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Effectiveness of EarlyBird Plus Program in Improving Parental Competence in Families of Children with Autism Spectrum Disorder

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Abstract

Objectives: This study aims to explore the effectiveness of the EarlyBird Plus program in improving parental competence in a sample of families of children with Autism Spectrum Disorder (ASD). The study sample included 24 families of ASD children. **Method:** The researcher used the quasi-experimental approach. **Results:** The results of the study showed that there is a statistically significant difference between the mean scores of the experimental and control groups on the parental competency scale in the post-measurement; in favor of the experimental group. Results, also, revealed a statistically significant difference between the mean scores of the experimental group on the scale of parental competence in the pre-and post-measurements in favor of the post-measurement. In addition, there is no statistically significant difference between the mean ranks of the experimental group's scores on the parental competency scale in the post-measurement at a three-month follow-up date. **Conclusions:** The results of this study are likely to inspire researchers to create counseling programs to assist families with ASD children in managing the pressures they confront and developing parental abilities that allow them to actively participate in inclusive education.

Keywords: EarlyBird Plus program, parental competence, families of children with autism spectrum disorder

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Introduction

The solidarity of all family members, an acceptance of their individual roles, and adaptive and flexible parenting make family interaction positive. These interactions facilitate the growth and development of the individual and enhance psychological adaptation both within the family and society; as a whole. In families where parents are providing for a child with a handicap, balancing the concepts of justice and equality will improve family interactions, enhance family unity and increase the willingness of siblings to actively participate in this task (Qassas & Al-Dhaiman, 2022). ASD, as listed in the DSM-5, is a condition that includes all four ASDs. ASD is no longer regarded as a unique diagnosis; medical or genetic problems associated with ASD are only indicated as specifiers (American Psychiatric Association, 2015). ASD is a complicated neurodevelopmental condition marked by deficits in social interaction, language and communication development, and inflexible, repetitive behaviors (Vaidya, 2016). At all levels, ASD is described by language impairment, social apathy and severe behavioral difficulties, and children who suffer from ASD show deficits in social communication, a lack of emotional and social empathy, a failure to use or understand non-verbal behaviors in communication, and a difficulty in developing and maintaining relationships. Diagnosing children with ASD requires the presence of restricted or repetitive patterns of behavior or activities (Aljughiman, 2022). Owing to the significant impact of having a ASD child in the family, an urgent need exists to provide family guidance, psychological counselling and training programs for parents to support them as they proceed to care for the child in the multiple stages that follow the diagnosis. These include the early years of the child and the school-age years, which extend from the time they are 6 years old until they are past puberty and into adolescence. The earlier the family support is, the faster the acceptance of the condition is. Providing early intervention to the child is thus vital in limiting the aggravation of the disorder (Al-Zaraa et al., 2022). Based on the extant studies, the researcher believes that it is necessary to intervene early in cases of childhood ASD by providing parental support that involves counseling to teach parents the skills required in interacting appropriately with their children.

The UK National Autistic Society developed the EarlyBird Plus program between 1997 and 2003 as a group-based psycho-educational intervention for parents of ASD children. The program, which focuses on parent education and training, has been delivered to over 27,000 parents in 14 countries. It aims to offer immediate support to parents following an ASD diagnosis, to empower families by fostering a positive attitude on their child's diagnosis and to assist families in establishing excellent parenting practices (Dawson-Squibb et al., 2019). Although the program is widely used in the United Kingdom, its evidence base is quite limited (Palmer et al., 2020). There is no research on EarlyBird Plus in low-resource settings; thus, we recommend a more comprehensive assessment of EarlyBird Plus that evaluates its accessibility, cultural appropriateness and scalability (Dawson-Squibb et al., 2019). Furthermore, few studies have looked into the feasibility of implementing the recommended interventions. The scarcity of findings in this area highlights the need for ASD parent education and training in low-resource settings that include intervention outcomes along with procedural and implementation outcomes (Dawson-Squibb & de Vries, 2020).

