

Assessment of Trainers' Knowledge about Pragmatic Language for Children with Autism Spectrum Disorder

MARWAH SALIH MUSLIM¹, ZAID W. AJIL²¹Academic Nurse, University of Baghdad, College of Nursing, Pediatric Nursing Department, Iraq²Assistance professor, University of Baghdad, College of Nursing, Pediatric Nursing Department, IraqCorrespondence to: Marwah Salih Muslim, Email: marwa.s@conursing.uobaghdad.edu.iq

ABSTRACT

Background: Pragmatic consider an important part of the conversation. Children with autism have delay in the early language milestones based on standardized language tests.

Study aimed: To assess the level of trainers' knowledge about pragmatic language for children with autism spectrum disorder, and to find out relationships between trainers' knowledge and their demographic characteristics.

Methodology: Using the pre-experimental design of the current study, for one group of 47 trainers working at the private Autism Centers in Baghdad, data was collected from January 8/ 2022 to February 13 /2022. Using non-probability samples (convenient samples), self-management technology in which trainers fill out the questionnaire form themselves was used in the data collection process; it was analyzed through descriptive and inference statistics.

Conclusion: The study concluded that there was no significant or weak correlation between the trainer's knowledge and socio-demographic characteristics. The knowledge of the trainers ranged from medium to high in various dialogues.

Keyword: Assessment, Trainers' Knowledge, Pragmatic Language, Autism Spectrum Disorder

INTRODUCTION

American Speech Language Hearing Association (ASHA) has been described pragmatic language as the appropriate and effectively used to achieve social goals, the ability to understand the role, change the subject, use appropriate expressions, and identify the necessary social needs during conversation with others⁽¹⁵⁾. Additionally, a descriptive study conducted in Iraq for children with ASD. It turns out that the majority of eighty-seven and nine percent of children diagnosed with autism spectrum strike have symptoms of difficulty in social communication, a lack of imaginary play, and some of them are totally speech-deficient or partially lacking in their speech⁽⁹⁾.

Pragmatic capabilities impact on person's communication and behaviours in social positions and responses of others toward them, this well lead to afterwards to changes in their act⁽⁹⁾.

Children with autism have delay in the early language milestones based on standardized language tests. Also, another study agree with this is refer to the pragmatic language is entirely impaired in ASD children. Moreover, children diagnosed with ASD are divided between a group that has no spoken language and another group that has a higher than average score for receptive and expressive language^(7; 16; 3).

As a result of profound the pragmatic language difficulties that lead to persistent challenges faced by children with autism spectrum disorder from infancy to adulthood, which have a long-term impact on their emotional or social relationship with their peers, specifically rejection and bullying^(12; 2).

This study aimed to:

1. To assess the level of trainers' knowledge about pragmatic language for children with autism spectrum disorder.
2. To find out relationships between trainers' knowledge and their demographic characteristics that include age, gender, level of education, marital status, years of working in autism center, number of training courses in caring for children with ASD, Information about pragmatic language.

METHODOLOGY

Study Design: Using the pre-experimental design of the current study, for one group of 47 trainers working at the private Autism Centers in Baghdad, data was collected from January 8/ 2022 to February 13 /2022.

Study Sample: Using non-probability samples (convenient samples), self-management technology in which trainers fill out the questionnaire form themselves was used in the data collection process; it was analyzed through descriptive and inference statistics.

The Study Instruments: A questionnaire has been created to accomplish objectives of the study; the questionnaire is divided into two axes.

Axis I: Demographic Characteristics: This part contains demographic information of trainers took part in the research. Which consists of (7) items including: age, gender, level of education, marital status, years of working in autism center, number of training courses in caring for autistic children, information about pragmatic language.

Axis II: Related trainers' knowledge: This axis includes two domains: the first one It consists of (5) items concerned with the trainers' information about Learning strategies for improving pragmatic language and the second It consists of (2) items concerned with the trainers' information about impact of pragmatic language.

Rating and Scoring: Likert scoring scale are used, of three categories responding, such that (Don't know, not sure, and I know), which are given by integer numbers (0, 1, and 2) respectively.

Validity of the study: To make the instruments more valid, it was introduced to a panel of (12) experts from various fields who assessed the clarity and adequacy of its items.

Reliability of the study: Cronbach's Alpha was used to determine the accuracy of the questionnaire (0.886). [L: Low (0.00 – 0.66)]; [M: Moderate (0.67-1.33)]; [H: High (1.34-2)].

Data collection: Data were obtained through face-to-face interview techniques as a method of data collection. Trainers was asked to complete a self-administered questionnaire, after taking the initial consent from them to participate in the study.

