

A Quasi Experimental Study to Assess the Impact of Psychological Intervention among Parents of Special Children with Anxiety, Depression and Stress in an Indian City

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Abstract: **Background:** The present study aims to understand the problems of the parent of special children, especially of Anxiety, Depression and Stress on the parents of special children. Review of literature highlights that not many such researches have been conducted on presenting of a parents of special children and their related problems. In view of the magnitude of problems faced by the Special Children's Parents community, it is felt that, a study and following intervention is needed. **Methods:** This study is a quasi experimental study which explore the association of Anxiety, Depression and Stress among parents of special children. Fathers (n=30) and Mothers(n=30) of special children were selected using purposive sampling technique from various places from Chennai city. Correlation Matrix was carried out using Statistical Package for Social Sciences (SPSS). To determine the mean difference between the sample student 't' test was used. To find out the reduction in Anxiety, Depression and Stress of Parents of Special Children after the after the psychological intervention Paired 't' test was used. **Results:** There was a significant 5.1% reduction of in state anxiety (p value 3.49), 5% reduction of trait anxiety(p value 3.08) and 1.8% reduction of stress (p value 3.80) between pre and post intervention period father's of special children .There was a significant 1 % reduction of in state anxiety (p value 3.21) , 0.5% reduction of trait anxiety (p value 2.90), 1% reduction in depression(p value-4.48) and 1% reduction of stress (p value 5.21) between pre and post intervention period mother's of special children. **Conclusion:** Our study is first of kind which have addressed and assessed the psychological disorders of mother and fathers of special children. Our study had opened up the possibilities of intervention for this section of people who so far have been un noticed in the psychological domain. More studies and intervention addressing the issues of the parents of the special children are the need of the hour.

1. Introduction

When we see people around us, we observe that some lack normal physical abilities. For example, there are people who are unable to see, hear or speak and others who are unable to move around. These people are commonly known as physically disabled. Similarly, there are people who have poor and insufficient development of mental functions, including control over their body movements, their intelligence, social interaction and language, from birth or early childhood. This condition is called mental retardation (1).

Recently, there has been increasing awareness that the term "mental retardation" has a derogatory connotation. Thus, the term "mentally challenged" is being used. However, since the term "mental retardation" is well known to the common man.

Naturally, such babies fail to develop and acquire milestones like normal children. These conditions, in which there is a significant deficit or delay in the development of various mental functions from early childhood, are called developmental disabilities. One can recognize different types of developmental disabilities, depending on what function or functions are affected and how extensive is the limitation. Mental Retardation: This is a condition in which there is delay or deficiency in all aspects of development, i.e. there is global and noticeable deficiency in the development of motor, cognitive, social, and language

functions. This is the commonest form of developmental disability. In many ways, mental retardation is also representative of developmental disabilities in general, in its causation, nature, and care.

Definition of Mental Deficiency

Tredgold (1937) defined as "Mental deficiency is a state of incomplete mental development of such kind and degree that the individual is incapable of adapting himself to the normal environment of his fellows in such a way as to maintain an existence independently of supervision, control or external support"(2). Few types of mental deficiency are Autism, Dyslexia, Attention Deficit Hyperactivity Disorder, Down Syndrome, Inherited Metabolic Disorder, Maternal rubella syndrome, Cretinism

Anxiety

Anxiety Disorders affect about 40 million American adults age 18 years and older (about 18%) in a given year, causing them to be filled with fearfulness and uncertainty(3). Unlike the relatively mild, brief anxiety caused by a stressful event (such as speaking in public or a first date), anxiety disorders last at least 6 months and can get worse if they are not treated. Anxiety disorders commonly occur along with other mental or physical illnesses, including alcohol or substance abuse, which may mask anxiety symptoms or make them worse. In some cases, these other illnesses need to be treated before a person will respond to treatment for the anxiety disorder.

