



Effectiveness of Instruction Program on Teachers' Performance of Counseling for Pupils regarding Autism Spectrum Disorder

Ali Abed Kadhim^{1*}

Lujain Anwar Alkhazrajy²

Journal for Educators, Teachers and Trainers, Vol. 14 (4)

<https://jett.labosfor.com/>

Date of reception: 08 Dec 2022

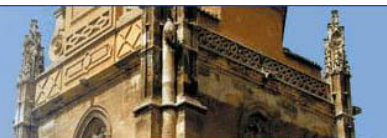
Date of revision: 10 Mar 2023

Date of acceptance: 14 Mar 2023

Ali Abed Kadhim, Lujain Anwar Alkhazrajy (2023). Effectiveness of Instruction Program on Teachers' Performance of Counseling for Pupils regarding Autism Spectrum Disorder. *Journal for Educators, Teachers and Trainers*, Vol.14(4).112-118.

¹Clinical Nurse Specialist, Ministry of Health, Iraq

²Professor, Family & Community Medicine Department, Al-Kindy College of Medicine, University of Baghdad



Effectiveness of Instruction Program on Teachers' Performance of Counseling for Pupils regarding Autism Spectrum Disorder

Ali Abed Kadhim^{1*}, Lujain Anwar Alkhazrajy²

¹Clinical Nurse Specialist, Ministry of Health, Iraq

²Professor, Family & Community Medicine Department, Al-Kindy College of Medicine, University of Baghdad

*Corresponding author

Email: dr.aliakd87@gmail.com¹, lujainalkhazrajy@kmc.uobaghdad.edu.iq²

ABSTRACT

Objectives: To evaluate teachers' performance of counseling for pupils with autism spectrum disorder, to identify the relationship between Teachers' Performance of Counselling for Pupils with autism spectrum disorder and their demographic.

Methodology: In Al-Firdous mixed primary School, a quasi-experimental approach was used to assess teachers' autistic spectrum disorder counseling and socio-demographic characteristics. The study ran from 18 September to 24 November 2022. The sample was purposive sample of (60) teachers were selected according to the study that are working in The First Rusafa Education Directorate. The data were collected by direct interview using specific questionnaire that's composed of two parts (8) items which are: Part (1) Socio-demographic characteristics which included (4) items. Part (2) which deals with teachers' performance about autism spectrum disorder and includes (4) items. SPSS v.25 analyzed data. Frequency, percentage, mean score, and standard deviation. Statistical inference: T-test and ANOVA for socio-demographic characteristics and teachers' performance.

Results: (66.7%) of them were 40 and more, teachers more than half evaluated their performance as moderate, more than half performed moderately regarding autism spectrum disorder, and there was a high significant link between teachers' performance and student performance (age, years of employs).

Conclusions: The research found that the instruction program improved teachers' autism spectrum disorder counselling. Age and years of employment were positively correlated with post-assessment teacher performance.

Recommendations: The research suggests improving teachers' effectiveness via lectures, workshops, and seminars on autism among students. Teachers should be given serious attention on autism spectrum disorder based on their age and experience.

Keywords: Effectiveness, Teachers' Performance, Counseling, Autism Spectrum Disorder

INTRODUCTION

The instructional program is crucial in helping teachers improve their ability to counsel pupils with behavioral disorders after an increase in the number of pupils who have behavioral disorders or are at risk of them due to war or terrorism, which increases the difficulties teachers face in dealing with these pupils. In order to address the issues brought on by behavioral disorders and integrate pupils with behavioral disorders with their peers in all classroom and school activities, teachers must have sufficient knowledge of the traits of behavioral disorders. They also need to be informed about teaching strategies and appropriate handling ^{[1][2]}.

For one to be prosperous, mental health is a necessity. The most vulnerable group is that of children. Environment hazard as lead poisoning and stress and anxiety experienced during wartime, as well as instances of violence and disorder, exacerbated these conditions. A risk factor for ongoing psychiatric disorders, particularly in children with autism spectrum disorder, is cumulative prior experience with war trauma. This issue is frequently identified in children who have other behavioral issues or who perform poorly in school ^{[3][4]}.