Early intervention bridges the gap between early diagnosis and suitable educational placement. This program is a three-month autism-specific parent package emphasizing parental involvement. Each three-month program comprises six families and includes weekly parent-training group sessions with individualized home visits. The program educates parents to grasp autism, establish social communication, and analyze and use structure to prevent inappropriate behavior. Important elements of the program include the utilization of video and the interaction among family members. The pilot program was reviewed in an effectiveness study, and further evaluation of the program's strengths and drawbacks is ongoing (Shields, 2001). Birkin et al. (2008) investigated two studies on EarlyBird program access and barriers to uptake. The first study examined the demographics of those who used the EarlyBird program and the factors influencing their decision. The second study was a qualitative inquiry into impediments to participation for New Zealand's ethnic minority communities. Approximately 85 percent of eligible households do not enroll in the program, according to the data. Non-membership in Autism New Zealand, ethnicity, and

wait time were all significant factors in non-participation. At the end of the study, a model is presented that defines the factors that may influence the adoption of therapies aimed at parents of challenged children. Caldwell et al. (2014) examined a program for fathers and children aimed at avoiding violence and decreasing aggressive behaviors among African American boys aged 8 to 12 years. The program, which focused on improving the parenting skills of nonresident fathers, was shown to result in improved parenting satisfaction. The study included 158 intervention group families and 129 control group families. The intervention was effective in improving fathers' satisfaction with their parenting skills, which was associated with children's satisfaction with paternal engagement. Among children, paternal engagement satisfaction was positively related to their intentions to avoid violence. Although aggressive behaviors were lower in the comparison group children, the intervention effectively reduced aggressive behaviors in ASD children indirectly by improving fathers' parenting skills. Cutress & Muncer (2014) recommended parent training interventions to parents soon after their child was diagnosed as ASD to improve both the child's behavior and the parents' psychological well-being and coping mechanisms. Their report examines parents' perceptions of the EarlyBird Plus program using data from the post-program questionnaire, which is collected on a regular basis. According to the questionnaire results, participants in the program report a better understanding of autism as well as improvements in their communication with their child and ability to manage their child's behavior. Parents appeared to value the opportunity to meet with other parents, and the majority of parents who attended the program seemed to have a favorable impression of it.

In their study of children with intellectual disability, Wilson et al. (2014) examined two types of intervention for parents: those targeting at strengthening social relationships and those aiming at teaching parenting skills. The evidence for interventions targeting at strengthening social relationships was inconclusive. While positive changes were observed, study design limitations reduced the generalizability of the findings. Nevertheless, the evidence suggested that behavioral-based interventions are more effective in teaching parental skills than less intensive forms of instruction such as lesson booklets and the provision of standard services. Stephanie (2015) conducted a study in which 61 autistic children aged 5 to

8 with limited spontaneous communication received a 6-month social communication intervention that included parent training. Parents' strategy implementation and children's joint engagement were coded in parent-child play interactions. Parents mastered 70% of the strategies on average. Further analysis revealed that some gains in implementation occurred as a result of merely observing the sessions, with the greatest gains occurring during the first month of active coaching and workshops. Children's joint engagement was linked to parental implementation success over time, indicating that parental implementation was important for children's social engagement.

In a study of ADHD children, Ben-Naim et al. (2019) sought to investigate the parent-child relationship by focusing on parental stress and parental self-efficacy as potential mediators. The study sample included 182 parents, who completed questionnaires on parental self-efficacy, marital satisfaction, and parental stress. According to the study findings, parents of ADHD children reported higher parental stress as well as lower self-efficacy and marital satisfaction than non-ADHD families. The relationship between being the parent of an ADHD child and marital satisfaction was fully explained by parental stress and self-efficacy, which suggests that when faced with strain and hardship, parents often exhaust their personal resources.

Abdel Naim (2020) aimed to verify the efficacy of the EarlyBird program in improving parents' skills in communicating with their ASD children. The research sample consisted of 6 parents of autistic children. The research used the following tools: Gilliam Estimated Scale for Autism Diagnosis, Goddard Intelligence Scale, Parental Communication Scale (prepared by the researcher), questionnaires from the Early-Bird program, Arabization of the researcher and the Parental Communication Improvement Program (developed by the researcher). in enhancing parents' skills in communicating with their children with ASD. Dawson-Squibb & de Vries (2020) conducted a feasibility study of two-parent education and training programs-Autism Cares, a locally developed program, & EarlyBird, including EarlyBird Plus. Both programs were found to have high parental acceptance, and adaptation suggestions were made. Limited efficacy testing revealed positive changes in parental stress, ASD knowledge, and child behavior. In their study of the EarlyBird program, Palmer et al. (2020) showed that

EarlyBird is a group-based intervention for parents of ASD children. Measures of the child's autism characteristics, cognitive ability, adaptive behavior, and emotional and behavioral problems were all assessed before and after the intervention. Recruitment challenges were encountered, indicating that strategies must be built into any future trials.

