

The Role of Psychotherapies in the Management of General Health Symptoms among Parents and Teacher of Autism Spectrum Disorders Adolescents

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ABSTRACT

Objective: The current article's goal is to emphasize the importance of psycho-therapeutic interventions in the management of general health symptoms (i.e., bodily symptoms, sleep and anxiety-related symptoms, inability to socialize, depression symptoms) among parents and teachers of autistic spectrum disorder adolescents.

Method: The current study is based on an experimental design to lessen the general health symptoms of parents and teachers of adolescents with autism spectrum disorders. Choosing appropriate friends, appropriate use of humor, entering a conversation, exiting a conversation, get-togethers, good sportsmanship, teasing and embarrassing feedback, bullying and bad reputations, handling disagreements, rumors, and gossip relaxation exercises were all used by clinical psychologists at various schools. The general health questionnaire (GHQ-28) scale was filled by both control and experimental group participants prior to the start of therapy. G power was used to calculate sample size; a total of 140 individuals, parents (N = 40) and teachers (N = 40), were chosen for the experimental group, while the remaining 40 parents and 20 teachers were assigned to the control group (CG), with an age range of 30 to 50 years old. Purposive sampling was used to determine the sample size. The data came from two schools in Islamabad and one in Rawalpindi, Pakistan. To treat their psychological concerns, parents and teachers were taught various therapeutic strategies. The participants filled the measure instruments of general health questionnaire (GHQ-28) after fifteen treatment sessions. SPSS version 25 was used to analyze the data, and the MANCOVA test was used to validate the results.

Results: The results showed the interaction effect of participants (teachers and parents) and general health (, i.e., bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms) was found to be non-significant with $F(1, 154) = 2.13, p > .05$, $F(1, 154) = 3.12, p > .05$, $F(1, 154) = 0.17, p > .05$, and $F(1, 154) = 3.45, p > .05$ respectively. Furthermore, there were no improvements in the control group.

Practical Implication: The current study findings contribute in our understanding of the relationship between Psychotherapies and general health symptoms. The finding further implied for psychologist, and therapist that how much psychotherapies play role in reduction of severity level general health (, i.e., bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms).

Conclusion: The current study concluded that psycho-therapeutic techniques play a critical role in reducing the degree of general health symptoms among ASD teenagers' parents and teachers.

Keywords: Psychotherapeutic Interventions, General Health Symptoms, Parents, Teacher, ASD

INTRODUCTION

It is frequently discovered that parents and teachers of children with Autism Spectrum Disorder (ASD) experience higher levels of stress and worse physical health. When compared to parents and teachers of children with typical development [1, 2, 3], parents and teachers of children with other disabilities [4, 5], or when compared to the general population [6–11]. Therefore, it suggests that the stress parents and teachers of children with ASD feel as parents and careers pose a greater risk to the parents' psychological and physical well-being. ASD is a neurodevelopmental disease characterized by abnormalities in stereotyped behaviors, restricted interests, and verbal and nonverbal communication skills [12]. The degree to which an individual's ASD symptoms appear varies from mild to severe. The prevalence of ASD is thought to be 1 in 160 children worldwide, or 62.5 per 10,000 children [13], with Japan having the greatest prevalence at about 161 children per 10,000 children [14]. In the US, the proportion of children who have been diagnosed with ASD has climbed from 1 in 150 (or 66.7 per 10,000) in 2000 to 1 in 68 (or 147 per 10,000) in 2016, a rise of 119.4% [15].

The careers of children diagnosed with ASD, known as "autism," are typically those of the child's parents [16]. These parents are at high risk for "care syndrome" or "care stress," a disorder characterized by tiredness, rage, anxiety, sadness, and physical symptoms caused by unrelieved care for a chronically ill dependent [17]. "Care stress" and "care burden" are other terms that are frequently used to describe a state of physical, emotional, and mental exhaustion that may be accompanied by a shift in attitude, from positive and caring to negative and unconcerned, as

a result of attending to the ongoing demands of caring for a dependent individual [18, 19].

