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Effectiveness of Guided Mastery Treatment for Reducing Test – Anxiety among Self-Efficacious Students

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The main goal of the present study to examine the effectiveness of guided mastery treatment for reducing the test-anxiety in high and low self-efficacious students studying in various senior secondary schools of Shimla town in H.P (India). Beside this, an effort has also been made to examine test-anxiety and effectiveness of guided mastery treatment on both scheduled castes and non-scheduled caste students in relation to high and low in self-efficacy. For this a final sample of n = 240 (120 SC + 120 NSC) were selected from a preliminary sample of N = 2000 students. The criterion of selection in the final sample was considered as M ± 1SD of the obtained score of General Self-efficacy Scale of Hindi version and Test Anxiety Inventory Hindi version. The result revealed that there were no significant difference in respect of test-anxiety and guided mastery intervention in both the categories under study. In nutshell, the guided mastery treatment was not found effective for eliminating test anxiety.

Keywords: Guided Mastery Treatment, Anxiety, Self-Efficacy

In India and Pakistan the caste system is rooted in Hindu religion as well as Mohammedan, Buddhism and Christian doctrine while in United States it is based on physical discrimination (Boek & Boek, 1956). Despite decades of efforts to alter mind set the prejudices remained entrenched and have become even more ferocious (Dirk, 2007). Its example can be taken from recent report of Amar Ujaala where Gatade (2007) wrote that there occurs discrimination even with literate dalit people in higher education, work setting and organization. Poverty seems to be prevalent in such discrimination which involves complex phenomenon that is not related to income but also with social, political and environmental factor (Joseph, 2007). The discriminated students belonging to poor families and low caste and low income group who experiences higher anxiety as well as test anxiety that has its serious repercussion on their mental health. Students with higher socioeconomic status perform better and achieve well in test taking situation as compared to their counterpart low socioeconomic status students (Zinta & Tiwari, 2006). They become poor achiever due to heightened and elevated anxiety that impose threat to the students and corrodes their mind as well as body. The students with such segments experiences unpleasant emotional state and are highly involve in tension, apprehension, worry, and nervousness due to activation of autonomic nervous system. Some student's shows stable personality disposition and reflects individual differences in anxiety proneness. Such state or trait anxiety can further be sub-divided into domain-specific anxieties such as social anxiety, sports anxiety, test-anxiety, and mathematics anxiety (Sharma, 2002).

The concept of test-anxiety tends to reverberate in people's innermost beings and has received global attention because; most kinds of behavior in one's life are akin to test taking situations. It is either a state or trait

anxiety that involves examination experience as well as phenomenological, physiological and behavioral responses thereby reflects possibilities of failures. The test-anxiety have two components namely worry (cognitive concerns about one's performance, about the consequences of failure) and emotionality (self-perceived arousal or autonomic reactions e.g. muscle tension or sweaty palm) etc. The test-anxiety theory recognizes that emotional or autonomic reactions occur in evaluative situations. It is worry, rather than emotionality that has been found to be the most responsible for poor performance in test taking situation (Sud, 2001, Sud & Prabha, 2004). The person with high anxieties experiences both the above component and shows weak competence expectancies interpret physical arousal, blood pressure, respiration, and high muscle tone, feel more responsible for failures than success. They experience threat, loss perception in higher degree, poor study skills, and negative non-productive attitude toward academic work as compared to the low test anxious (Sharma, 2002). In the word of Wine (1980), such person's show their current concerns and generate varieties of self-statement those are self-denigrating and self-deprecatory in nature. A number of prominent researchers from diverse cultures agree that the genesis of test-anxiety lies in parent-child interaction and childhood family environment. It develops as a result of overly strict upbringing practices, parent's unrealistic expectations towards child's performance level, sustained negative feedback, punitive behavior and particularly in a performance evaluation situation (Sharma & Sud, 1990). Such practices are observed in low socioeconomic status person as well as in disadvantaged segments who dominate their children by generalizing their own anger and helplessness to them.