Ten parents were interviewed by Harris (2021) after completing group-based, parent-focused therapies for their children's communication difficulties. The outcomes of nine various intervention groups, including EarlyBird programs, early communication skills training, and Makaton instruction, are presented. Parental views on transformation, including positive processes and professional techniques, were discussed. Participants saw peer networks as offering safe places and possibilities but also as creating obstacles. Two parents' benefits were reduced due to significant individual differences in relation to their child's more complicated demands. Kurzrok et al. (2021) examined the correlation between parents' intervention experiences and their confidence in raising an autistic kid. 93% of moms of children with ASD were included in a unique autism-specific parenting self-efficacy measure among the 438 participants. Results showed that parents with stronger autism-specific parenting self-efficacy reported more participation in their child's treatment and better satisfaction with intervention-related training. Autism-specific parenting self-efficacy was lower in parents who reported greater financial and social strain.

A final study in this section is that of Russell & Ingersoll (2021), who sought to identify factors associated with families' therapeutic self-efficacy when implementing a telehealth-based parent-mediated intervention. The participants included 51 parents of children aged 17 to 83 months with ASD. Parental therapeutic self-efficacy (feeling of efficacy in implementing an intervention) was generally high, and global parental self-efficacy was significantly related to therapeutic self-efficacy, playing an important role in parent-mediated interventions. As coaches assist parents in learning, they should specifically inquire about the child's abilities, the parent's interaction style, environmental challenges and the child's response.

It is clear from previous studies that there are a number of studies indicating the efficacy of the counseling program in general in improving parental competence in families of ASD children, such as the studies of

Caldwell et al. (2014), Wilson et al. (2014), and Stephanie (2015). While a number of studies have indicated the efficacy of the EarlyBird program in improving parental competence in families of ASD children, such as those by Cutress and Muncer (2014), Abdel Naim (2020), Dawson-Squibb and de Vries (2020), and Kurzrok et al. (2021), In addition, there are no Arab studies on this topic, except for the study of Abdel Naim (2020), which was applied in Egypt. Therefore, the current study aims, through the EarlyBird Plus program, to enhance the competence of parents in the families of ASD children and the degree of social communication and social participation between parents and their ASD children.

Statement of the Problem

Al-Otaibi (2022) indicated that providing parents of ASD children with information about their health and educational needs and teaching them how to manage and assist their children until they become independent can help in improving parental acceptance of the ASD diagnosis. It can also help to deter parents comparing their ASD child with others. The acceptance of an ASD child is vital to the development of the child's self-image and self-confidence, and this acceptance can transform a situation of despair into one of hope, which is needed for the child to reach a place of psychological balance with the environment. The problem that the current research attempts to address pertains to the findings of previous research, indicating that most families with ASD children are unable to cope efficiently and effectively in this situation. This inability may be due at least in part to the fact that the responsibility of caring for a child with ASD has in many cases fallen entirely on the family of the child. With the burden of the Corona pandemic added to their difficulties, many families with ASD children have experienced a low psychological state marked by feelings of guilt, self-blame and blame directed toward others as a result of stress, anxiety and depression. Society has neglected the psychological state of families with ASD children, and the low expectations of the parents of these children are directly related to this neglect. Many parents of children with ASD suffer from anxiety about their child's future and how their child will manage when they are no longer able to care for the child and no longer alive. Failure to satisfy the psychological needs of children with ASD can affect their adaptation to their parents as well

as the adaptation of the parents to their children. It can also affect the marital bond. Early intervention is vital for positive outcomes for children with ASD, and a lack of intervention is a primary cause of parental incompetence, as several studies have shown (Ben-Naim et al., 2019; Birkin et al., 2008; Harris, 2021).