Depression

Clinical depression (also called major depressive disorder, or unipolar depression when compared to bipolar disorder) is a state of intense sadness, melancholia or despair that has advanced to the point of being disruptive to an individual's social functioning and/or activities of daily living. Although a low mood or state of dejection that does not affect functioning is often colloquially referred to as depression, clinical depression is a clinical diagnosis and may be different from the everyday meaning of "being depressed." Many people identify the feeling of being clinically depressed as "feeling sad for no reason", or "having no motivation to do anything." A person suffering from depression may feel tired, sad, irritable, lazy, unmotivated, and apathetic. Clinical depression is generally acknowledged to be more serious than normal depressed feelings. It often leads to constant negative thinking and sometimes substance abuse(4). Extreme depression can culminate in its sufferers attempting or committing suicide. Without careful assessment, delirium can easily be confused with depression and a number of other psychiatric disorders (5) because many of the signs and symptoms are conditions present in depression, as well as other mental illnesses including dementia and psychosis

Stress

Stress can be defined as the way you feel when you're under too much pressure. Research suggests that a moderate amount of pressure can be positive, making us more alert, helping to keep us motivated, and making us perform better. However, too much pressure, or prolonged pressure, can lead to stress(6). Stress can cause illness and physical and emotional problems(7,8,9). Research has shown that around 12 million adults see their GP with mental health problems each year. Most of these suffer from anxiety and depression, much of it stress-related. In everyday life we are subjected to a wide range of pressures. We also have a wide range of resources and strategies for coping with pressure. Sometimes we will cope well and will not feel that the pressure is having any adverse effect upon us. At other times we will have difficulty in dealing with the situation and that is when we may use the term "stress". In reality, any situation that puts us under pressure is technically "stressful". Stress is not necessarily unpleasant or harmful. When we are able to cope satisfactorily with the stress and find it to be positive in its effect, we tend to use other words - such as "stimulation" or "challenge". For the purpose of this introduction, we will use the term "stress" to mean the reaction we have to those pressures which are harmful, unpleasant or disabling.

Special Children

The Children who are have poor and insufficient development of Mental functions, including control over their body movement, their intelligence, Social interaction and language, from birth or early childhood. These kinds of children in early days they are called Mental retarded children. Recently professional using the term Special Children.

Problem of Parents of Special children

The term Special Children denoted the children who are all having poor and insufficient development of Mental functioning. The Parents who are all having these kind of

Children are called Parents of Special Children. They are having more problems like Economical Problems, Social Status, Psychological Problems, Care giving (Maintaining Problems).

Significance of the Study

The present study would be beneficial to a great extent in Schools, Colleges, Organizations, Hospitals, families etc., in the terms of the demand of various courses, careers, placements, promotions, health status checkups, occupation etc., This study assessed by the trained psychologists would be an authentic source to promote self-evaluation of Parents of Special Children. This study would give a brief sketch of the psychological problems of parents of Special children, which would be immense help to the society as large for others in the following ways:

- To reduce psychological problems related to Anxiety, Depression and Stress.
- To aid Parents of Special Children to cope up with society
- To help Parents of Special Children to develop themselves in Parenting style

Need for the study

The present study is necessary to understanding the problems of the parent of special children, since it is needed in many schools, institutions, organizations, hospitals and social work communities for understanding the Special Children's problems and promoting the welfare of the Parents.

The study on Anxiety, Depression and Stress on the Parents of Special Children and the forgoing discussions and narration and review of literature that follows, it is inferred that not may such researches have been conducted on presenting a global picture of a parents of special children and their related problems.

In viewing of the magnitude of problems faced by the Special Children's Parents community, it is felt that, the study on parent of special children would go a long way in assessing psychological problems and more to handle them effectively. In addition to some suggestion and certain remedial and preventing measures can also be suggested.

2. Methodology

This study is a quasi experimental study which explore the association of Anxiety, Depression and Stress among parents of special children. The purpose of this study to provide baseline data and context formulating a more precise hypothesis. The study by design is Quasi - experimental in nature as it examines the impact of psychological intervention provided on need to the Parents of Special Children who are defined as those with Anxiety, Depression and Stress disorders. One-Group, Pre and Posttest design was adopted to test the effects of the treatment judged by the difference between the pre-test and the post-test scores.

Sample population and Size

Fathers and Mothers of special children were selected using purposive sampling technique. The samples were randomly selected from various places from Chennai city. The sample

size consisted of 30 Fathers and 30 Mothers of Special Children.

Three tools were used for this study which are State Trait anxiety inventory by Spielberg (1966), Becks Depression scale(1961) and Latha's stress questionnaire (1988) to measure Anxiety, Depression and Stress.