Data Analysis: Descriptive and inferential statistics were used to analyze the results of

the study under application of the statistical package (SPSS) ver. (18.0). Frequencies, and Percentages for socio- demographic; weighted arithmetic mean (MS), stander deviation (SD), Relative Sufficiency (RS%), for trainers' knowledge; ANCOVA to find relationship.

Ethical Considerations: After the study has been accepted by Council of the University of Baghdad's College of Nursing, Permission to collect the sample was also obtained from Ministry of Labor and Social Affairs commission of persons with Disabilities and special needs care\Directorate of Social Special needs, for private autism centers in Baghdad city.

RESULTS OF THE STUDY

Table (1) shows the gender has vast majority for female that are the trainers, their percentage is 47(100%). Also, there is a diversity in the age of the trainers and the category (25- Under 35

years of age) was the highest percentage (40.4). Additionally, educational level is diverse the highest category was (college graduated or higher) with percentage (53.2). Moreover, marital status shows equally and highest percentage in two categories was (unmarried, married) for percentage (42.6). However, number of years of work in autism center show high percentage was (55.3) for category (5 or less). In addition, number of training courses in the care of autistic children was high percentage in category was (1 – 3) for percentage (51.1). Additionally, information about pragmatic language according to their answer yes or no, it's close to the results, yes (26) 55.3, no (21) 44.7. As well as, that found varying percentage of sources of learning where the Internet (42.3) is more a source of learning than the other sources lowest was for magazine (3.8).

The table (2) shows highly significant for social communication is an element of pragmatic language and has a variety of skills with MS (1.66) and followed with moderate significant for definition of pragmatic language is the ability to use language correctly in interactions with others and interpret it in social contexts or in communicative exchanges with MS (1.33). The table (3) shows moderate significant for impact of pragmatic language are anxiety disorders with MS (1.32) and followed with moderate significant for impact of pragmatic language are the difficulty of achieving the educational and academic goal with MS (1.28).

Table (4) results shows relationships between (SDCv.) and trainers' knowledge were weak in all variable except the information variable with degree of significant (.001).

Table 1: Distribution of the sample by their Socio-demographic characteristics (SDCv.) with comparisons significant

Pointer (SDCv.)	Classes	Number	%	M±SD
Gender	Male	0	0	
	Female	47	100.0	
	Total	47	100.0	
Age Groups	Less than 25	10	21.3	32.91±8.60
	25- Under 35 years of age	19	40.4	
	35- Under 45 years of age	12	25.6	
	45- Under 55 years of age	5	10.6	
	55 years and older	1	2.1	
	Total	47	100.0	
Level of education	Primary school	0	0	
	Secondary school	5	10.6	
	Institute	17	36.2	
	college graduated or higher	25	53.2	
	Total	47	100.0	
Marital status	Unmarried	20	42.6	
	Married	20	42.6	
	Divorced	5	10.6	
	Widowed/ er	2	4.2	
	Total	47	100.0	
Number of years of work in autism center	5 or less	26	55.3	
	6 –less than 10yr.	6	12.8	
	10 – less than 15yr	13	27.7	
	15 – less than 20yr	1	2.1	
	20 or more	1	2.1	
	Total	47	100.0	
Number of training courses in the care of autistic children	Non	8	17.0	
	1-3	24	51.1	
	4-6	2	4.3	
	7-9	5	10.6	
	10 or more	8	17.0	
	Total	47	100.0	
Do you have information about pragmatic language?	Yes	26	55.3	
	No	21	44.7	
	Total	47	100.0	
what are the sources of learning about pragmatic language	magazine	1	3.8	
	Books	4	15.4	
	Courses	10	38.5	
	Internet	11	42.3	
	Total	26	100.0	

HS: Highly Sig. at P<0.01; Testing based on Frequencies, and %(Percentages).

Table 2: Descriptive Statistics of the studied subjects according to the knowledge trainers about the concept of pragmatic language

MS	Item	SD	RS	Axx
1-The definition of pragmatic language is the ability to use language correctly in interactions with others and interpret it in social contexts or in communicative exchanges				
2-Pragmatism is the important part of the conversation.	1.33	0.815	66.5	M
3-Pragmatism is the Cornerstone (evolutionary language features) and children diagnosed with autism spectrum disorder lacks the development of their language	1.45	0.717	72.5	H
4- social communication is an element of pragmatic language and has a variety of skills	1.45	0.746	72.5	H
5-The development of pragmatic language is closely linked to linguistic and environmental contexts	1.66	0.668	83	H
	1.55	0.686	77.5	H

HS: Highly Sig. at P<0.01; weighted arithmetic mean (MS), stander deviation (SD), Relative Sufficiency (RS%), H 1.34-2, M 0.67-1.33 L,0-0.66

