are statistically significant differences in the psychological and educational assessment of autistic children due to age).

To verify this hypothesis, one-way analysis of variance (ANOVA) is used to test the differences in statistically significant averages.

Table (8): The statistical differences in the psychological and educational assessment of children with autism due to age

Dimension	Variance source	Sum of squares	SD	DF	T. Value	P. Value
Cognitive	Between groups	283.120	141.560	2	1.675	0.195
	within groups	5999.218	84.496	71		
	total	6282.338		73		
Socio-emotional	Between groups	340.568	170.284	2	3.944	0.024
	within groups	3065.270	43.173	71		
	total	3405.838		73		
Receptive language	Between groups	413.975	206.988	2	3.336	0.041
	within groups	4405.430	62.048	71		
	total	4819.405		73		
Expressive language	Between groups	397.088	198.544	2	0.733	0.484
	within groups	19242.318	271.019	71		
	total	19639.405		73		
Gross motor skills	Between groups	166.742	83.371	2	3.260	0.044
	within groups	1815.813	25.575	71		
	total	1982.554		73		
Fine motor skills	Between groups	96.411	48.205	2	1.251	0.292
	within groups	2736.130	38.537	71		
	total	2832.541		73		
Activities and interests	Between groups	79.728	39.864	2	1.261	0.290

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	within groups	2244.218	31.609	71		
	total	2323.946		73		
Measurement as whole	Between groups	9752.651	4876.325	2	2.389	0.099
	within groups	144911.295	2041.004	71		
	total	154663.946		73		

The findings of the study in Table (8) show that the value of (T. Value) is equal to (1.675) with a (P. Value) of (0.195), which is not statistically significant.

There are no statistically significant differences in psychological and educational assessment of children with autism in cognitive dimension due to age. The findings of the study in Table (8) show that the (T. Value) is equal to (3.944) with a (P. Value) of (0.024), which is a statistically significant value.

There are statistically significant differences in psychological and educational assessment of autistic children in emotional and social dimensions due to age. The findings of the study show that the (T. Value) is equal to (3.366) with (P. Value) of (0.041), which is a statistically significant value. There are statistically significant differences in psychological and educational assessment of autistic children in receptive language due to age.

The findings of the study show that the (T. Value) is equal to (0.733) with (P. Value) of (0.484), which is not significant statistically. There are no statistically significant differences in psychological and educational assessment of autistic children in expressive language due to age.

The findings of the study show that (T. Value)) is equal to (3.260) with the (P. Value) of (0.044), which is statistically significant value. There are statistically significant differences in the psychological and educational assessment of autistic children in gross motor skills due to age.

The findings of the study in Table 8 show that the (T. Value) is equal to (1.292) with (P. Value) of (0.292), which is not significant statistically. There are no statistically significant differences in psychological and educational assessment of autistic children due to fine motor skills.

The findings of the study show that (T. Value) is equal to (1.251) with (P. Value) of (0.290), which is not significant statistically. There are no statistically significant differences in psychological and educational assessment of autistic children in activities and interests due to age.

Table (9): The less LSD due to socio-emotional dimension

Variable	LSD	Statistical significance	Result
5 years and less (6-9) years	4.98500- 4.98500 *	0.010	There are statistically significant differences in favor of (6-9) years.

The mark (*) indicates that the significant SLD is in favor of the variable. The mark (-) indicates that the significant SLD are not in favor of the variable. To identify the low

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differences due to social and emotional dimension LSD is used and there are statistically significant differences in favor of (6-9) years.

Table (10): The LSD due to receptive language dimension

Variable	LSD	Statistical significance	Result
5 years and less (6-9) years	5.79500- 5.79500*	0.03	There are statistically significant differences in favor of (6-9) years.

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of category (6-9) years.

Table (11): The LSD due gross motor skills dimension

Variable	LSD	Statistical significance	Result
5 years and less (6-9) years	3.68750- 3.68750*	0.013	There are statistically significant differences in favor of (6-9) years.

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of category (6-9) years.

