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Enhancing Social Connectedness And Emotional Awareness: A Comprehensive Intervention Study Investigating The Impact Of Psychoeducation On Parents Of Children With Autism Spectrum Disorder

Aneela Begum¹, 2. Maryam Kausar², Allah Nawaz³, Aafra Zeb⁴, Wakqas Khalid Ally⁵, Mehreen Khalid⁶, Afroz Ahmad⁷

Abstract

Background: Parents having Autistic children often experience social disconnection from others because of their child's autism-related behaviors. They distance themselves from friends and relatives, and occasionally, others stop them from participating in⁸ social gatherings and activities. The purpose of this research is to increase the knowledge and comprehension of social workers and other professionals working in the sector, as well as to empower families whose children present with Autism spectrum disorder (ASD) through psychoeducation.

Objective: Examining how psychoeducation affects emotional awareness and social connectedness in parents having Autistic children.

Method: The participants of the study were 50 mothers of children who were already diagnosed with ASD. They were divided into two groups (treatment group = 35, control group = 15). The study comprised a total of three phases. In 1st phase, a pre-test assessment was carried out, and data regarding Alexithymia and social connectedness was collected using the Perth Alexithymia Questionnaire (PAQ) (Preece et al., 2018) and Social Connectedness Scale (SCS) (Lee & Robbins, 1995) from total 50 mothers of diagnosed ASD children. In 2nd phase, psychoeducation intervention was conducted on mothers (n=35). In the third phase, the post-test assessment was carried out.

Results: Regarding the overall pre and post intervention values of PAQ value (102.04 \pm 7.23 vs. 81.21 \pm 10.35) and SCS value (17.92 \pm 2.58 vs. 24.56 \pm 3.13: p <0.001), there were significant differences in the treatment group, but not in the control group (p>0.05). Psychoeducation significantly influenced parents with weaker social connections and Alexithymia.

Summary/Conclusion: There is a decrease in Alexithymia and an increase in social connectedness in Parents of Autistic children after psychoeducation intervention.

¹Lecturer, University of Peshawar, Email: <u>kaneela350@gmail.com</u>

² Lecturer, Department of Psychology, University of Swat, Email: <u>mkausar475@gmail.com</u>

³ Clinical Psychologist, Foundation University School of Science and Technology, Email: <u>drazaad143@gmail.com</u>

⁴ Lecturer, Department of Psychology, University of Swat, Email: <u>aafrazeb00@gmail.com</u>

⁵ Psychologist at MoD, Bahria University (Institute of Professional Psychology), Email: <u>wakqas@gmail.com</u>

⁶ Clinical Psychologist, Foundation University School of Science and Technology, Email: <u>mehreen11@live.com</u>

⁷ Clinical Psychologist, Swat Medical College, Email: <u>afrozswat@gmail.com</u>

Keywords: Psychoeducation, Alexithymia, Social connectedness, Autistic Children, Emotional awareness.

Introduction

Autism spectrum disorder (ASD) is a condition that affects a child's neurological system as well s his or her growth and development. Eleven years ago, Autism cases varied from five per 10,000 to sixty per 10,000 around (Altiere & Kluge, 2009). According to recent research, autism affects nearly one in every 110 children and is increasing at a rate of 10% to 17% each year (Meadan et al., 2010). According to the Pakistan autism society, a survey in 2021 reported the estimated rate of autism spectrum disorder is approximately 400,000 in Pakistan (Pakistan autism society, The Express Tribune", 2021). Parents play a vital role in the lives of all children since parenting is a complex and uncompromising commitment, especially when the child has special needs (Berns, 2007). Lee et al. (2008) discovered that childrearing is deemed more challenging as it puts significant load on parents and families that raise children with autism spectrum disorders. Based on an ecological concept, parents face challenges in all extant subsystems. At the microsystem level, parents have challenges when dealing with children with autism spectrum disorders, such as addressing behavioral issues (Brobst et al., 2009). At the mesosystem and exosystem levels, there are other difficulties experienced by parents, such as having to face the jealousy of autistic children's siblings and frequently having conflict with spouses or other members of the family such as grandmother and grandfather (Mukhtar et al., 2016), job disruption, and limited interaction with the surrounding as they spend more time in parenting (Stoner & Stoner, 2014). At the macro system level, parents frequently face stigma or unfavorable responses from the general public due to a lack of understanding of autism spectrum disorder, making parents feel alienated (Ha et al., 2014).