So, it is important to explore multifarious antecedent of test anxiety that causes detrimental functioning and poor mental health. Poverty and undernourishment is a widespread malaise in India among lower socio-economic status people , is one of the important antecedents that results socio-cultural and economic deprivation and debilitate cognitive, motivational and educational processes (Misra, 1990) and aggravate anxiety. This low socio-economy and low incomes result discrimination (overt and covert) that is directly associated with test-anxiety and lower achievement in evaluative situation. There exists overt and covert discrimination towards members of various groups in all over the countries. It has been well researched that the deprivation and discrimination from social stimulation can leads to mental disorganization (Katz & Kahn, 1970) as well as hinder test taking situation of the students. Asthana (2005) found that low socioeconomic status could bring alienation that encompasses the feeling like uneasiness, discomfort, exclusion from social and cultural participation, breaking value, norms, roles etc. can have also its relations to the test taking situations.

Another antecedent of poor performance among the test anxious students can be excessive religious beliefs of the people in devi and devta. It has been observed in certain communities in the rural areas that their mind has been conditioned by the elite people in believing in devi and devta. Some rural people expend too much from their earning to please their devi devta in the form of presenting goats, depositing money for celebrating fairs and festivals by debarring their sons and daughters even from the basic amenities like food, clothes and shelters and involves too much in religious affairs. Although Ranta and Pirta (2007) found divine factors (devtas & deities) useful in promoting physical and psychological well being of the people yet does not seems to be fair for all the segments of the societies. Although blind beliefs in all segments are there yet the educated people feels suffocations in the beliefs of devis and devta. Its example is the

customs of upper Shimla districts where the upper caste people do not allowed lower caste people to touch their temple and devta as well as don't allow them. Such lower segments people are being utilized by them on petty services e.g. picking up their luggage, heavy pots etc., beating drums as well as using them as a servant or working in the field. Such rudimentary customs traditions have its serious repercussion on mental health. Such exploited person perhaps need humanitarian treatment as was suggested by Loveleen and Zinta, 2006 while studying mental retardation in the client for recording the change in behavior.

Misra and Tripathi (1977) empirically identified two factors named as physico-economic and experimental that are related to cognitive and motivational level in performance during testing situations. Most anxiety theorist imputes attention as a culprit in the performance interface. Some theorists considers self-preoccupation and ego focused thoughts in reducing the attention capacity requisite for solving the task at hand (Sharma & Sud, 1989). The learning deficit model attributes such disturbances on academic performance to study skills deficit and poor test taking skills. The contents of such self-related cognition are now considered important for possible interventions. Various interventions like Cognitive Behavior Modification (CBM) rational emotive therapy, yoga, systematic desensitization, emotionally focused treatments, relaxation, biofeedback, study skills training, and multifaceted treatment are found useful in reducing anxiety and test anxiety (Broota and Sanghvi, 1994). The cognitively focused treatments are found consistently successful in reducing test anxiety and its worry and emotionality components. Various eminent scholars found the guided mastery intervention useful for reducing phobia ((Mattick & Peters, 1989; Williams & Zane, 1997; Zane & Williams, 1993) but not for test anxiety (Zinta, 2006). So in the present study its effectiveness has been further explored for reducing test anxiety of the secondary students and increasing their self-efficacy because there can be error in earlier finding while administering the test.

Method

Sample:

The data were collected on a preliminary sample of n = 2000 students studying in various senior secondary schools of Shimla town in Himachal Pradesh (India). These students were given Sud (2002) Hindi Version Self-efficacy Scale as well as Sharma, Sud, & Spielberger (1983) Test Anxiety Inventory to fill in up in order to identify the students in high and low in self-efficacy as well as high and low test-anxiety groups. The criterion for the selection of the subjects in the high and low self-efficacy was Mean ± 1SD on the obtained score of both the scales. So in all there were 240 subjects (120 SC + 120 General) who were put into eight groups with n =30 subject in each group on the basis of their castes. Both the groups received intervention in the form of guided mastery for knowing its effectiveness in reducing the test anxiety and increasing the self-efficacy.