Third Hypothesis: There are statistically significant differences in psychological and educational assessment children with autism due to gender

To verify the hypothesis the T. Test is used to test the significant LSD. Table (12) shows the statistically significant differences in psychological and educational assessment of children with autism due to gender:

Variable	Gender	Sample size	Mean	Standard Deviation	T. Value	FD	Statistical significance
Cognitive	Male	46	34.65	9.34	1.502	72	0.137
	Female	28	36.96	8.95			
Socio-emotional	Male	46	27.15	7.45	2.068	72	0.044
	Female	28	30.46	5.15			
Receptive language	Male	46	30.13	8.52	2.028	72	0.045
	Female	28	34.07	6.88			
Expressive language	Male	46	32.02	14.90	1.773	72	0.080
	Female	28	34.89	18.08			
Gross motor skills	Male	46	30.37	5.45	0.616	72	0.540
	Female	28	31.14	4.89			
Fine motor skills	Male	46	35.35	6.09	0.770	72	0.444
	Female	28	36.50	6.49			
Activities and interests	Male	46	26.30	5.96	.4440	72	0.1930
	Female	28	28.07	4.98			
Measurement as whole		46	215.98	46.30	2.052	72	0.045
		28	237.11	43.22			

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Table (12) shows that the mean for males was (34.65) and for females was (30.46), where the (T. Value) was (1.502), with statistical significance of (0.137), which is statistically not significant, compared with the value (0.05), accordingly, there are no statistically significant differences in psychological and educational assessment of children with autism regarding the cognitive dimension due to gender. The findings of the study show that the mean for males is (27.15) and for females was (36.96), where the (T. Value) was (2.068), with statistical significance of (0.044), which is statistically significant, therefore, there are statistically significant differences in psychological and educational assessment of autistic children at cognitive dimension due to gender. The findings of the study in Table (12) show that the mean for males is (30.13) and for females was (34.07), where the (T. Value) was (2.28), with statistical significance of (0.045), which is statistically significant, therefore, there are statistically significant differences in psychological and educational assessment of autistic children at socio-emotional dimension due to gender in favor of females. The findings of the study show that the mean for males is (32.02) and for females was(34.89), where the (T. Value) is (1.773), with statistical significance (0.080), therefore, there are statistically significant differences in psychological and educational assessment of autistics children at receptive language dimension due to gender in favor of females. The findings of the study in Table (12) show that the mean for males is (30.37), and for females was(31.14), where T.(Value) is (0.616), with statistical significance of (0.540), which is statistically not significant, therefore, there are no statistically significant differences in psychological and educational assessment of autistic children at gross motor skills dimension due to gender. The findings of the study in Table (12) show that the mean of males is (35.35), and the mean of females is (36.50), where the (T. Value) was (0.770), with statistical significance of (0.44), which is statistically not significant, therefore, there are no statistically significant differences in psychological and educational assessment of autistic children at fine motor skills due to gender.

Fourth Hypothesis: There are statistically significant differences in the psychological and educational assessment of autistic children due to autism degree.
To verify this hypothesis, the single-variance analysis test is used to test differences in statistically significant averages. Table (13) shows the statistically significant differences in psychological and educational assessment of children with autism due to autism degree:

Table (13): Statistically significant differences in psychological and educational assessment among autistic children according to the degree of autism

Dimension	Variance source	Sum of squares	SD	DF	T. Value	P. Value
Cognitive	Between groups	2079.271	693.090	3	11.543	0.000
	within groups	4203.067	60.044	70		
	Total	6282.338		73		
Socio-emotional	Between groups	799.417	266.472	3	7.157	0.000
	within groups	2606.421	37.235	70		
	Total	3405.838		73		
Receptive language	Between groups	1357.951	452.650	3	9.154	0.000

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	within groups	3461.454	49.449	70		
	Total	4819.405		73		
Expressive language	Between groups	3050.739	1016.913	3	4.291	0.008
	within groups	16588.667	236.981	70		
	Total	19639.405		73		
Gross motor skills	Between groups	414.624	138.208	3	6.170	0.001
	within groups	1567.930	22.399	70		
	Total	1982.554		73		
Fine motor skills	Between groups	590.310	196.770	3	6.143	0.001
	within groups	2242.230	32.032	70		
	Total	2832.541		73		
Activities and interests	Between groups	481.141	160.380	3	6.092	0.001
	within groups	1842.805	26.326	70		
	Total	2323.946		73		
Measurement as whole	Between groups	50968.935	16989.645	3	11.469	0.000
	within groups	103695.011	1481.357	70		
	Total	154663.946		73		