Study process

Phase I: Pre-Test

In the preliminary session, an attempt was made to establish rapport with the participant. It was ensured by the investigator that trust and confidence is built in the groups. The objective of the study were informed to the samples and was assured that the study findings would be used for research purposes only and will be kept strictly confidential. After the preliminary session, the pre test was carried out in the following manner.

In pre test, data was collected in 3 sessions. A personal data sheet was given first to collect the demographic details. Each sessions and associated tests took an approximate duration of 20 minutes approximately each. Assessment of the Anxiety, Depression and Stress among the parents of special children were done by collecting the data with the help of Standardized questionnaires.

Phase II: Psychological Intervention

Based on the indication of the Anxiety, Depression and Stress of the special children's parents, the need based psychological intervention was given to the subjects to reduce the Anxiety, Depression and Stress. The interventions were given to subjects in two stages. (1) Relaxation techniques (2) Need based counseling and related interventions.

Statistical Analysis

To explore the interrelationship among Anxiety, Depression and Stress, the Correlation Matrix was carried out using Statistical Package for Social Sciences (SPSS). To determine the mean difference between the sample student 't' test was used. To find out the reduction in Anxiety, Depression and Stress of Parents of Special Children after the after the psychological intervention Paired't' test was used.

3. Results

Table 1 shows the results of difference between mothers and father's of special children in terms of State-Anxiety, Trait-Anxiety, Depression and stress. This was tested during the pre intervention period which shows that there was a significant difference between fathers and mothers in the level of state anxiety (5.1 difference with p value:2.81) and trait anxiety (4.2 difference with p value 2.4).But the difference in terms of depression (3.2 difference p value 1.35) and stress (1.8 difference p value 1.25) was non significant.

Table 2 shows the results of difference in levels of State-Anxiety, Trait-Anxiety, Depression and stress among father's of special children between the pre intervention and post intervention period. There was a significant 5.1%

reduction of in state anxiety (p value 3.49) 5% reduction of trait anxiety(p value 3.08) and 1.8% reduction of stress (p value 3.80) between pre and post intervention period.

Table 3 shows the results of difference in levels of State-Anxiety, Trait-Anxiety, Depression and stress among mother's of special children between the pre intervention and post intervention period. There was a significant 1% reduction of in state anxiety (p value 3.21), 0.5% reduction of trait anxiety (p value 2.90), 1% reduction in depression (p value-4.48) and 1% reduction of stress (p value 5.21) between pre and post intervention period.

4. Discussion

From Table - 1, it seen that there is no significant relationship among Anxiety, Depression and Stress. This finding endorses the previous research studies by Weissman et al. (1984). Who provided and extensive meta-analysis of Depression and Anxiety correlations.

The results highlight that in general Mothers of Special Children have more Anxiety than fathers which has been noted in other studies widely(10,11). This difference may be due to the reason that the Mothers are more emotionally attached to their children than Father. Indian Women who spend more time with their children due to their socio economic and cultural reasons were tend to experience more anxiety than their spouse. Another plausible biological reason could be that, women might have bio chemical imbalances, like lack of Vitamins, such as 'B' Vitamins that include foliate and niacin may which play a part in Anxiety(12).

Results after intervention shows that there is a higher and significant reduction (almost 5%) among father of special children in terms of trait anxiety and state anxiety. It was also noted that the level of anxiety had minimal reduction among women though it was significant. The reasons could be that women who are more emotionally attached to their children and who spend more time with their special children must have strong causative factors for anxiety than men who spend considerably less time with their children (13,14). Also the social in interaction of men is usually higher for men than women in the Indian context, where men enjoy more social network connections and participate in social events and gathering which would help in venting out the anxiety related feelings (15)

Also in general men have shown to cope up with the anxiety than women, due to their ability to accept and change themselves to circumstances to problems. This could be understood from the conservative Indian set up where men enjoy more leading role in the family and consequent life experiences which positively mould them (15).

The difference in reduction of depression and stress among mother after intervention was very less though it was significant. This could be due to already explained fact that women have special and strong bond with their special children and have shown less impact. But this also highlights that psychological intervention is still a feasible option to address the anxiety, depression and stress among women,

This study calls for developing more tailored intervention specific for women which would be more intensive in approach and thus leads to increased reduction of their disorders.