The transactional Model of Stress and Coping (Lazarus & Folkman, 1984) suggests that individuals' reactions to stress are influenced by their appraisal of the situation and their perceived ability to cope. Parents of children with Autism Spectrum Disorder (ASD) often experience high levels of stress due to the challenges associated with caring for a child with special needs. This stress can lead to a higher risk of developing Alexithymia, a condition characterized by difficulty identifying and expressing one's emotions (Lane et al., 2015). According to the Transactional Model of Stress and Coping, individuals' reactions to stress involve two major cognitive processes: primary appraisal and secondary appraisal. Primary appraisal involves evaluating the significance of the situation and determining whether it is a threat, a challenge, or irrelevant. Secondary appraisal involves evaluating one's coping resources and determining whether they can cope with the situation. When parents of children with ASD experience stress, they may appraise the situation as a threat, particularly if they feel overwhelmed or lack the resources to cope effectively. This can lead to negative emotions such as anxiety, depression, and frustration, which may be exacerbated by a lack of emotional awareness and difficulty in expressing emotions.

Psychoeducation can be seen as a coping strategy that can help parents change their appraisal of the situation, reduce their stress levels, and improve their ability to cope with the challenges of raising a child with ASD. By providing parents with accurate information about the nature of autism and teaching them coping strategies, psychoeducation can help parents reframe their appraisal of the situation from a threat to a challenge and provide them with the knowledge and skills to effectively manage the stress associated with caring for a child with ASD. Research has shown that psychoeducation can be an effective way to improve emotional awareness and reduce symptoms of Alexithymia in parents of children with ASD (Biegel et al., 2010). By increasing parents' knowledge and understanding of their child's condition, psychoeducation can help reduce the uncertainty and ambiguity associated with caring for a child with ASD and provide parents with a greater sense of control over the situation. This, in turn, can help parents become more aware of their

emotions as well as better equipped to express them, leading to decreased alexithymia symptoms.

Three recommendations are made about family or carer components in the treatment of autism: 1) the necessity for active engagement in the intervention from parents/caregivers; 2) assessing family-related variables; and 3) taking socio-cultural characteristics and economic capacities into consideration. Both development and behavioral programs can benefit from active family engagement, whether as a well-supervised co-therapist or as part of an intervention that involves defining objectives and priorities for treatment. Psychoeducation for parents can optimize their engagement in family activities and the care of their autistic kid. Parent psychoeducation that offers correct information and intruduces parents to therapy techniques that work improves symptoms, educational elements, and social components of autism spectrum disorders in addition to increasing adaption and family acceptance. When a child with autism spectrum disorder displays fear, problematic conduct, or stereotypical behavior, parents should evaluate whether any of their behaviors as parents are contributing to the child's problems. If the parents can modify their behavior, this can also help children feel less stressed.

According to Szatmary et al. (2008), Alexithymia is more common in parents of autistic children than in the general population. Alexithymia is a group of cognitive traits that includes knowing feeling, having trouble expressing one's and others' feelings, thinking emotionally, and having low creative ability (Szatmary et al., 2008). A summary of the results of numerous studies on families with children with mental disabilities was that families feel socially isolated (Kearney & Gryphon, 2001); mothers neglect to take enough time for themselves because they are caring for their children too much (Sari et al., 2006); they experience emotional exhaustion more than mothers of children without mental disabilities; their anxiety is consistently high (Coskun & Akkas, 2009); and their depression is also high (Bahar et al., 2009). The purpose of the study was to raise awareness among parents of autistic children since, for many parents, finding out that their child has a chronic disease or handicap may be distressing, and on top of that raising an autistic child can significantly disrupt family life. Due to their frequent misconceptions regarding ASD, parents may feel socially isolated and endure mental stress, worry, dread, and guilt. The rise in the disorder's prevalence rates indicates that parent-training therapeutic approaches may help extend individuals' understanding of ASD.

Objectives

- To determine the initial levels of social connectedness and Alexithymia in parents of children with Autism Spectrum Disorder (ASD) to establish a baseline for comparison.
- To develop and implement a structured psychoeducation program designed to address the specific needs of parents with children diagnosed with ASD.
- To measure the impact of the psychoeducation intervention on social connectedness and Alexithymia immediately following the completion of the program.