Some parents become overwhelmed by the daily problems and ordinary life stresses that come with parenting an autistic child [20]. A growing body of research suggests that parents of children with ASD have greater rates of sadness and anxiety [21–27], exhaustion [28], increased problems with physical health and bodily discomfort [29], and lower overall well-being [24, 30]. Increased parenting stress is ascribed to the necessity to offer constant supervision and help with the child's daily living skills, ongoing sleep disruption, a lack of available respite care, and a lack of response by school employees and related services [31–34].

Significance of current study: There was no research that assessed general health problems with psychotherapies in Pakistan. The complexity of general health problems among children and their parents and their long-term effects on a person's growth and development highlight the importance of this area of study. Furthermore, the behavior of children with ASD can be difficult to manage due to behavioral abnormalities such as temper tantrums and aggressive, self-abusive, destructive, obsessive, ritualistic, impulsive, and self-stimulating behaviors that can endanger the parent carer as well as siblings, family members, and friends [8, 26, and 35]. Complicating matters for parent carers tasked with managing the child's behavior [36]. Externalizing behaviors (such as hyperactivity and conduct issues) have been proven to explain a major percentage of parental distress and poor physical health [37].

METHOD

Study Participant and Research design: An experimental research design was used to collect the data of current study. G power was used to calculate sample size; a total of 140 individuals, parents (N = 40) and teachers (N = 40), were chosen for the experimental group, while the remaining 40 parents and 20 teachers were assigned to the control group (CG), with an age range of 30 to 50 years old. Purposive sampling was used to determine the sample size. The data came from two schools in Islamabad and one in Rawalpindi, Pakistan.

Measures: An intake interview was conducted to establish rapport and get consent for the study. The demographic sheet and General Health Questionnaire (GHQ-28) were used for the purpose to collect the data of participants such is age, gender, education, family system, socioeconomic position, occupation, and number of children. The General Health Questionnaire (GHQ-28) is a self-reported screening tool for detecting potential psychological disorders. The GHQ-28 outlines two major issues: (1) the incapacity to do routine tasks; and (2) the introduction of novel and disturbing events (Goldberg & Hillier, 1979). The reliability of the scale is $r = 0.90$.

Procedure & Therapeutic Intervention: First, therapists obtained permission from the school and assessment tool authorities, and the current study's ethical considerations were considered. Following that, the participant provided informed consent and promised the secrecy of identifying information. The nature and objective of the current study were briefly discussed with parents and teachers. All therapeutic interventions from various therapies were chosen for participants based on their applicability and discussed with the other authors of the current study. Therapy sessions were scheduled based on the availability of parents and teachers at school. It was expected that four sessions would be appropriate throughout the week. Initially, the researcher conducted a lengthy interview before administering the psychological evaluation tools and the General Health Questionnaire (GHQ-28). During the first sessions, the therapist engaged the participants in various activities such as color drawings charts and relaxation exercises in order to create rapport

and make the participants comfortable before engaging in evaluation and therapy. Participants in the study were psycho-educated on the nature of the study. Initially the continuous nontangible reinforcement was planned for participants.

After three to four sessions, the psychotherapy strategy began to function, and study participants learned the first technique for managing their anxiety-related symptoms and sad mood. The following strategy was used to manage their problems: Psychotherapeutic techniques included selecting appropriate friends, using appropriate humor, entering and exiting conversations, get-togethers, good sportsmanship, teasing and embarrassing feedback, bullying and bad reputations, handling disagreements, rumors, and gossip, and relaxation exercises. The total number of therapeutic intervention sessions was fifteen. Participants filled out the General Health Questionnaire (GHQ-28) test again after finishing the fifteen sessions to determine the severity of their general health symptoms. As a result, the entire treatment time was two and a half months.

Statistical analysis: The data has been analyzed on SPSS-25.0V. The two-way and three-way mixed factorial MANCOVA, have been applied on pre and post-testing data, to analyze the results of pre and post-testing of both groups simultaneously.

Ethical considerations: While conducting this study, ethical issues were closely considered. Before beginning the study, approval and consent were obtained from the Institutional Review Board, the Study Ethics Board, the creator of the scales, and other important parties. A consent form and an overview of the current investigation's goals were given to each participant in the study. Only those study participants who were enthusiastic about participating in the current research were chosen.

