

Efficacy of Dhyana and Jacobson Progressive Muscle Relaxation Therapy on Anxiety and Thought Control of Parents of Differently Abled Children

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Abstract

Numerous researchers have elicited positive relationships between discrete psychotherapies and the mental health of parents of differently abled children, but there exists a significant paucity on integrated therapeutic interventions over their mental health. In this present study the efficacy of an integrated intervention program comprised of Dhyana (non-directive meditation) and Jacobson Progressive Muscle Relaxation Therapy (JPMRT) on anxiety and thought control of parents of differently abled children by intellectual has been examined. The study targeted 30 parents of intellectual differently abled children, 15 parents for pre - post experiment group and 15 parents for control group. Both groups were assessed before and after intervention by Beck Anxiety Inventory (BAI) and Thought Control Questionnaire (TCQ). Intervention program was conducted daily one hour for five days per week for one month. The intervention program was carried only on experimental group. The data was statistically analyzed by paired t-test for the assessment of efficacy of therapy and F- test for the homogeneity of experimental and control groups. The result reveals that the intervention program consisted of Dhyana (non- directive meditation) and Jacobson Progressive Muscle Relaxation Therapy (JPMRT) was significantly effective on reducing anxiety features and improve thought control of parents of differently abled children by intellectual.

Keywords: Dhyana, Jacobson Progressive Muscle Relaxation Therapy, Anxiety, Thought Control, Parents of children with Differently abled.

Intellectual disability is not an explicit medical disorder, rather it is an umbrella term which covers various dysfunctions of an individual with below average intellectual functioning (IQ below 70), that confines their ability to cope with normal daily functions as well as social interactions (ICD, 10). Prevalence of intellectual disability is 3% all over the world. Among this prevalence 75% of children are having mild intellectual disabilities with IQ ranges from 69 to 50 and 25% of rest children are having moderate to profound intellectual disabilities with IQ ranges from 49 and below

(Gohel, et al, 2011). In Indian context, several inter-intra issues including mental health hygiene among family members are stirred due to the presence of a differently abled children. This often demands reorientations, reevaluations of family goal and often raises disputes among family members (Majumdar, et al 2005). Beck (2011), due to these frequent unfavorable situational exposures, the parent's cognition can get distorted and anxiety, an apprehension without known reason and obsessive thoughts which can be defined as uncontrolled, repetitive and unpleasant thoughts (ICD,10) can be learned

sub consciously. Researches have elicited high rates of mental illness morbidity among parents with children with different abilities out of them 10–44% of people suffer from depression and anxiety (W.H.O, 2001). The positive impact by relaxation therapy, mindfulness and various meditational procedures over stress management, insomnia and anxiety of parents of children with different developmental disorders have being focused by various researchers, (Abbaz, 2013 & Jon, 2011). Several discrete interventions which comprise of cognitive therapy, behavioral therapy, relaxation therapy etc. ascertained positive correlation in the reduction of anxiety level among parents of children with developmental disorders. Still there exists a significant paucity of integrated interventions which augment positive mental health of parents of differently abled children. An attempt is made in this study to ascertain the efficacy of an integrated intervention consists of Dhyana and Jacobson Progressive Muscle Relaxation Therapy on anxiety level and thought control of parents of differently abled children.

OBJECTIVES

To study the prevalence of anxiety level among the parents of differently abled children.

To ascertain the efficacy of Dhyana and Jacobson Progressive Muscle Relaxation Therapy on anxiety and thought control of parents of differently abled children.

HYPOTHESES

Following null hypotheses were framed to study the objectives.

H_0 1: The prevalence of anxiety level is low among parents of differently abled children.

H_0 2: There is no significant difference between experimental and control groups after integrated therapy based on

anxiety and thought control of parents of differently abled children.

RESEARCH METHODOLOGY

Variables studied

Independent Variables studied were parents of differently abled children.

Dependent Variables studied were,

Anxiety: An irrational fear for no adequate reason (Casey & Kelly, 2007) and Thought Control: The effectiveness of strategies used for the control of unpleasant and unwanted thoughts. Intrusive and subjectively uncontrollable thoughts are a central feature of numerous anxiety disorders such as obsessive-compulsive disorder, generalized anxiety disorder and post-traumatic disorder (Wells & Davies, 1994).

Sample

In this cross-sectional, pre-post experimental study, non-probability Purposive Sampling method was used to collect data from a total sample size of 30 parents (N=30) of intellectual differently abled children, 15 parents for pre - post experimental group and 15 parents for control group having age between 35 and 45 years with secondary education at least up to 10th standard.

Inclusion criteria was parents of children diagnosed as intellectually disabled as per ICD-10 criteria.

Tools

Beck Anxiety Inventory (BAI) (Beck, et al. 1988) has been administrated to detect the level of anxiety among parents. The inventory consists of 21 items, each item is on a four-point Likert scale ranging from 0 (not at all) to 3 (severely it bothered me a lot). A total score ranging between 0-21 indicates very low anxiety, 22-35 indicates moderate anxiety and above score of 36 indicates a potential cause for concern. Authors report excellent internal consistency (Cronbach's alpha = .92) and reliability (.75).