Among men the difference in depression was not significant post intervention. There was less change in the stress level for men (1.8%) post intervention. But overall there is a higher impact of intervention for men than women which could be due to the gender specific factors and social factors which contextualize the family and social role of men in Indian society.

Our study is first of kind which have addressed and assessed the psychological disorders of mother and fathers of special children. Our study had opened up the possibilities of intervention for this section of people who so far have been un noticed in the psychological domain. More studies and intervention addressing the issues of the parents of the special children are the need of the hour.

References

[1] Mental retardation, Freed dictionary by Farlex. <http://medical-dictionary.thefreedictionary.com/mental+retardation>; Accessed 22 January 2017.

[2] Tredgold, A. F. (1937) A textbook of mental deficiency (6th ed.) Baltimore: Wood, 1937.

[3] Anxiety disorder, Anxiety and Depression Association of America. Available at <https://www.adaa.org/about-adaa/press-room/facts-statistics>; Accessed on 22 January 2017

[4] Wayne, J Katon (2003) Clinical and health services relationships between major depression, depressive symptoms, and general medical illness. *Biological Psychiatry Volume 54, Issue 3, 1 August 2003, Pages 216-226.*

[5] Mental disorder, Wikipedia. Available at https://en.wikipedia.org/wiki/Mental_disorder; Accessed 9 January 2017.

[6] Sapolsky, Robert M. (2004). Why Zebras Don't Get Ulcers. 175 Fifth Ave, New York, N.Y.: St. Martins Press. pp. 37, 71, 92, 271. ISBN 978-0-8050-7369-0

[7] Dohrenwend, Barbara snell, Dohrenwend and Bruce p (1978) Some issues in research on stressful life events. *Journal of Nervous & Mental Disease: January 1978*

[8] Stress effects on body, American Psychological Association. Available at <http://www.apa.org/helpcenter/stress-body.aspx>; Accessed 10 February 2017

[9] Stress, Mental health foundation. Available at <https://www.mentalhealth.org.uk/a-to-z/s/stress>; Accessed 10 February 2017

[10] Omar A Al-Farsi, Yahya M Al-Farsi, Marwan M Al-Sharbati, and Samir Al-Adawi (2016) Stress, anxiety, and depression among parents of children with autism spectrum disorder in Oman: a case-control study. *J Neuropsychiatr Dis Treat. 2016; 12: 1943-1951. [PMC]*

[11] Gillian N. Penny, Paul Bennett, Mike Herbert (1994) *Health Psychology: A Lifespan Perspective.* book Page 36.

[12] Stacey Cornish and Lewis Mehl-Madrona (2008) The Role of Vitamins and Minerals in Psychiatry *Integr Med Insights.* 2008; 3: 33-42.

[13] Stacey Cornish and Lewis Mehl-Madrona (2008) The Role of Vitamins and Minerals in Psychiatry *Integr Med Insights.* 2008; 3: 33-42.

[14] Annette Estes, Jeffrey Munson, Geraldine Dawson, Elizabeth Koehler, Xiao-Hua Zhou, Robert Abbott (2009) Parenting stress and psychological functioning among mothers of preschool children with autism and developmental delay, *journal Autism.* 2009 Jul; 13(4): 375-387. (PMC)

[15] Anxious, the conversation. Available at <http://theconversation.com/women-are-far-more-anxious-than-men-heres-the-science-0458>; Accessed 21 February 2017.

Table 1

		State-Anxiety		Trait-Anxiety		Depression		Stress	
pre test	Fathers	40.7	2.81*	41.1	2.42*	32.6	1.35NS	26.6	1.25NS
	Mothers	45.8		45.3		29.4		24.8	

Table 2

		State-Anxiety		Trait-Anxiety		Depression		Stress	
pre test	Fathers	40.7	3.49*	41.1	3.08*	32.6	0.91 Ns	26.6	3.80*
Post test	Fathers	35.6		36.1		31.8		24.8	

Table 3

		State-Anxiety		Trait-Anxiety		Depression		Stress	
pre test	Mother	45.8	3.21*	45.3	2.90*	29.4	4.48**	24.8	5.21**
Post test	mother	45.0		44.8		28.5		23.9	