Autism is a developmental neurological disorder that is typically identified before the age of three. It is characterized by limited interests, repetitive activities, and a lack of social reciprocity and language abilities. Males are more likely than females to have autism ^[5]. Difficulties in social interaction, as well as verbal, nonverbal, and repetitive motor interaction. It can also be followed by learning disability ^[6]. ASD (Autistic Spectrum Disorder) may originate from the interplay of between genetic, environmental and immunological factors ^[7]. Strong genetic links to autism's etiology are hypothesized as well as potential environmental dangers

associated with early fetal development ^[8]. Leo Kanner, an American child psychologist, originally identified the autism spectrum disease in 1943. It has several subcategories, including asperger's disorder and rett's disorder ^[9].

In Iraq, autistic spectrum disorders have grown to be a significant public health issue. In 2011, a specific research from Cambridge University indicated that (75) out of every (10,000) Iraqi children were autistic ^[10]. a descriptive study for childs with ASD was carried out in Iraq. It turns out that (87%) of children with autism spectrum disorder exhibit indications of trouble in social communication, a lack of pretend play, and some of them have completely or partially undeveloped speech; this is a significant challenge for teachers ^[11].

Importance of the study focuses on evaluating the level of teachers' performance in dealing with and advising pupils with Autism Spectrum Disorders (ASD). Closing the knowledge gap and increasing the teachers' performance to deal with pupils with ASD. The current study is important in that it deals with the application of an instructional program based on the strategy of enhancing the performance of teachers. The role of a teacher is very important as a Guide, as a Counsellor. Guidance integrated with the school curriculum can enrich the teaching - learning and develops academic skills, emotional and social skills to promote learning for the development of a total personality ^[12].

SUBJECTS AND METHODS

Study design and setting

A quasi-experimental (pre-posttest) design carried out at Al-Firdous mixed primary School. Study included (60) of teachers to improve their performance of counseling about autism spectrum disorder. Sampling technique to selection staff were non-probability (purposive sample).

Ethics

After getting the approval of the College of Nursing Council for the study, a detailed description including the objectives of the study has been submitted to the Ministry of Planning (Central Statistical Organization), Al-Rusafa First Education Directorate in order to obtain an official permission to carry out the study. Later, the permission is presented to the Directors of Administrations of primary schools covered by special education to ensure that the letters of agreement have been granted. Additional unwritten agreements are obtained from the subjects of study for their participation in the study. Each and every teacher was guaranteed confidentiality and the anonymity of his or her identity.

Procedure and tool for data collection

Questionnaire format contents part (1) socio-demographic characteristics which includes (age, gender, educational level, years of employs), also the questionnaire contain part (2) teachers' performance toward autism spectrum disorder which includes (4) items. The data collection was through direct interview technique by researcher with participant of teachers from 18th September 2022 to 24th November 2022. Constructed the study instrument (questionnaire).

A panel of ten (10) experts with at least five (5) years of expertise in their respective fields reviews the questionnaire's clarity, relevance, and appropriateness to determine the content validity of an early-stage instrument. Cronbach alpha is used to determine the questionnaire's reliability; a correlation coefficient is calculated (0.908).

Analysis of statistical data

Statistical Analysis: Frequency distributions, percent, mean, standard deviation, T-test, and AVOVA were used to examine and evaluate the outcomes of the research using the statistical package (SPSS) version 25. A P-value of 0.05 or less was regarded as statistically significant.