The findings of the study in Table (13) show that the (T. Value) is equal to (11.543) with a (P. Value) of (0.000), which is a statistically significant, therefore, there are statistically significant differences in psychological and educational assessment of children with autism at cognitive dimension due to degree of autism. The findings of the study show that the T. Value) is equal to (7.157) with (P. Value) of (0.000), which is statistically significant, therefore, there are statistically significant differences in psychological and educational assessment of children with autism asocial-emotional dimension due to the degree of autism. The findings of the study show in Table (13) that the (T. Value) is equal to (9.154) with (P. Value) of (0.000) which is statistically significant, therefore, there are statistically significant differences in psychological and educational assessment of autistic children at receptive language dimension due to autism degree.

The findings of the study in Table (13) show that the (T. Value) is equal to (4.291) with (P. Value) of (0.008), which is statistically significant, therefore, there are statistically significant differences in psychological and educational assessment of autistic children at expressive language dimension due to degree of autism. The findings of the study show that the (T. Value) is equal to (6.170) with (P. Value) of (0.001), which is statistically significant, therefore, there are statistically significant differences in psychological and educational assessment of autistic children at gross motor skills dimension due to degree of autism. The findings of the study in Table (13) show that the (T. Value) is equal to (6.143) with (P. Value) of (0.001) which is

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statistically significant, therefore, there are statistically significant differences in psychological and educational assessment of autistic children at fine motor skills dimension due to degree of autism. The findings of the study show in Table (13) that (T. Value) is equal to (6.092) with (P. Value) of (0.001) which is statistically significant, therefore, there are statistically significant differences in psychological and educational assessment of children with autism at activities and interests dimension due to autism degree. Table (14): The LSD due to cognitive dimension:

Variable	LSD	Statistical Significance	Result
Autism and hyperactivity Mild autism	13.53333- 13.53333*	0.000	There are statistically significant differences in favor of mild autism
Autism with distraction Autism with hyperactivity	11.20000- 11.20000*	0.004	There are statistically significant differences in favor of autism and hyperactivity

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of both mild autism, and autism with hyperactivity.

Table (15): The LSD due to socio-emotional dimension as follows:

Variable	LSD	Statistical Significance	Result
Autism with hyperactivity Serious autism	6.71111- 6.71111*	0.002	There are statistically significant differences in favor of serious autism
Autism and distraction Autism with hyperactivity	11.20000* 11.20000-	0.010	There are statistically significant differences in favor of autism and hyperactivity

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of both serious autism, and autism with distraction.

Table (16): The LSD due to receptive languages dimension:

Variable	LSD	Statistical Significance	Result
Autism with distraction Autism with hyperactivity	11.26667- 11.26667*	0.001	There are statistically significant differences in favor of autism and hyperactivity

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of autism hyperactivity.

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Table (17): The LSD due to expressive language dimension as follows:

Variable	LSD	Statistical Significance	Result
Mild Autism Autism with hyperactivity	16.26667* 11.26667-	0.001	There are statistically significant differences in favor of autism and hyperactivity

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of mild autism.

Table (18): The LSD due to gross motor skills as follows:

Variable	LSD	Statistical Significance	Results
Mild Autism Autism with hyperactivity	6.25714* 6.25714*	0.000	There are statistically significant differences in favor of mild autism.
Serious Autism Autism with hyperactivity	3.87778* 11.87778-	0.013	There are statistically significant differences in favor of serious autism

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of both mild autism and serious autism.

Table (19): The LSD due to fine motor skills dimension as follows:

Variable	LSD	Statistical Significance	Result
Mild Autism Autism with hyperactivity	7.47619* 7.47619-	0.000	There are statistically significant differences in favor of mild autism

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of mild autism.