Hypotheses

H1: Participation in the psychoeducation program leads to a significant increase in social connectedness among parents of children with Autism Spectrum Disorder.

H2: Involvement in the psychoeducation program results in a significant reduction in alexithymia levels among parents of children with Autism Spectrum Disorder. **Method**

Research design

A pre-post-test quasi-experimental approach was employed to assess the psychoeducational intervention's efficacy. Since this design included assessments both before and after psychoeducation, we were able to see the effects of therapy on a group of participants who had been given the psychoeducation intervention according to their availability.

Sample

Mothers of children who are already diagnosed with ASD were recruited through consecutive sampling. A total of 50 mothers were taken from the Autism Unit Peshawar located at the University of Peshawar (Department of Psychology). The age group of autistic children was between 4 to 10 years. Mothers were then divided into two groups, i.e., the treatment group (n=35) and the control group (n=15). The reason for having more participants in the treatment group (35) than the control group (15) is to ensure that the study has enough statistical power to detect potential differences between the two groups. A larger sample size in the treatment group increases the likelihood of detecting a significant treatment effect, which is crucial for determining the efficacy of the treatment. Meanwhile, a smaller sample size in the control group is sufficient as the primary purpose of this group is to serve as a reference or baseline for comparison with the treatment group.

Inclusion criteria

- Mothers having autistic children were included.
- Mothers who are willing for psychoeducation sessions were included.

Exclusion criteria

- Mothers having children with other disabilities were excluded.
- Mothers not willing to participate in sessions were excluded.

Instruments

Demographic Sheet.

The demographic sheet was used to gather information about each participant, including family structure, age, education level, and household income.

Perth Alexithymia Questionnaire (PAQ)

The PAQ is a 24-item, 7-point Likert scale to assess Alexithymia (Preece et al., 2018). It intends to evaluate every facet of Alexithymia, including excellent and negative feelings. The assessment yields five subscales and six composite scores, where higher scores correspond to higher degrees of Alexithymia. The scale's total score is 168, and scores more than 61 signify the presence of Alexithymia, whereas scores between 50 and 60 suggest a probable or borderline case, and scores less than 50 do not. The PAQ showed strong internal consistency and high discriminant and concurrent validity (the subscales' Cronbach's alpha ranged from 0.87 to 0.96; Preece et al., 2018).

Social Connectedness Scale

Lee and Robbins created the scale in 1995. The eight items on the 6-point Likert scale, which runs from strongly disagree to strongly agree, assess the participant's sense of connection and social connectivity as well as their degree of belongingness. A higher score on the scale indicates a greater sense of social connectivity. The scale possesses concurrent, construct, convergent, and discriminant validity along with high reliability ($\alpha >.92$).

Operational definitions

Alexithymia

Alexithymia is a term used to describe the characteristics of people who do not appear to grasp their feelings and who lack the vocabulary to express these sentiments (Szatmari et al., 2008). The Perth Alexithymia Questionnaire (PAQ) was used to operationalize it.

Social connectedness

The feeling of being a part of a social network or relationship is known as social connectedness (Lee & Robbins, 1995). The scale of social connectedness was utilized to operationalize it, as it assesses and gauges the participants' sense of bonding and social connection and their degree of belongingness (Lee & Robbins, 1995).

Proposed Analysis

- Descriptive statistics
- Paired sample t-test.

Procedure

Mothers of autistic children were invited for psychoeducation about their child's behavior and how to deal effectively with them.

The study were conducted in 3 phases as the following:

Phase I: Pre-assessment of parent knowledge and awareness about autistic disorder and applying questionnaires.

Phase II: The psychoeducational intervention in this study lasted for three months. The researcher made the psychoeducational materials used in this study. It contained sections on an overview of autism, including typical symptoms, the etiology, available treatments, prognosis, food information, daily activities, recreational activities, task analysis, and how to behave with these children. It also covered what to do if the child becomes calm or violent, uses of reinforcement, and how to manage while caring for them.