RESULTS

Table 1: Distribution of the Teachers' Demographic Characteristics

List	Demographic Characteristics	Study group		Control group	
		F	(%)	F	(%)
1	Age (year)				
	20 – 29	2	6.7	3	10.0
	30 – 39	8	26.7	9	30.0
	40 and >	20	66.7	18	60.0
	Total	30	100.0	30	100.0
2	Gender				
	Male	15	50.0	15	50.0
	Female	15	50.0	15	50.0

	Total	30	100.0	30	100.0
3	Years of Employs				
	1 – 10	7	23.3	4	13.3
	11 – 20	3	10.0	4	13.3
	21 – 30	20	66.7	21	70.1
	31 and >	0	0	1	3.3
	Total	30	100.0	30	100.0
4	Level of Education				
	Diploma	26	86.7	25	83.3
	Bachelor	3	10.0	3	10.0
	Higher Diploma	1	3.3	2	6.7
	Master	0	0	0	0
	Doctorate	0	0	0	0
	Total	30	100.0	30	100.0

F=Frequency, (%) = percentage

This table reveals that the majority (20) (66.7%) of teachers in the study group are within the age group (40 and more); while 18 (60%) of teachers in the control group. Regarding gender males and females, both groups, the study and control groups, are (15) (50%). Concerning the years of employs in the control group, most teachers are (21 - 30) (21) (70.1%); while (20) (66.7%) in the study group. In relation to level of education, most teachers in the study group are (26) (86.7%) are diploma; while (25) (83.3%) in the control group.

Table 2: Significant Comparison of Teachers' Performance about ASD among Three Periods (Pre-test, Posttest I and Posttest II) for the Study Group

Teachers' Performance about ASD	Study Group (n=30)				
	Mean	t	df	P-value	Sig.
Pre-test	1.225	10.906	29	0.000	H.S
Post-test I	1.816				
Pre-test	1.225	9.109	29	0.000	H.S
Post-test II	1.791				

df= Degree of freedom, t=t-test value, P= Probability level (P value \leq 0.05), C.S.: Comparision. Significant, NS: Non Significant at $P \geq$ 0.05, S: Significant at $P \leq$ 0.05, HS: Highly Significant at $P <$ 0.01

This table presents that there is a significant difference between the three periods (Pre-test, Posttest I and Post II) for the study group regarding teachers' performance in dealing with Autism Spectrum Disorder ($P \leq$ 0.05).

Table 3: Association between Teachers' Performance and Their Demographic Distribution in the Study and Control Groups

Teachers' Performance		Study Group (n=30)						Control Group (n=30)				
		Sources of Variance	Sum of Square	df	Mean Square	F	$P \leq$ 0.05	Sum of Square	Df	Mean Square	F	$P \leq$ 0.05
Age	Pre-test	Between Group	0.168	2	0.084	2.429	0.107	0.079	2	0.039	1.211	0.313
		Within Group	0.592	27	0.022			0.875	27	0.032		
		Total	0.760	29				0.954	29			
	Post-test I	Between Group	0.201	2	0.100	17.261	0.000	0.058	2	0.029	1.356	0.275
		Within Group	0.157	27	0.006			0.575	27	0.021		
		Total	0.358	29				0.633	29			

Years of Employ	Post-test II	Between Group	0.468	2	0.234	11.232	0.000	0.051	2	0.026	1.323	0.283		
		Within Group	0.562	27	0.021			0.522	27	.0190				
		Total	1.030	29				0.573	29	0.039				
	Pre-test	Between Group	0.166	2	0.083	2.947	0.069	0.028	3	0.009	0.264	0.851		
			Within Group	0.594	27			0.022	0.925	26			0.036	
			Total	0.760	29				0.954	29				
		Post-test I	Between Group	0.282	2	0.141	49.989	0.000	0.014	3	0.005	0.189	0.903	
				Within Group	0.076	27			0.003	0.619	26			0.024
				Total	0.358	29				0.633	29			
		Post-test II	Between Group	0.709	2	0.355	29.845	0.000	0.015	3	0.005	0.228	0.876	
				Within Group	0.321	27			0.012	0.558	26			0.021
				Total	1.030	29				.5730	29			

n: Group size, df: Degree of freedom, F: F-Statistic, P: Probability value

This table shows that there is a statistical significant relationship between teachers' age, years of employs and teachers' performance in dealing with Autism Spectrum Disorders at (posttest I and posttest II) and no statistical significant at (pre-test) in the study group ($p \leq 0.05$), while there is no statistical significant relationship between teachers' performance and their demographic distribution in dealing with Autism Spectrum Disorders (pre-test, posttest I and posttest II) in the control group ($p \leq 0.05$).