Table (20): The less LSD due to activities and interests dimension as follows:

Variable	LSD	Statistical Significance	Result
Mild Autism Autism and hyperactivity	6.29524* 11.29524-	0.001	There are statistically significant differences in favor of mild autism.

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of mild autism.

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Table (21): The less LSD due to the measurement as whole as follows:

Variable	LSD	Statistical Significance	Result
Mild Autism Autism with distraction	54.70000* 54.70000-	0.001	There are statistically significant differences in favor of mild autism.

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of mild autism.

Fifth Hypotheses: There are statistically significant differences in psychological and educational assessment of children with autism due to teacher's experiences years.

To verify the validity of the hypothesis the one-way analysis of variance (ANOVA) test is used to test statistically significant means differences. Table (22) shows statistically significant differences in psychological and educational assessment of children with autism due to teacher's experience years as follows:

Table (22): Statistically significant differences in psychological and educational assessment among autistic children according to years of experience

Dimensions	Variance source	Sum of Squares	SD	FD	T. Value	P. Value
Cognitive	Between groups	38.791	19.396	2	0.221	0.803
	Within groups	6243.546	87.937	71		
	Total	6282.338		73		
Socio-emotional	Between groups	5.379	2.689	2	0.056	0.945
	Within groups	3400.459	47.894	71		
	Total	3405.838		73		
Receptive language	Between groups	170.529	85.264	2	1.302	0.278
	Within groups	4648.876	65.477	71		
	Total	4819.405		73		
Expressive language	Between groups	742.339	371.169	2	1.395	0.255
	Within groups	18897.067	266.156	71		
	Total	19639.405		73		
Gross motor skills	Between groups	61.650	30.825	2	1.139	0.326
	Within groups	1920.904	27.055	71		
	Total	1982.554		73		

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Fine motor skills	Between groups	130.259	65.130	2	1.711	0.188
	Within groups	2702.281	38.060	71		
	Total	2832.541		73		
Activities and interests	Between groups	22.471	11.235	2	0.347	0.708
	Within groups	2301.475	32.415	71		
	Total	2323.946		73		
Measurement as whole	Between groups	3450.893	4725.446	2	4.182	0.004
	Within groups	151213.053	1129.761	71		
	Total	154663.946		73		

The findings of the study in Table (22) above show that the (T. Value) is equal to (.221) with a probability value (P. Value) of (0.803), which is statistically not significant, therefore, there are no statistically significant differences in the psychological and educational assessment of children with autism at cognitive dimension due to teacher's experience years.

The findings of the study in Table (22) show that the (T. Value) is equal to (.056) with (P. Value) of (0.945), which is statistically insignificant, therefore, there are no statistically significant differences in psychological and educational assessment of children with autism at socio-emotional dimension due to teacher's experience years.

The findings of the study in Table (22) show that the (T. Value) is equal to (1.302) with (P. Value) of (0.278), which is statistically not significant, therefore, there are no statistically significant differences in psychological and educational assessment of children with autism at receptive language dimension due to teacher's experience years.

The findings of the study in Table (22) show that the (T. Value) is equal to (1.395) with (P. Value) of (0.255), which is statistically not significant, therefore, there are no statistically significant differences in psychological and educational assessment of autistic children at expressive language dimension due to teacher's experience years.

The findings of the study in Table (22) show that (T. Value) is equal to (1.339) with (P. Value) of (0.326), which is statistically not significant, therefore, there are no statistically significant differences in psychological and educational assessment of autistic children at gross motor skills dimension due to teacher's experience years.

The findings of the study in Table (22) show that (T. Value) equal to (1.711) with (P. Value) of (0.188), which is statistically not significant, therefore, there are no statistically significant differences in psychological and educational assessment of autistic children at fine motor skills dimension due to teacher's experience years.

The findings of the study show that (T. Value) is equal to (.347) with (P. Value) of (.708), which is statistically not significant, therefore, there are no statistically significant differences

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in psychological and educational assessment of autistic children at activities and interests dimension due to teacher's experience years.

Table (23): The LSD due to the measurement as whole:

Variable	LSD	Statistical Significance	Result
3 years and less 7 years and more	15.20522- 15.20522*	0.012	There are statistically significant differences in favor of category (7 years and more).