EarlyBird Plus is an early intervention program that has proven effective for parents of ASD children. It focuses on educating families about ASD and how it affects their children. The program also teaches families strategies to improve communication and social interaction with their children and how to deal with various types of behavior, including socially unacceptable behavior (Abdel Naim, 2020; Caldwell et al., 2014; Cutress & Muncer, 2014; Dawson-Squibb & de Vries, 2020; Kurzrok et al., 2021; Palmer et al., 2020; Stephanie, 2015; Wilson et al., 2014). Based on the numerous studies that have been conducted in relation to this program, the current research tries to answer the following question: Does the EarlyBird Plus program improve parenting competence in families of children with ASD? This question leads to three sub-questions:

- 1 - What is the degree of difference between the mean ranks of the experimental and control groups' scores on the parental competence scale in the post-measurement?
- 2 - What is the degree of difference between the mean ranks of the experimental group's scores on the parental competence scale in the pre- and post-measurements?
- 3 - What is the degree of difference between the mean ranks of the experimental group's scores on the parental competence scale in the post-measurement and at a three-month follow-up date?

Significance of the Study

The theoretical and practical significance of the current research is as follows:

A. Theoretical significance

- 1 - Enriching the theoretical frameworks that deal with parental competence among families of children with disabilities in general and among families of ASD children in particular.

- 2 - It attracts researchers' attention to the need to focus on the families of ASD children.
- 3 - Increasing the body of research on the subject. There is a scarcity, within the limits of the researcher's knowledge, of foreign research on this subject.
- 4 - Providing one of the few Arab studies of the EarlyBird program. As far as the researcher is aware, there are no Arab studies dealing with this subject.

B. Practical importance

- 1 - The researcher hopes that the results of this study will benefit future researchers and expand the subject of the study into larger area, who are interested in these variables and the sample by applying it to a large of various samples.
- 2 - Developing a scale to measure parental competence in parents of ASD children.
- 3 - Providing an EarlyBird program to improve parental competence in families of ASD children.

Study Objectives

The aim of the current study is to prepare an EarlyBird Plus program for improving parental competence in families of ASD children and to verify the efficacy of this program in helping these families to achieve the desired goals at the end of the program application period.

Study Terminology

- a - EarlyBird Plus program: a psycho-educational early intervention program for parents of ASD children. The program aims to teach parents how to use behavioral techniques to improve their child's communication and to manage challenging behavior (Birkin et al., 2008). Defined as an educational and training program for families of ASD children ranging from 6 to 9 years, the EarlyBird Plus program consists of two cycles of 8 sessions each, which are run simultaneously over a 3-month period. Each session involves 6

families, who are instructed and trained in managing ASD behavior. The program is divided into three stages: understanding the nature of ASD children, methods of building good communication and social interaction, and managing and modifying problem behavior. There are 16 sessions in total. Each session lasts 180 minutes.

- b - Parental Competence: the parent's ability to create verbal and nonverbal communication with their ASD child and to deal and interact with the child in a lively and positive manner. Parental competence is measured by various dimensions of the parental competence scale, developed by the researcher.
- c - Autism Spectrum Disorder: a mental condition characterized by confined and repeated patterns of behavior, interests, or hobbies, as well as chronic difficulties communicating with and interacting with others in a variety of settings. These signs and symptoms must have appeared in childhood and are causing severe functional impairment now, both socially and professionally. Intellectual impairment (intellectual developmental disorder) or global developmental delay does not explain this disorder. Comorbid diagnoses of ASD and intellectual impairment are common (American Psychiatric Association, 2013). The researcher will adopt this definition as a procedural definition for this study.

Methodology

Research Approach

The quasi-experimental approach is adopted, as it relies on a two-group design. The EarlyBird Plus program (independent variable) in improving parental competence (dependent variable) in the sample.

Research Sample

The original research community consisted of all families of ASD children. The study sample included 24 families of ASD children. The age of the parents ranged from 24 to 46 years (mean 35.08, $\pm$ 6.90 standard deviation), and the age of their children ranged from 6 to 9 years (mean 7.33, standard deviation $\pm$ 1.24). The parents were chosen intentionally. They were divided into two groups: an experimental group ($n=12$) and a

control group (n=12). The researcher used the Mann-Whitney test to verify the equivalence between the two groups in terms of chronological age, educational qualification, and parental competence. The results of the test indicated that there were no statistically significant differences between the mean ranks of the experimental and control groups on these three variables, which means that equivalence was achieved between the two study groups. The study was conducted during the second semester of the 2021/2022 academic year.