DISCUSSION

The Table 1: show Analysis of such characteristics reveals that the majority (20) (66.7%) of teachers in the study group are within the age group (40 and more); while (18) (60.0%) in the control group. This finding reveals that these teachers have been employed for long time and are middle age employees. Regarding gender, both male and female in the study and control groups are (15) (50%). Concerning the years of employs, most teachers (21) (70.1%) in the control group; while (20) (66.7) in the study group. In relation to level of education, most teachers (26) (86.7%) in the study group are diploma; while (25) (83.3) in the control group. This finding reveals that most of teacher are graduates of Institute for Preparation of teachers.

A study was done on a sample of (129) teachers to see how much they knew about autism and how confident they felt in their performance. Results showed that when given particular, illustrative information about autism, teachers' understanding about the condition rises. Additionally, instructors' self-efficacy for dealing with pupils with autism was seen to rise from the pre- to post-test^[13].

The effectiveness of the instructional program is observed through the results of

Table 2: for all three periods, teachers' performance at the pretest was at low level but changed in to high level at the posttest I and posttest II. there are high significant differences between pre and posttest I and posttest II of the study sample at (P. value =0.001).

According to the study's findings, (105) new teachers were exposed to a teacher-training program. The training component of the program was successful, and paired-samples t-tests were used to assess significant findings at a (0.05) level of significance, showing significant, positive outcomes for each of the parts of study^[14].

To evaluate the impact of an educational program on primary school teachers' understanding of autism spectrum disorder, a quasi-experimental design with two groups of teachers (25 each) was used. The study demonstrates that educational programs are very effective at increasing teachers' knowledge of autism spectrum disorder in the study group as shown by a substantial change in total knowledge scores between the pre- and post-test. In contrast, there is no variation in knowledge score in the control group^[15].

Table 3: shows that there is a statistical significant relationship between teachers' age, years of employ and teachers' performance in dealing with Autism Spectrum Disorder at (posttest I and posttest II) and no statistical significant at (pre-test) in the study group ($p \leq 0.05$), while there is no statistical significant relationship between teachers' performance and their demographic distribution in dealing with Autism Spectrum Disorder (pre-test, posttest I and posttest II) in the control group ($p \leq 0.05$).

In a few Delhi schools, a pre-experimental study was conducted on a sample of (35) elementary school teachers. During the fifteen days that the teachers were exposed to the educational program, it became clear that learning was greatly influenced by age and experience ^[16].

In quasi-experimental design conducting on (study group = 33, control group = 34) includes (11) elementary schools. The results of ANCOVA demonstrated that the training program had a substantial favorable impact on the majority of dependent variables, including attitudes, knowledge of special educational needs, and teaching methodologies, as well as their sociodemographic features ^[17].

CONCLUSION

The study find results revealed significant positive effects of the instruction program regarding teachers' performance of counseling regarding pupils with Autism Spectrum Disorder. Some demographic variables as ages and years of employs had a significant Positive correlation with post assessment teachers' performance. The study confirms that the training is an excellent method for enhancing teachers' knowledge of autism spectrum disorder. All teachers in the study group have gained benefits from the program implementation; their performance about autism spectrum disorder has been improved. Teachers' performance about Autism Spectrum Disorder is highly influenced by the teachers' age and years of employs.

RECOMMENDATIONS

The study recommend that need to improve teachers' performance through lecture, courses and seminar about Autism Spectrum Disorder among pupils, serious attention bout teachers' information should be oriented toward teachers with respect to their age and years of employs differences. The program can be utilized as an effective tool to improve Teachers' performance about autism spectrum disorder nation-wide.

ACKNOWLEDGEMENT

I feel privileged to express my sense of gratitude to Professor (Dr.) Lujain Anwar Alkhazrajy, Supervisor, Community & Family Medicine Department, Al-Kindy College of Medicine , for his guidance, limitless affection, and inspiration throughout the course of the endeavor; also Professor (Dr.) Dean Huda B. Hassan, Assist. Dean Professor (Dr.) Wissam J. Qassim and Professor (Dr.) Arkan B. Naji Head of the Department of Community Health Nursing, College of Nursing / University of Baghdad.