Measures:

General Self-efficacy Scale-Hindi version (GSE-H): Jerusalem and Schwarzer in 1992 translated the German language General Self-efficacy Scale into English, and Sud (2002) in Hindi, was used in the present study. Earlier it involves 20 items while at present has only10 items that is very relevant and its psychometric precision has been tested in 25 countries (Dona, Scholz, Sud & Schwarzer, 2002). It yield internal consistency between alpha .75 and .91 respectively and its reliability ranges from 0.47 to 0.63 for male and female subjects. In India, Sud (2002) apply this scales at Shimla town in (India) on a sample of 398 undergraduate (217 females

+ 181 males) and found internal consistency of .77 for females, .72 for males and .75 for the total sample. This measure was used to test the students in order to identify them in high and low level. The self-efficacy can be measured with an index of standardized score reflecting responses to all the items. It utilizes four-point scale that yields minimum score of 10 and a maximum of 40.

Test Anxiety Inventory-Hindi version (TAI-H): The Test anxiety Inventory Sharma, Sud and Spielberger (1983) developed Hindi version has emerged as an operational measure of test-anxiety. It has strong psychometric properties and factor structure (W & E) have been amply demonstrated not only in its original English form but also on around two-dozen other languages including Hindi (Sharma, 2002). It has generated a lot of relevant research across Cultures or Nations and has published in seven volumes of Advances in Test Anxiety. It has 20 items in all, utilizes four point scales. Its score ranges from minimum 20 to a maximum of 80. The composite score is the sum of both the sub-tests (worry and emotionality). It is a highly reliable and valid instrument in terms of psychometric precision and is very well known mostly by all the psychologists across cultures.

Short-term Intervention: The short term intervention was devised in the form of guided mastery treatment that is derived from the social cognitive theory (Bandura, 1988; Cervone & Williams, 1992) and its component, the self-efficacy theory (William, 1996). It is a performance-based approach that is used in removing disability and distress experienced by the people after losing their sense of self-efficacy or confidence in dealing with the problem.

Development of Guided Mastery Task: It was developed by Zinta (2006) in which 100 different anagrams were graded in terms of difficulty level and finally 20 anagrams were selected. These anagrams comprises of three, four and five letter words. These 20 anagrams were given to solve to the subjects during counseling session. While solving the anagram where the subject showed and felt helplessness, distraction and inability they were guided, encouraged and persuaded as well as given positive and negative feedback in order to increase their efficacy and decrease their anxiety.

Results

Table 1 Mean, SD and Coefficient of variation at pre and post treatment level in self-efficacy and test anxiety at experimental and comparison conditions

Name of Groups	Pre. Inter	SD	CV%	Post Inter.	SD	CV%	Mean of Pre & Post
1. HSE-HTA-(SC)	59.13	5.34	9.03	52.07	8.17	15.70	55.60
2. LSE-HTA- (SC)	63.13	10.42	16.51	48.53	13.43	25.61	55.83
3. HSE-LTA- (SC)	40.13	6.65	10.71	43.87	10.71	24.41	42.00
4. LSE-LTA- (SC)	42.67	7.91	18.53	51.27	10.52	20.52	46.97
5. HSE-HTA- (NSC)	64.47	3.40	5.27	54.33	7.89	14.51	59.40
6. LSE-HTA-(NSC)	60.27	11.33	18.80	55.80	8.32	14.91	58.03
7. HSE-LTA- (NSC)	41.07	4.92	9.52	47.93	9.52	19.87	44.50
8. LSE-LTA- (NSC)	41.80	5.64	9.94	44.93	9.94	22.12	43.37
M	51.58			49.84			50.71

HSE- High self-efficacy; LSE - Low self-efficacy; HTA: High test anxiety; LTA: Low test anxiety;SD-Standard Deviation; CV- Coefficient of variation; Pre Inter: Pre intervention; Post Inter- Post Intervention; M-Mean