Thought Control Questionnaire (TCQ) (Wells & Davies,1994) is a 30 items questionnaire. Items are scored on a four-point Likert scale ranging from 1 (never) to 4 (almost always) to assess the effectiveness of strategies used for the control of unpleasant and unwanted thoughts. The TCQ measures five factors that correspond to different strategies for controlling unwanted thoughts, viz: Distraction, Social Control, Worry, Punishment and Re-appraisal. Reliability and internal consistency reported as .83 and .79 respectively by the authors.

Method

Integrated Intervention Program:

After the completion of Consent form for both groups BAI and TCQ have been administrated as pre-test for both groups. Intervention program was conducted daily one hour for five days per week for one month for experimental group. After the completion of intervention both the groups have been administrated with BAI and TCQ as post-test assessment. Dhyana (non-directive meditation) and JPMRT intervention program followed as per following:

Jacobson Progressive Muscle Relaxation Therapy, (JPMRT), Jacobson, E. (1929 & 1938).

JPMRT have been applied to experimental group for 25-30 minutes per day. Individuals were instructed to keep their eyes closed, be calm and comfort, avoid stray thoughts and unnecessary movements. Relaxation process followed the laid down standard format of JPMRT with a muscle tensing time for 05 seconds and followed by an immediate release of muscle and feel the relaxed muscle for 10 seconds. The therapy followed the following muscle pattern with a final relaxation for whole body for 2 minutes. Hands ->> Arms ->> Facial Muscles (eye brows, eyes, jaws, tongue) -

>> Neck & Shoulder ->> Chest ->> Stomach ->> Back ->> Thighs & Buttocks ->> Lower legs ->> Toes ->> Full relax (2 minutes).

Dhyana (non-directive meditation) (Satyananda,2002 & Jon, 2011).

A blended intervention of Dhyana / meditation from yoga as well as mindfulness was given to the experimental groups for the first 03 weeks of intervention and trained for positive self-imagery by visualizing a natural scene for last week, each session consisted of 15 – 20 minutes emphasizing the following. Group were motivated to continue the Dhyana even if disturbed by the intrusion of external thoughts.

- Yoga (Dyanam / Meditation) by focusing on breathing.
- Living in the present (scenario)
- Feeling the positive energy & implementing
- Continuing the practice
- Study to feel the change & believe on the process.

Statistical Analysis

Descriptive and inferential statics used for analyzing data is as follows. The statistical package for social sciences (SPSS), version 17.0 was used for the analysis of the data.

• **Descriptive Statistics**

Descriptive statistics: Mean, standard deviation and Normal Probability Curve (NPC).

• **Inferential Statistics**

Besides descriptive analysis, paired t- test and ANOVA have been used to check hypotheses. Statistical test used was two-tailed at 0.05 level of significant.

RESULTS

Table 01 & Figure 01 reveals the overall mean of total score of anxiety in the total population and was 34.63, with a SD of 4.72 which falls in the range of moderate anxiety. So, the null hypothesis H_01 is rejected. The prevalence of

anxiety level is moderate among parents of differently abled children.

Table 01: Anxiety score among parents of differently abled children.

Anxiety Score	N	Mean	Std. Deviation
Somatic complaints	30	34.63	4.72

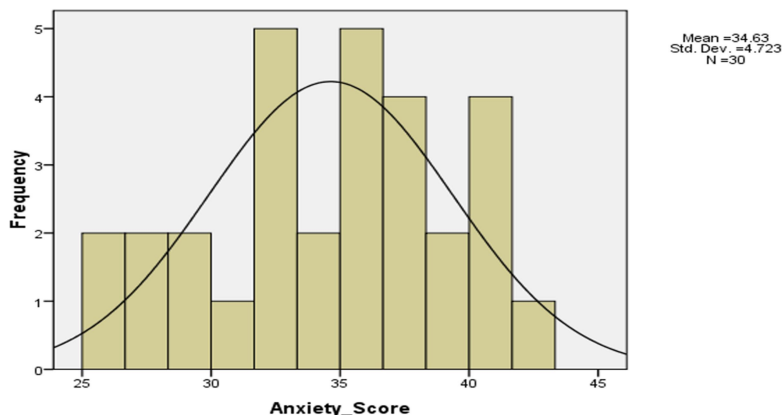


Table 02 reveals score and Thought between both gro

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Variables	Groups	N	Mean	Std. Deviation	F Value	Sig
Anxiety	Exp	15	34.80	3.629	.036	.851
	Control	15	34.47	5.743		
Distraction	Exp	15	10.33	1.113	.000	1.000
	Control	15	10.33	.976		
Social Control	Exp	15	9.20	1.699	.315	.579
	Control	15	9.53	1.552		
Worry	Exp	15	8.67	1.447	.022	.884
	Control	15	8.60	.986		
Punishment	Exp	15	9.27	.884	.470	.499
	Control	15	9.07	.704		
Re-appraisal	Exp	15	9.67	.724	.918	.346
	Control	15	9.93	.799		
Thought Control Total Score	Exp	15	47.13	2.669	.135	.717
	Control	15	47.47	2.295		

Table 03 shows the difference in mean between pre and post intervention among experimental group-based anxiety score and Thought control scores. Table reveals the mean score of anxiety decrease significantly to a mild level from moderate level after the intervention. Table further reveals a significant increase in total thought control as well as in controlling strategies on distraction and worry, among experimental group.