REFERENCES

1. Mamadi, S. 2013. The effectiveness of a counseling program in reducing symptoms of attention deficit hyperactivity disorder among fourth year primary school pupils. *Journal of Neuropsychology*, 2(1), 49-76.
2. Muhammad, S. H., & Saleem, A. D. 2021. The Commonest Negative Behavioral Manifestations among Kindergarten Children in the Post-Terrorist Phase. *Journal of the College of Education for Women*,32(3), 99-112.
3. Maliha, M., & Wahid, S. S. 2019. Behavioral Disturbances among School Children in Baghdad Province. *AL-Kindy College Medical Journal*, 5(1), 52-56.
4. Ali, A. K., & WISSAM, J. Q. 2017. Effectiveness of Occupational Health Education Program upon Workers' Knowledge towards Lead Poisoning Hazard in the General Company's Factories for Batteries in Baghdad. *AARJMD*, 13-23.
5. Ali, A., & Ghanim, E. 2020. Feeding Behaviors of Children with Autism Spectrum Disorder in Baghdad City. *Iraqi National Journal of Nursing Specialties*, 33(2), 60-65
6. Hussein, A. N., & Mohammed, Q. Q. 2021. Perceived Social Support and Psychological Well-being among Mothers of Children with Autism Spectrum Disorder in Al-Nasiriyah City. *Annals of the Romanian Society for Cell Biology*, 10117-10126.
7. Kadhum, Z. I. 2016. Biochemical alteration in some Iraqi children with autistic spectrum disorder (ASD). *Journal of the Faculty of Medicine Baghdad*, 58(1), 46-50.
8. Tawfeeq, W. F., Mukhaiser, M. H., & Al-Hemiary, N. J. 2016. Risk factors for autism in Baghdad city. *Al-Kindy College Medical Journal*, 12(1), 95-102.
9. Al-Rawi, B. A. O. 2017. Behavior Management of Children with Autism. *Al-Kindy College Medical Journal*, 13(1), 27-31.
10. Hawas, A. H., & Qasim, W. J. 2020. Assessment of Elementary Schools Teachers' Knowledge about Autism Spectrum Disorders. *Mosul Journal of Nursing*, 10(2), 362-368.
11. Muslim, M. S., & Ajil, Z. W. 2022. Assessment of Trainers' Knowledge about Pragmatic Language for Children with Autism Spectrum Disorder. *Pakistan Journal of Medical & Health Sciences*, 16(03), 1031-1031.

12. Alanzi, B. J. 2020. Effectiveness a training program to improve level of teacher's knowledge to behavioral, educational and social traits among students of conduct disorder. *JASHT*, 123-171.
13. Bressette, K. A. 2017. The influence of autism related information on general education teacher knowledge of autism and self-efficacy for inclusion of pupils with autism (Doctoral dissertation, The University of Arizona).
14. Leblanc, L., Richardson, W., & Burns, K. A. 2019. Autism spectrum disorder and the inclusive classroom: Effective training to enhance knowledge of ASD and evidence-based practices. *Teacher education and special education*, 32(2), 166-179.
15. Hawas, A. H., & Qasim, W. J. 2022. Effectiveness of An Educational Program on Elementary Schools' Teachers' Knowledge about Autism Spectrum Disorders. *Pakistan Journal of Medical & Health Sciences*, 16(05), 757-757.
16. Daniel, L. T., Gupta, S., & Sagar, R. 2013. Effect of educational module on knowledge of primary school teachers regarding early symptoms of childhood psychiatric disorders. *Indian Journal of Psychological Medicine*, 35(4), 368-372.
17. Kurniawati, F., De Boer, A. A., Minnaert, A. E. M. G., & Mangunsong, F. 2017. Evaluating the effect of a teacher training programme on the primary teachers' attitudes, knowledge and teaching strategies regarding special educational needs. *Educational Psychology*, 37(3), 287-297.