Table 3: Descriptive Statistics of the studied subjects according the knowledge trainers about the impact of pragmatic language

Item	MS	SD	RS	Ass
1-The impact of pragmatic language are anxiety disorders.				
2- The impact of pragmatic language is the difficulty of achieving the educational and academic goal.	1.32	0.783	66	M
	1.28	0.772	64	M

HS: Highly Sig. at P<0.01; weighted arithmetic mean (MS), stander deviation (SD), Relative Sufficiency (RS%), H 1.34-2, M 0.67-1.33 L,0-0.66

Table 4: Relationships (ANCOVA) concerning trainers' knowledge about pragmatic language for children with ASD and SDCv.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	11339.438a	24	472.477	2.741	.010
Intercept	13154.955	1	13154.955	76.317	.000
Age	1190.918	3	396.973	2.303	.105
Level of education	457.156	2	228.578	1.326	.286
Marital status	898.638	2	449.319	2.607	.096
Years of working in autism center	1520.400	4	380.100	2.205	.102
Number of training courses in the care of autistic children	1994.553	10	199.455	1.157	.368
Information about pragmatic language	2398.126	1	2398.126	13.913	.001
Error	3792.179	22	172.372		
Total	176270.000	47			
Corrected Total	15131.617	46			

a. R Squared = .749 (Adjusted R Squared = .476), df= degree of freedom Statistical hypothesis based on Analysis of variance (ANCOVA).

DISCUSSION

The finding of table 1, show participants was female only works in autism centers and this means that the centers prefer this category. This finding was supported that found the educators who participants were only females⁽¹¹⁾.

The trainers age, most of them was in classes (25- under 35 years of age). A study conduct by have similar result of participant age was mean (68.8) from 25 to 34years⁽¹³⁾.

level of education was the highest for classes (college graduated or higher). This result similar with study conducted, they mentioned that the highest score for bachelor's or equivalent was 89.8⁽⁸⁾.

Marital status was equal result for unmarried and married with high percent, there are no studies that have indicated this variable.

number of years of work in autism center was highest in (5 years or less), a study conducted about analysis of teachers' knowledge and training: their implication of teaching children with autism, their experience as a teacher with ASD with a percent (49.1) from one to five year this result similar to our result⁽¹⁾.

Furthermore, number of training courses in the care of autistic children was (1-3). in Iraq a study for physicians, junior doctors, and medical college students about their knowledge, attitudes, and practices for autism, their finding about have taken a course on ASD was(45.0)significant percent⁽¹³⁾. While, information about pragmatic language, the results of study for the answer are close. There is no study support this.

The result of table 2 there was no study refer to this subject. In point may view, lack of focus on trainers primarily and assess their knowledge about pragmatic language and its parts. whereas studies support each high significant items of this table, were highly significant for item - social communication is an element of pragmatic language and has a variety of skills, this study supported⁽⁴⁾. The result of table 3. The knowledge of trainers about the impact of pragmatic language, there was no study refer to this subject. Although, there are studies support each items of this table. A study conducted was similar to the first item that supported the impact of pragmatic language on autistic children because they are at high risk to anxiety⁽¹⁴⁾. Furthermore, a study approved to item the impact of pragmatic language is the difficulty of achieving the educational and academic goal⁽⁶⁾.

The result of table 4 shows relationships between (SDCv.) and trainers' knowledge were weak in all variable except the information variable with degree of significant school. While, a study conducts, about the impact of a program for teachers and their knowledge of the special pictorial narration for autistic children, show similarity in correlation result no significant between

teacher knowledge about autism and their qualifications (0.204) and (0.244) for their experience⁽¹⁰⁾.

CONCLUSION

The study concluded that there was no significant or weak correlation between the trainer's knowledge and socio-demographic characteristics. On the contrary, the results showed a significant correlation between the trainer's knowledge of pragmatic language and their information about the pragmatic language for children with ASD. The knowledge of the trainers ranged from medium to high in various items.

Recommendations

1. Recommend intensifying efforts to study the pragmatic language for children with ASD and applying global standards or scales to evaluate them.
2. Recommend to ministry of labor and social affairs increasing the establishment of workshops, courses or programs related to the pragmatic language for children with ASD to development of trainers.
3. Recommendation to the Ministry of Health on the need to diagnose the process of communication with autistic children and train health personnel about pragmatic language and its relationship to autistic children.

Limitations

1. Difficult access and refused for many centers, which are distributed in Rusafa and Karkh.
2. The study sample size was not specified by the Ministry of Labor and Social Affairs as a result of the fact that the trainers were appointed on daily wages

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