Research Instrument

Parental Competence Scale (PCS): The researcher developed this scale for parents of ASD children to assess their parenting competence. It consists of 52 items, which are divided into 5 dimensions: (active participation = 11 items), (positive care = 10 items), (problem solving = 10 items), (emotional competence = 10 items) and (independence = 11 items). A three-point Likert scale is used to answer the questions: 3 (always), 2 (sometimes) and 1 (never). The total score of the scale ranged from 52-156.

Scale construction steps: The researcher reviewed some of the scales and studies that were conducted on parental competence, as he benefited from these scales and studies in developing the scale to be suitable to use with the study sample, including the scale of Abdel Tawab (2018), Harris (2021), Kurzrok et al. (2021), and do Vale Costa e Silva et al. (2022). The researcher developed the initial version of the scale consisting of 60 items based on the scales and studies. Five proposed dimensions were identified to measure parental competence, each dimension consisting of 12 items. The scale was sent in its initial version to seven experts in educational, psychological, and social sciences and all of its items obtained an agreement of 80% or more, except 3 items that scored less than 80%, the scale statements before the internal consistency procedure became 57 items.

The researcher calculated the internal consistency of the items on the scale, which consisted of 57 items. Internal consistency is secured by applying the scale to a sample of 167 parents, and the item-total correlation coefficient was calculated. Most of the correlation coefficients for the scale items 0.517-0.730 were significant at the 0.01 level,

except for the correlation coefficients for two items that were non-significant, so the scale consisted of 55 items before securing the psychometric characteristics of the scale.

Psychometric efficiency of the scale

Validity of the scale: The principal component method was used to verify the validity of the scale through factor analysis in revealing the internal validity of the scale, and the factors were rotated perpendicular to the Varimax method by determining the factors on the scale items of 55, on a sample of 167 parents. Results showed that the value of the Kaiser-Meyer-Olkin (KMO) test statistic is equal to 0.69, This implies that the sample size in the present study is adequate. The loading of the first factor ranged between 0.497-0.726, and through the literature review of the current study, the researcher was able to name this factor (active participation), which included 11 items, and the loading of the second factor ranged between 0.528-0.711, which was The designation (positive care), which included 10 items, while the loading of the third factor ranged between 0.361-0.691 and this factor was named (problem-solving), and included 10 items, while the loading of the fourth factor ranged between 0.417-0.662, and named (emotional competence), including 10 items, while the loading of the fifth factor ranged between 0.335-0.627, and this factor was called (independence), including 11 items.

Reliability of the scale: The test-retest reliability was used after three weeks. The correlation coefficients for the scale of parental competence and sub-dimensions: (active participation=0.745), (positive care=0.613), (problem solving=0.668), (emotional competence=0.597), (independence=0.629), and (total score=0.792), All came statistically significant at 0.01. The items that were not loading on one of the five factors were deleted, as the items with loading percentage of less than 0.30 were excluded, and the number of these items reached three items so the scale in its final version consisted of 52 items.

EarlyBird Plus Program

Participants in the EarlyBird Plus program, which aims to improve parental competence in parents of ASD children, constituted the experimental group in this study. The application of the program continued for a period of three months and included 16 group sessions

and two distance home sessions, in addition to an individual distance session for each family before the application of the program. An informal follow-up session is conducted after the program ends, and the group members are then evaluated on their performance in the program. The program targets parents of ASD children ranging in age from 6 to 9 years from integrated families, meaning families in which parents live together with their children on an ongoing basis. The experimental group received program training in the following order:

Week 1: Pre-measurement application of the Parental Competence Scale, Clarification regarding the concept of ASD and the latest prevalence of this disorder, Presentation of the most important results of studies on the factors causing this disorder, Presentation of the modern diagnostic criteria for this disorder according to DSM-IV-TR, Presentation of the most important methods of counseling intervention for families, and a brief presentation of the latest educational programs for ASD children.