Discussion

Although there emerges a non-significant difference between experimental and comparison groups (p>.05) yet the Table–1 provide some valuable information about all the four groups. From the findings of Mean, Standard Deviation (SD), and coefficient of variation (CV%) as showed in Table–1 shows that there emerges non significant difference between experimental and comparison but at pre and post basis some groups showed some improvement in decreasing anxiety. From Table 1 it is quite clear that High self-efficacious-High Test anxious (HSE-HTA) SC's and Non SC's subjects at pre- and post counselling stages experiences almost similar level of anxiety. Despite this the Low self-efficacious high-test anxious (LSE-HTA) subjects with SC's and Non SC's category also experience almost similar level of anxiety at pre counselling stage but at post counselling stage the students with SC's category get much more benefit from the counselling. The subjects with high self-efficacy and low-test anxiety (HSE-LTA) in both SC'sand NSC's groups at pre-counselling stage experienced very less anxiety and at post counselling stage their anxiety level were found to be heightened by giving counselling.

Finally,the the low self-efficacious-Low test anxious (LSE-LTA) subjects belonging to SC's and NSC category students also reported almost equal level of anxiety at pre-counselling stage but at post counselling stage the level of anxiety increases in both the groups but the students belonging to scheduled caste groups experience much more heightened in the test anxiety and their score in test-anxiety increases after counselling. From the findings of ANOVA Repeated measure as shown in Table-2 is very clear that there emerges non significant difference ($p<0.05$) of the intervention guided mastery in reducing the anxiety of both scheduled and non scheduled caste students. It found to be ineffective for all the four groups with high and low level of self-efficacy and test anxiety. All the eight combination of self-efficacy and test anxiety in experimental and control group were statistically significant $F(239=21.005, p<0.01)$. It shows that the selection of the groups on the basis of $M \pm 1SD$ was the fair criterion for selection of the groups and the self-efficacy and test anxiety at pre and post counselling stage were also different. There was non-significant difference $F(239) = 1.22$, $p>0.05$ in both SC'sand Non-SC's students at pre and post counselling stages. The main effect of self-efficacy were statistically significant $F(239)=137.59$, $p< 0.01$) while the main effect of test anxiety showed non-significant difference $F(239)= 0.37$, $p> 0.01$). The interaction between pre and post in all the eight combination of self-efficacy and test anxiety $F(239)=7.352$, $p< 0.01$ as well as self-efficacy at pre and post $F(239)=43.62$, $p<0.01$ showed significant difference. Beside this all of the interaction effects proves to be non-significant.

The result of the studies does not support the findings of Katz & Kahn, 1970) that deprivation and discrimination leads to mental disorganization. It also does not match with the findings of Misra (1990) that poverty and undernourishment has its impact on cognitive, motivational and educational process. It rather goes in tune with the findings of Dash (1980) that the disadvantaged children had high level of boredom tolerance, remarkable vigilance and their tendency is going to be more positive (Sharma, 1975). Because there were no significant difference in the anxiety proneness and both experimental and comparison groups showed almost equal trend. Now some segments of scheduled caste students are realizing and actualizing their Self and are continuously performing well despite adverse circumstances. It does not mean that there is no discrimination, differentiation and

prejudices with disadvantaged section especially scheduled caste students. The beliefs are still prevalent as was found by Gatade and Dirk (2007). The prejudices has remained entrenched and become even more ferocious and its example can be observed from the recent writing of Dirk (2007) that literate dalit as well as their students are experiencing too much discrimination in educational, vocational and personal areas. The elite within the countries many times grab their rights and reservation including crushing their expectation and opportunities and produces thorn in front of their future. The suggestion is that India should produce new breed of elite one (Rastogi, 1995) to flourish who could see equality and unity in diversity and prevent it from hackneyed slogan and the danger to running many cliché.

Further the suggestion is that the study needs to maintain conducive environment during study, altruistic behavior of school Principals, Headmasters and staffs who sometime become obstacle during data collection as reported in this study. It has caused ineffectiveness of the counsellling the suggestion is that the counselling can be effective provided that facilitating testing condtions be provided to the students. Humanitarian approach as suggested by Loveleen and Zinta (2006) is required in order to reach at a consensus about changing behavior and labeling effectiveness and ineffectiveness of any interventions.

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