RESULTS

The therapeutic outcome of psychotherapeutic interventions showed that therapeutic interventions are very effective in the management of general health symptoms (i.e., bodily symptoms, sleep and anxiety-related symptoms, inability to socialize, depression symptoms). See (Tables 1-2)

Table 1: Univariate Differences for Pre-Post Assessments of General Health (Bodily Symptoms, Sleep and Anxiety Related Symptoms, Inability to Socialize, Depression Symptoms) across Experimental and Control Groups for Teachers and Parents (N =140)

Variables	Teachers								F(1,189)	p	η^2
	Control				Experimental						
	Pre		Post		Pre		Post				
	M	SD	M	SD	M	SD	M	SD			
Bodily Symptoms	12.00	2.18	11.35	2.38	12.06	2.33	3.88	1.90	1.72	0.19	.011
Sleep and Anxiety Symptoms	13.58	1.76	12.84	2.00	11.97	3.06	3.53	1.48	2.08	.151	.013
Inability to Socialize	13.90	1.85	12.81	2.76	13.13	1.96	3.75	0.67	3.55	.062	.023
Depression Symptoms	14.10	2.06	13.26	2.99	13.88	1.68	3.31	1.42	.01	.973	.001

Table 2: Univariate Differences for Pre-Post Assessments of General Health (Bodily Symptoms, Sleep and Anxiety Related Symptoms, Inability to Socialize, Depression Symptoms) across Experimental and Control Groups for Parents (N =140)

Variables	Parents								F(1,189)	p	η^2
	Control				Experimental						
	Pre		Post		Pre		Post				
	M	SD	M	SD	M	SD	M	SD			
Bodily Symptoms	12.26	3.30	12.10	3.15	12.17	2.40	3.92	1.91	1.72	0.19	.011
Sleep and Anxiety Symptoms	13.64	1.72	12.67	2.03	12.64	1.96	3.50	1.57	2.08	.151	.013
Inability to Socialize	13.94	1.97	13.42	1.99	13.42	2.04	3.67	0.63	3.55	.062	.023
Depression Symptoms	14.38	1.86	13.96	1.68	17.17	1.53	3.25	1.50	.01	.973	.001

Bonferroni adjustment was applied by dividing the original level of significance (.05) with the total number of dependent variables (i.e., 4). After applying Bonferroni adjustment, the Alpha level for significance was .0125. The results of the sub-factors of general health, i.e., bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms depicted significant differences across assessments (pre and post) $F(1, 154) = 6.22, p < .05, F(1, 154) = 4.30, p < .05, F(1, 154) = 13.43, p < .001,$ and $F(1, 154) = 26.13, p < .001$ respectively. The results revealed that after receiving intervention the bodily symptoms, sleep and anxiety

symptoms, inability to socialize, depression symptoms were significantly reduced.

The interaction effect of participants (teachers and parents) and general health (, i.e., bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms) was found to be non-significant with $F(1, 154) = 2.13, p > .05, F(1, 154) = 3.12, p > .05, F(1, 154) = 0.17, p > .05,$ and $F(1, 154) = 3.45, p > .05$ respectively. This indicated that intervention was equally effective for both teachers and parents.

Moreover, the interaction effect of groups (experimental and control) and general health (bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms) was found to be significant $F(1, 154) = 343.88, p < .001$, $F(1, 154) = 453.39, p < .001$, $F(1, 154) = 827.31, p < .001$, and $F(1, 154) = 1416.31, p < .001$ respectively. Results showed that the intervention group (EG) showed significant reduction in bodily symptoms, sleep and anxiety symptoms, inability to socialize, and depression symptoms. See figure 1 and 2 for the mean differences.

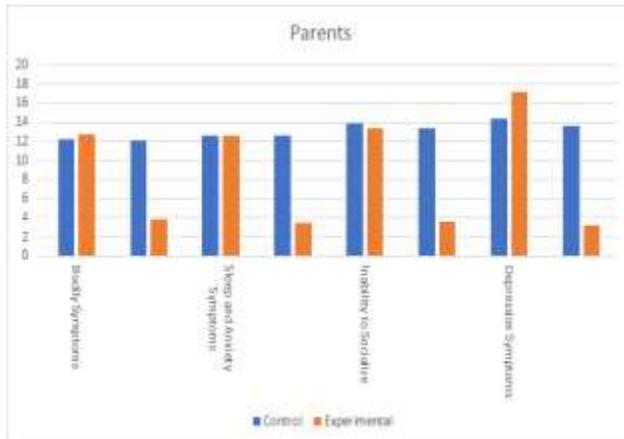


Figure 1: Mean Differences of Pre-Post Assessments of General Health across Experimental and Control Groups of the Parents.