Weeks 2-3: How ASD children perceive the world around them. Develop communication and social interaction among ASD children, and Communication techniques with ASD children.

Weeks 4-5: Educating parents on various types of communication skills, Training parents in pragmatic language skills, and how to practice these skills while dealing with their children.

Weeks 6-7: Training parents to train their child in participating in social turnout. Training parents to train their child in developing social interest, and Training parents to train their child in communication and social interaction skills.

Week 8: Interactive parent-child play.

Weeks 9-10: Explaining the concept of behavior. Clarifying the concept of the target behavior. Describing the concept of behavior modification and management. Behavior modification characteristics. Behavioral modification date. Areas of application of behavior modification. Behavior modification competencies training, and Misconceptions about behavior modification.

Weeks 11-12: Skinner's Behavioral Theory, and Applied Behavioral Analysis.

Weeks 13-14: Training parents in behavioral techniques used to reduce repetitive behavior and restricted interests in things.

Week 15: Practicing recreational activities involving parents and their children to increase the child's focus and attention.

Week 16: Reviewing what was learned in this program. Providing feedback by answering questions asked by parents about how to deal with their children. Celebrating the progress of families and their children during the program implementation period, and Post-measurement application of the parental competence scale.

Results

To answer the first question, in the post-measurement, the Mann-Whitney U test was used to explore differences between the experimental and control groups' scores on the PCS. For all analyses, statistical significance level was at $p < 0.01$. Findings showed a difference in favor of the largest average, i.e. the experimental group when it came to the average rankings of the two measures. Such findings indirectly indicate that the training program was effective in improving parental competence among the experimental group members as shown in Table 1.

Table 1

Results of the Mann-Whitney test for the difference between the experimental and control groups' scores on the PCS in the post-measurement

Dimensions	Exp. group (N = 12)		Con. group (N = 12)		Z	P
	Mean Rank	Sum of Ranks	Mean Rank	Sum of Ranks		
Active participation	18.50	222	6.50	78	-4.185**	< 0.001
Positive care	18.50	222	6.50	78	-4.194**	< 0.001
Problem solving	18.50	222	6.50	78	-4.192**	< 0.001
Emotional competence	18.50	222	6.50	78	-4.196**	< 0.001
Independence	18.50	222	6.50	78	-4.184**	< 0.001
Total	18.50	222	6.50	78	-4.163**	< 0.001

Note. ** $p < 0.01$.

As presented in Table 1, the Z value of the total score was -4.163 (p -value < 0.001), indicating a high level of significance.

To answer the second question, the Wilcoxon-rank test was used to test the difference between the experimental group's scores on the PCS in the pre- and post-measurements see Table 2.

Table 2

The Wilcoxon-rank test results for the difference between the experimental group's scores on the PCS in the pre- and post-measurements

Dimensions	Exp. group (Pre-Post)	N	Mean Rank	Sum of Ranks	Z	P
Active participation	Negative Ranks	0	0	0	-3.077**	0.002
	Positive Ranks	12	6.50	78		
	Ties	0				
Positive care	Negative Ranks	0	0	0	-3.082**	0.002
	Positive Ranks	12	6.50	78		
	Ties	0				
Problem solving	Negative Ranks	0	0	0	-3.074**	0.002
	Positive Ranks	12	6.50	78		
	Ties	0				
Emotional competence	Negative Ranks	0	0	0	-3.072**	0.002
	Positive Ranks	12	6.50	78		
	Ties	0				
Independence	Negative Ranks	0	0	0	-3.066**	0.002
	Positive Ranks	12	6.50	78		
	Ties	0				
Total	Negative Ranks	0	0	0	-3.062**	0.002
	Positive Ranks	12	6.50	78		
	Ties	0				

Note. ** $p < 0.01$.

As presented in Table 2, the Z value of the total score was -3.062 (p -value = 0.002), which is < 0.01 , indicating a high level of significance.

To answer the third question, the Wilcoxon signed-rank test was also used to determine whether there was a difference in the experimental group's scores on the PCS in the post-measurement and at a three-month follow-up date. The findings showed a statistically significant difference. This finding implies that the experimental group members retained parental competence after training see Table 3.