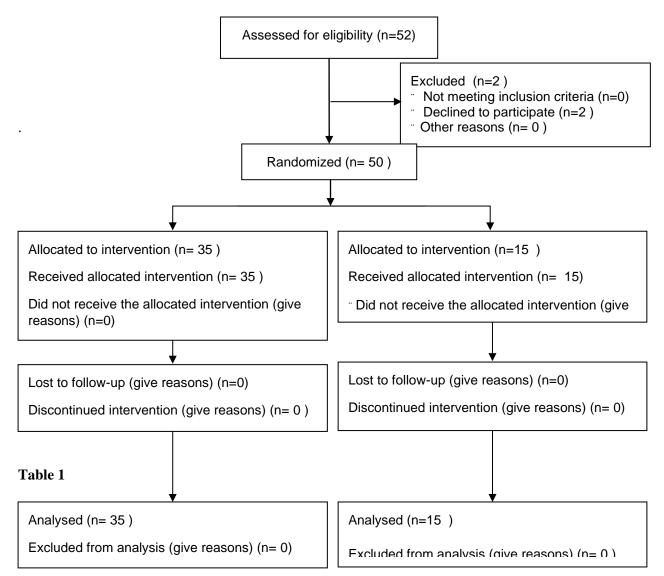
Phase III. The focus of this step was to use the post-test assessment and evaluate the intervention.

The researcher organized the parental psychoeducation session at the particular education center in cooperation with the personnel of the chosen institutions.

The relevant authorities' official consent was acquired. Each participant filled out a letter requesting informed consent. From August to November 2023, the researcher gathered data in the designated schools' official settings. Fifty mothers first filled out the self-administered measuring forms. The mothers received psychoeducational psychotherapy after the pre-test. Each mother had three different two-hour sessions (6 hours total) of psychoeducation. Two weeks after the psychoeducation sessions ended, participants were interviewed once again, and all tests were given again. Throughout the process, the participants' comforts were considered, and the mothers received gratitude for their active engagement at the end of the research.

Results and Discussion

Flow of psychoeducation for parents:



Sessions (time)	Topics
Session 1 (30 min)	Inform consent
	Pre-assessment (administering Perth Alexithymia Questionnaire and Social Connectedness Scale) Psychoeducation contract
Session 2 (120 min)	The diagnosis and treatment of autism spectrum disorders and their definition and causes.
Session 3 (120 min)	The all-inclusive model for managing autism spectrum disorders. Parents of children with autism spectrum disorders can overcome social and behavioral challenges with the aid of this non-medication skills guide. The non-medication skills guide for parents of autistic children who are experiencing physical problems.
Session 4 (120 min)	The recommended course of treatment for parents whose children have autism spectrum disorders. Parents who participate in future planning for kids with autism spectrum disorders
Session 5 (30 min)	Post-assessment (administering Perth Alexithymia Questionnaire and Social Connectedness Scale)

	Characteristics	F	% 46
Age	20-30 years	23	
	31-40 years	27	54
	Total	50	100
Education	SSC and below	10	20
	HSSC-graduate	40	80
	Total	50	100
Family income	Below 50000	15	30
	50000+	35	70
	Total	50	100
Family system	Nuclear	35	70
	Joint	15	30
	Total	50	100

Table 2: Baseline details about the participants (N=50)

Note f= Frequency, %= Percentage

Table 3: Comparison between the means of obtained scores from the pre-test and post-test session

Variabl		Pre-test	Post-test	Comparison	effect
es		score	score		
PAQ	Control	$95.06 \pm$	91.01 ± 5.34	1.24	1.56
	Treatmen	5.65	81.21 ± 10.35	10.46**	.00
	t	$102.04 \pm$			
		7.23			
SCS	Control	$16.93 \pm$	15.00 ± 2.98	1.54	1.34
	Treatmen	3.00	24.56 ± 3.13	8.14**	.00
	t	$17.92 \pm$			
		2.58			

Note. **p<0.01, *p<0.05, ***p<0.001

Significant differences were present in the treatment group in terms of total PAQ value (102.04 ± 7.23 vs. 81.21 ± 10.35) and SCS value (17.92 ± 2.58 vs. 24.56 ± 3.13 : p <0.001) before and after the intervention. At the same time, there were no significant differences in the control group (p> 0.05). There was a significant influence between psychoeducation on parents having Alexithymia and less social connectedness.