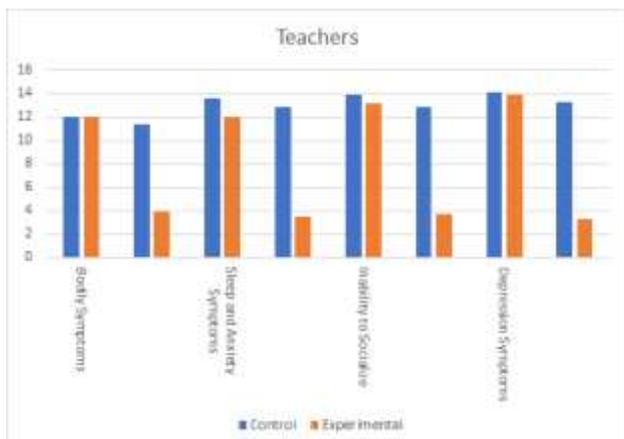


Figure 2: Mean Differences of Pre-Post Assessments of General Health across Experimental and Control Groups of the Teachers.

Simultaneously, the interaction effect of participants (teachers and parents), groups (experimental and control) and general health (bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms) was also found to be non-significant with $F(1, 154) = 1.72, p > .05$, $F(1, 154) = 2.08, p > .05$, $F(1, 154) = 3.55, p > .05$, and $F(1, 154) = 0.01, p > .05$ respectively. The results depicted that intervention showed significant reduction in bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms for the experimental group in post assessment for both teachers and parents. So, the intervention is equally effective for teachers and parents in the post assessments.

DISCUSSION

The results of the current study stated that there will be a significant improvement in general health (i.e. somatic symptoms, anxiety/insomnia, social dysfunction and severe depression) of parents and teachers of adolescents with ASD following the

therapeutic intervention. The results of multivariate analysis revealed significant differences on the combined effect of general health in pre and post assessments.

The interaction of the combined effect of general health and participants was found to be significant. Moreover, the interaction of combined effects of general health and groups was also found to be significant [7, 8]. Additionally, the univariate differences of the pre and post assessments of the general health, i.e., bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms across EG & CG among parents and teachers were reported below.

The results of the sub-factors of general health, i.e., bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms depicted significant differences across assessments (pre & post) respectively [11]. The results revealed that after receiving intervention the bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms were significantly reduced.

The interaction effect of participants (teachers & parents) and general health (i.e., bodily symptoms, sleep and anxiety symptoms, inability to socialize, and depression symptoms) was found to be non-significant [12]. Moreover, the interaction effect of groups (EG & CG) and general health (bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms) was found to be significant respectively. Results showed that EG showed significant reduction in bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms [13].

Simultaneously, the interaction effect of participants (teachers & parents), groups (EG & CG) and general health (bodily symptoms, sleep and anxiety symptoms, inability to socialize, depression symptoms) was also found to be non-significant [29].

With the increased risk of acquiring mental health difficulties such as depression or anxiety in this population [32, 33], improvement in behavioral and emotional health is extremely important. A recent study supported and demonstrated that social skills interventions play a critical role in the reduction of negative mental health symptoms, such as anxiety symptoms of adolescents with ASD [34].

Furthermore, Parents and teachers when equipped with the weekly homework assignments and behavioral rehearsal tasks, their unnecessary preoccupations and worries decreased gradually. Organized and planned activities, get-togethers with peers, active peer engagement, enhanced understanding of social cues, social interaction, social reciprocity and identification of social situations facilitated in improving general health of parents and teachers [18,20]. Hence, psychotherapeutic interventions are concluded to be an effective measure in enhancing individual's daily functioning in a more organized way [15].

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