Table 3

The Wilcoxon-rank test results for the difference in the experimental group's scores on the PCS in the post- and follow-up measurements

Dimensions	Exp. group (Post-follow-up)	N	Mean Rank	Sum of Ranks	Z	P
Active participation	Negative Ranks	6	7.50	45	-0.504	0.614
	Positive Ranks	6	5.50	33		
	Ties	0				
Positive care	Negative Ranks	7	5.71	40	-1.387	0.166
	Positive Ranks	3	5	15		
	Ties	2				
Problem solving	Negative Ranks	5	6.50	32.50	-0.540	0.589
	Positive Ranks	5	4.50	22.50		
	Ties	2				
Emotional competence	Negative Ranks	5	5	25	-0.312	0.755
	Positive Ranks	4	5	20		
	Ties	3				
Independence	Negative Ranks	6	5.92	35.50	-0.237	0.813
	Positive Ranks	5	6.10	30.50		
	Ties	1				
Total	Negative Ranks	7	5.43	38	-1.073	0.283
	Positive Ranks	3	5.67	17		
	Ties	2				

As presented in Table 3, the Z value of the total score was -1.073, (p-value = 0.283), which is > 0.01, indicating no significance.

Discussion

The family performs multiple duties that serve the interests of its members, and the child constitutes an important component in building and forming the family. Even so, we find many families who are solely responsible for the care of their disabled children, especially families of ASD children. These families face a great challenge and must be helped to handle the pressures they routinely encounter. Facilitating their adaptation process, teaching them to focus on the developmental aspects of their children and helping them to meet their child's special needs are vital support services. The first question in this research study inquired into the difference in the experimental and control groups' scores on the PCS in the post-measurement. The study results indicate an improvement as of the members of the experimental group, indicating the efficacy of the training program used in this study. By satisfying the psychological needs of children with ASD, the EarlyBird Plus program was shown to help families that are attempting to deal with their child's unique requirements. Results also indicate that the program improves parenting efficiency by improving relationships between family members. The program included a number of sessions to improve relationships between the father and mother, parents and their ASD children, and ASD children and their siblings. It also provided extensive information on the prevention of the disorder to help families of ASD children who would like to increase their family size reduce the stress and anxiety they may experience.

These findings are consistent with those of Caldwell et al. (2014), which aimed at improving parenting skills to reduce socially unacceptable behavior among ASD children, and the findings of Cutress and Muncer (2014), which demonstrated the effectiveness of the EarlyBird Plus program in improving families' ability to communicate with their children and enhancing participants' willingness to implement effective strategies. The results also echo the study of Wilson et al. (2014), which explained the effectiveness of the EarlyBird Plus program in strengthening the social relations between family members, the study of Stephanie (2015), which showed that 70% of families in the program mastered effective social participation with their children, and that of Dawson-Squibb and de Vries (2020), which showed reduced parental stress, increased parental efficiency and an increase in the desire of participants

to continue in the program as a result of the intervention. Other studies, such as those conducted by Cutress & Muncer (2014), Palmer et al. (2020), and Kurzrok et al. (2021) have attested to the extent to which participants found that the group intervention improved parenting competence. These findings contrast with those of Ben-Naim et al., (2019), who found decreased self-effectiveness and marital contentment in children with ADHD compared to families without children with ADHD, and also with the study of Birkin et al. (2008) in which the study sample was reluctant to participate in the intervention, and the Harris study (2021), which showed significant individual differences related to the needs of parents and the needs of their more complex children. In the end, the researcher believes that the lack of exposure among the control group to the activities and practices included in the training program is what made a difference for the experimental group in the post-measurement.

The second question in this study explores the difference between the mean ranks of the experimental group scores on the parental competence scale in the pre- and post-measurements. The findings confirmed the effectiveness of the program in improving parental competence in families of ASD children. These families experienced cognitive reconstruction as their false ideas and beliefs about the nature of this disorder were dismantled. The experimental group were also given the opportunity to express their feelings openly and honestly in group discussions where they exchanged experiences and learned the skills of effectively dealing with their ASD children. The control group did not experience this shift in their understanding of ASD. These findings agree with the results of the research by Abdel Naim (2020). While differing from the findings of the Harris study (2021).