Discussion

The purpose of this study was to test if a psychoeducational intervention might help with Alexithymia and social connectivity in parents with ASD children. The findings were encouraging primarily, with substantial improvements in social connectedness and a decrease in Alexithymia (Table 3). Alexithymia affects 7-10% of the general population (Franz et al., 2008). It has been demonstrated that in some families with neurologically damaged children, parents are at a greater risk of acquiring Alexithymia (Durukan et al., 2018; Temelturk et al., 2021). Parents' Alexithymia is linked to autistic children's repeated stereotyped behaviors (Szatmari et al., 2008). Most persons with Alexithymia have a neurotic disposition and can detect more negative feelings (such as depression and worry; Heshmati & Pellerone, 2019; Mensi et al., 2020). Based on the available data, it is plausible to conclude that Alexithymia is a risk factor for parental burnout. Nichole, Troy, and Grace's (2021) research found that higher alexithymia features predict lower levels of social

competence, suggesting that increasing difficulty in identifying and articulating one's own emotions and the emotions of others is related to inferior social competence.

According to Szatmari et al. (2008), autistic children's moms had a higher prevalence of Alexithymia than the general population. This study included 439 autistic children and 45 mothers with Prader-Willi syndrome. According to the study, prior moms had more excellent Alexithymia ratings than later mothers. Both father and mother were evaluated in this study, and both earned more excellent Alexithymia ratings than Prader-Willi patients. Stressors resulting from an ASD diagnosis can lead to social isolation in parents, strain their marriage, and create financial responsibilities within the family, all of which hurt the social and emotional well-being of parents. Parents who had a kid diagnosed with autism faced sadness over their child's restricted chances, stress from having to adjust objectives and activities for their child and change the arrangements for the child's schooling. The results of a study indicate that interacting with families cooperatively, providing information about illness, making recommendations for behaviors that encourage recovery, and instructing families in coping mechanisms that lessen their sense of burden are all critical factors in the success of working with children who have ASDs (Gillberg et al., 1991). The literature reports that psychoeducational interventions led to a significant decrease in Alexithymia in parents of children with ASD (Bakan et al., 2020); in addition, following an appropriate skill training session for adults and adolescents, self-reported difficulties with emotional regulation, awareness of emotions, and levels of Alexithymia were significantly reduced (Hatamzadeh et al., 2012). Parent education and support programs for parents of children with autism spectrum disorders usually provide positive outcomes for both parents and their children. Parenting support programs benefit parents and positively impact their knowledge, abilities, and performance, in addition to the side effects of reducing stress and emotional challenges (Kuravackel, 2017). Most parenting program therapies are designed to teach parents specific skills related to supporting their children and themselves and information on autism. Numerous studies have looked into parenting program training therapies, which are expressly designed to help parents of children with autism (Hemdi & Daley, 2017). Parenting education programs promote parental participation. After the therapist has generated more significant outcomes for autistic children by following up than clinical therapy, this program was established to target particular difficulties in children with ASD, enhance social behavior and language abilities, and minimize inappropriate behavior (Whittingham, 2009).

Implications

The current study holds significant implications for advancing our understanding of the psychosocial well-being of parents with children diagnosed with Autism Spectrum Disorder (ASD). By systematically evaluating the effectiveness of psychoeducation on two critical factors—social connectedness and Alexithymia—the research aims to shed light on novel interventions to enhance the lives of these families. If successful, the findings may not only contribute valuable insights to the broader field of autism research but also inform tailored and effective support strategies for parents. The potential positive outcomes could pave the way for integrating psychoeducation into standard clinical practices, offering a holistic approach to address the unique challenges faced by parents of children with ASD. Moreover, the study's implications may extend to policy considerations, influencing the development of support services and emphasizing the importance of prioritizing these families' mental health and well-being within healthcare frameworks.

Limitations and conclusion

In conclusion, current study findings indicate that psychoeducation can empower parents with knowledge, coping strategies, and support, improving both social connectedness and the ability to understand and express emotions. Data has been collected only from mothers, and depending on the sample size, the findings may need to be more generalizable to a larger population. The duration of the intervention and follow-up may be limited due to practical and ethical reasons, which could affect the long-term assessment of the effectiveness of psychoeducation. Future research could benefit from a longer follow-up duration to evaluate the sustained impact of psychoeducation over time. Qualitative research could provide a more nuanced understanding of the experiences and changes in social connectedness and Alexithymia as perceived by the parents.

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