To identify the less difference due to autism degree, LSD test is used and there were statistically significant differences in favor of category (7 years and more).

Sixth Hypothesis: There is interaction in the measurement of psychological and educational assessment regarding age, degree of autism, and teacher's experience years. To verify the validity of the hypothesis the one-way analysis of variance (ANOVA) test is used to test means statistically significant mean differences.

Table (24): The statistical significance of the effect of age, autism degree, and teacher's experience years on psychological and educational assessment of autistic children

Variable	Model	Sum of squares	Mean of squares	DF	T. Value	P. Value
Psychological and educational assessment	Regression	16866.577	5622.192	3	2.856	0.043
	Residual	137797.369	1968.534	70		
	Total	154663.946		73		

Table (25): The statistical significance of the coefficients of age, autism degree, and teacher's experience years

Independent variables	(B) Value	(T) Value	Statistical significance
Psychological and educational assessment	212.513	10.072	0.000
Age	22.151	2.294	0.025
Autism degree	-10.931	2.020	0.047
Teacher's experience years	-6.510	0.815	0.418

The findings of the study show in Table (25) that (T. Value) is (2.294), with statistical significance of (0.025), which is statistically significant, therefore, indicates that the child's age has statistically significant effect on psychological and educational assessment of autistic child. The results in Table (25) shows that (T. Value) is (2.020), with statistical significance of (0.047), which is statistically significant, therefore, the degree of autism has a statistically significant effect on psychological and educational assessment of autistic child. The findings of the study in Table (25) show that (T. Value) is (0.815) with statistical significance of (0.418)

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which is statistically not significant, therefore, indicates that of teacher's experience years has no statistically significant effect on psychological and educational assessment of autistic.

RESULTS

The study has revealed the following results:

- The level of psychological and educational assessment among autistic children is characterized by little highness.
- There are statistically significant differences in psychological and educational assessment at cognitive, social, emotional dimensions and receptive language in favor of age category (6-9 years).
- There are statistically significant differences in psychological and educational assessment of children with autism due to gender.
- There are statistically significant differences in psychological and educational assessment of children with autism at cognitive, social, emotional dimensions and language expression in favor of females.
- There are statistically significant differences in psychological and educational assessment of children with autism at the dimension of receptive language in favor of males.
- There are statistically significant differences in psychological and educational assessment of children with autism due to autism degree in favor of mild autism.
- There are statistically significant differences in psychological and educational assessment of children with autism due to teacher's experience years in favor of age category(7 years and more) .
- There is correlation between psychological and educational assessment of autistic children and age, degree of autism, and teacher's experience years.
- There is no correlation between teacher's experience years and psychological and educational assessment of child with autism.

RECOMMENDATIONS

The author proposes the following recommendations:

- The abilities of children with autism should be developed by applying educational programs specialized for the children with mild autism disorder; intervention should be early before the appearance of low assessment which may suggest their mental disability.
- A great attention should be paid to teachers of special education and to social communication among children with autism; such teachers should be qualified in the

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field of speech and communication in order to remove the obstacles of expressive language.

- Developmental and behavioral disorder, caused by the disability and accompanying symptoms, should be avoided; there should be an early prevention from psychological disorders and causes of psychological non-adaptation to achieve comprehensive psychological education.
- Despite the expansion of autism institutes and centers in Saudi Arabia, there is need for more ones in the outskirts of the capital city, Riyadh, because of its population density.
- Social and statistical surveys should be conducted on people with autism in different categories including nursery aid to detect any case earlier.
- Scientific applied guidelines should be set at the educational and therapeutic levels such as:

    A. Psychiatrists and social workers should focus on the application of psychological standards and tests regularly to improve the psychological environment of autistic children.

    B. Preparing a plan to increase the child's ability to learn and achieve academically via modern technology.

Suggestions for Future Studies

- Conducting such a study on another sample of children with autism in other cities of Saudi Arabia.
- Investigating the relationship between the mental abilities of autistic child and the tendency towards school or profession and compatibility.
- Investigating the importance of educational activities and modern technological aids and their impact on developing disabled children and building their personalities.

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