Table 03: t-values of Experimental group before and after intervention

Variables	Groups	N	Mean	Std. Deviation	t Value	Sig
Anxiety	Before	15	34.8	3.625	10.753	.000*
	After	15	25.87	3.224		
Distraction	Before	15	10.33	1.112	-5.551	.000*

	After	15	11.6	1.05		
Social Control	Before	15	9.20	1.693	-1.101	.290
	After	15	9.67	1.345		
Worry	Before	15	8.67	1.443	-2.827	.013**
	After	15	9.53	.836		
Punishment	Before	15	9.27	.884	.367	.719
	After	15	9.20	.775		
Re-appraisal	Before	15	9.67	.724	2.103	.054
	After	15	9.27	.704		
Thought Control Total Score	Before	15	47.13	2.669	-2.899	.012**
	After	15	49.27	1.907		

* $p < .01$ (two-tailed), ** $p < .05$ (two-tailed)

Table 04 reveals the homogeneity of variance between control and experimental groups based on anxiety and thought control after the intervention. The table reveals significant decrease of mean score among experimental group based on anxiety ($F(1,28) = 23.801, p < .01$) and increase in distraction control ($F(1,28)=4.027, p<.05$), worry control ($F(1,28) = 15.562, p < .01$) and total thought control ($F(1,28) = 8.656, p < .01$). Hence, the null hypothesis $H_0 2$ is rejected, there is significant difference between experimental and control groups after integrated therapy based on anxiety and thought control of parents of differently abled children.

Table 04: Homogeneity of variance between experimental and control groups after-intervention

Variables	Groups	N	Mean	Std. Deviation	F Value	Sig
Anxiety	Exp	15	25.87	3.226	23.801	.000*
	Control	15	32.80	4.459		
Distraction	Exp	15	11.60	1.056	4.027	.055**
	Control	15	10.53	1.767		
Social Control	Exp	15	9.67	1.345	.577	.454
	Control	15	10.07	1.534		
Worry	Exp	15	9.53	.834	15.562	.000*
	Control	15	8.40	.737		
Punishment	Exp	15	9.20	.775	1.287	.266
	Control	15	8.87	.834		
Re-appraisal	Exp	15	9.27	.704	.560	.461
	Control	15	9.53	1.187		
Thought Control Total Score	Exp	15	49.27	1.907	8.656	.006*
	Control	15	47.40	1.549		

* $p < .01$ (two-tailed), ** $p < .05$ (two-tailed)

The result reveals a prevalence of moderate anxiety among parents of differently abled children. The results also revealed a significant effect by integrated intervention consists of Dhyana and Jacobson progressive muscle relaxation therapy on anxiety and thought

control of parents of differently abled children. As per the Stress-diathesis model the environmental factors along with the personality vulnerability accounts for the mental hygienic of individuals (Sigelman & Rider, 2009). Lazarus & Folkman (1984) argue that when individual

coping with stress is provided with resources, will show less vulnerability to stress. Enormous researches pertaining physiology of brain and various dysfunctions, have proved the efficacy of Dhyana on modulation of electrical pulses in the brain. These electrical pulses which enables the transmission between neurons are responsible for the observational behaviours including affective as well as functional (Bryan & Ian 2009). Among these electrical pulses or waves viz: Alpha, Beta, Delta, Theta; Alpha and Theta waves are considered as the one which is responsible for the concentration, relaxation and overall health issues. Increasing of these two brain waves enhance relaxation and reduce stress, anxiety, hyper activities and help to increase attention as well as concentration (Kaur & Singh 2015). In relaxation therapy an individual monitor as well as learns to contraction and relaxation to a group of muscles which in turns reduce the sympatric and enhancing para sympatric neural activity and lowering the increased involuntary bodily functions such as heartbeat, hypertension and

change brain wave patterns (Ahmadvand, 2007). Relaxation therapies can enhance an individual in three domains physical, mental and social. An integrated therapy consisting of Dhyana and relaxation, involuntary teaches an individual to monitor, focus, sustain attention and concentration and control their thoughts. Integrated or eclectic therapies always attested significant improvement on mental health of individuals than discrete therapies.

CONCLUSION & RECOMMENDATIONS

Current study findings are concurrent with the existing research findings and can be used retrospectively for ensuring psychological intervention to improve mental health of parents of differently abled children. Integrated therapies can benefit individual than discrete therapies. Psycho education pertaining Yoga and its positive correlation with mental health of individuals must be discoursed with the help of involvement by multi professionals and organizations.

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