The third study question investigates the difference between the experimental group scores on the parental competence scale at post-measurement and follow-up. Findings indicated that the families of ASD children in the experimental group made a great effort to absorb all information provided to them through the training program, such that the program was effective for 3 months from the end of the application period. This impact might also be due to the researcher's ongoing emphasis on applying behavior modification techniques, such as dialogue and discussion, modeling, role-playing and reinforcement,

along with an emphasis on spending time with these children in the recreational activities that they prefer and those that attract their attention. These behaviors helped parents of ASD children deal with the disorder in a proven, systematic way that improved communication and social interaction between them and their children and also between them and those around them. These findings corroborate the findings of Abdel Naim's research (2020).

Conclusion

According to the findings of the present study, counseling helps increase parenting competency in families of ASD children. However, not all counseling programs directed to these families will be helpful. Programs need to be carefully planned, prepared and put into action within a set and acceptable amount of time, as indicated by the EarlyBird Plus program used in the current research. Nevertheless, the heuristics for improving parenting competence are not limited to certain unalterable patterns of behavior but are intrinsically amendable to modification. In this study, the researcher found individual differences in parental competence among families of ASD children, especially in active participation and problem-solving. Since ASD children have somewhat different psychological and social needs from other children, it is the responsibility of families to satisfy these needs. The results of this research are expected to motivate researchers to develop counseling programs to help families of ASD children to manage the pressures they face and develop parenting competencies that allow them to actively engage in inclusive education.

Recommendations

In light of these findings, the researcher suggests that further research should be conducted on parental competence in families of ASD children to develop more intervention measures that enhance the psychological and cognitive development of these children. Working on improving and developing parenting competence in these families is vital for positive parenting and is reflected in the behavioral, cognitive, psychological, and social characteristics of ASD children. The findings of this research thus indicate the need for training courses, workshops and seminars for families of ASD children since such educational approaches are essential in alleviating the problems these children face. Parents need to be educated & trained

with respect to the impact of their behaviors on the performance and success of their children. Parents have an important role in achieving a partnership between the family and the educational center in which their child is enrolled and must assume responsibility for doing everything they can that might advance their child's condition. The need for family counseling centers that include ASD specialists is also apparent. These centers must be available to parents so that families of children with ASD can delve into anything related to the wellbeing of their children without incurring further hardships.

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فعالية برنامج إيرلي بيرد بلس في تحسين الكفاية الوالدية لدى أسر الأطفال ذوي اضطراب طيف التوحد

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الملخص

الأهداف: هدفت هذه الدراسة إلى التحقق من فعالية برنامج إيرلي بيرد بلس في تحسين الكفاية الوالدية لدى عينة من أسر الأطفال ذوي اضطراب طيف التوحد. وقد تضمنت عينة الدراسة 24 أسرة من الأطفال ذوي اضطراب طيف التوحد. **المنهج:** تم استخدام المنهج شبه التجريبي. **النتائج:** أظهرت نتائج الدراسة وجود فرق دال إحصائياً بين متوسطات رتب درجات المجموعتين التجريبية والضابطة على مقياس الكفاية الوالدية في القياس البعدي لصالح المجموعة التجريبية. كما أوضحت النتائج وجود فرق دال إحصائياً بين متوسطات رتب درجات المجموعة التجريبية على مقياس الكفاية الوالدية في القياس القبلي والبعدي لصالح القياس البعدي. كما أسفرت النتائج عن عدم وجود فرق دال إحصائياً بين متوسطات رتب درجات المجموعة التجريبية على مقياس الكفاية الوالدية في القياسين البعدي والتتبعي بعد مرور ثلاثة أشهر من تطبيق البرنامج. **الخاتمة:** من المتوقع أن تحفز نتائج هذه الدراسة الباحثين على تطوير البرامج الإرشادية لمساعدة أسر الأطفال ذوي اضطراب طيف التوحد على إدارة الضغوط التي يواجهونها، وتطوير الكفاية الوالدية التي تسمح لهم بالمشاركة في التعليم الشامل.

الكلمات المفتاحية: برنامج إيرلي بيرد بلس، الكفاية الوالدية، أسر الأطفال ذوي اضطراب طيف التوحد

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