Review Article

Pre-exam Anxiety among students and its coping mechanism

Zulfiqar Ahmed

Department of Special Education, National University of Modern Languages, Islamabad Pakistan

Test anxiety is an arising issue of today's academia. Present research attempted to explore its hidden realities in view of types, causes, prevalence, impact and coping mechanism. Test anxiety and educational performance has an inverse relation. General prevalence has been estimated from 30 to 40 percent in all schools. Female students have more anxiety as compared to male students. Major causes arise from parental attitudes, expectations of high grades, admission in good institutions, job market, work load, lack of preparation, inappropriate test techniques and home-school maladjustment. This problem may be addressed through simulation, yoga, behavior modification, therapeutic approaches, guidance and counseling. Pharmacological measures are effective in severe symptoms only. (Rawal Med J 201;40: 233-236).

Key words: Test anxiety, yoga, cognitive behavior therapy (CBT), counseling, beta blockers.

INTRODUCTION

Phobia and anxiety are the terms which describe a condition in which human being involves in a conscious avoidance from a certain situation or object.[1] Examination phobia or anxiety is assumed as a source of purposeful dislike against different exams.[2] In such anxiety, a natural response to threat or emergent situations is provided, which results in arousal of physical symptoms and thought distortions. Exam stress is a pervasive problem for decision making of institutions, programs and admission sections.[3] In anxiety or stress situations, human organism's homeostasis perceive a threatening situations.[4]

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Test anxiety is estimated from 10 to 40 percent in all students.[4] Its effects are seen in physiological and cognitive sense and it is mainly related to thinking abilities and racing thoughts.[5] Phobic situation or cause is the basic factor to be addressed.[6] Study style, life style and nutritional problems are raising elements of exam phobia.[7] Factors relating to exam phobia limit our educational and personal life activities.[8] These are of individual's cognitive, somatic and behavioral responses which result in continuous thoughts about outcomes of exams.[9] Different yoga therapies and physical exercises through organized counseling programs are used as a tool to eliminate its effects and these can be arranged both at home and school.[10]

CONTEXT OF PROBLEM AND RELATED EVIDENCE

Test anxiety has different components, which are mainly associated with psychological, physical and environmental reasons. Worry and distress is related to cognitive component, autonomic arousal or emotionality which is a physiological response.[11] Another study investigated the major classifications of test anxiety as psychological, physical and behavioral.[12] Cognitive factor is called emotionality and its severity is mainly associated with physical systems and its results.[13] Physical symptoms occur as a result of irrational thinking about exam which makes student minds empty for final test.[13] Severity of test anxiety can be changed into generalized anxiety disorder, obsessive compulsive disorders, panic disorder, phobias, post traumatic disorder and social anxiety.[14] The two main types of test anxiety are worry and emotionality.[15] Concept of test anxiety is situation-specific also where in community events like sports, social work and public speaking it is judged by others.[15] Students with generalized anxiety and attention deficit problems are considered more prone to exam anxiety.[16]

During exams, severity of this problem becomes very high. In terminal exams of May-June or in final exams of schools and colleges such severity

increases automatically.[17] There are other potential sources of test anxiety like unfamiliarity with test subject, level of difficulty and use of test scores to make decisions. Some other causes of exam anxiety are lack of confidence, pre-determined high performance standards, low self-efficacy, low emotional stability and neuroticism.[17] Moreover, it increases due to classroom maladjustments, long and short term memory problems, attention deficits, retrieval of information, negative thoughts about tests and less test preparation. Likewise, inappropriate test taking techniques, test validity, time limit and testing environment are other prevailing issues.[18]

In current competitive world, extensive curricula, job tests and market needs further stimulate test anxiety.[18] There is a deep-soiled reason of test anxiety which is associated with the sense of punishment from parents or teachers therefore, minds of children work as empty skulls.[18] Such anxiety is also prevalent as need for admissions in reputed institutions and parental pressure for additional marks in colleges exams which sometimes results in suicidal decison.[19] Time related issues about long duration of exams, extensive course work, less exercise and awareness about anxiety reduction are additional causes.[19] Family patterns become sources of exam anxiety if home environment is non educational and conflicting. Over protection and negative family environment is also an adding factor.[19] Physical, mental and social aspects all determine causes and origin of test anxiety.[20] Lack of time management for exam preparation, rote memorization, studying whole night and having poor knowledge to take exam are other underlying causes.[20] Among a plethora of causes of exam anxiety quality of poor sleep has also been dominant.[21]

Prevalence of exam anxiety is estimated from 10 to 40 percent in all students of different schools.[22] Prevalence in elementary and secondary schools is estimated from 10 to 30 percent while rate in colleges and universities is comparatively high.[22] Another study revealed that more than 50 percent students suffer from exam stress no matter they are dull or intelligent.[23] Impacts of test anxiety are seen as headache, rapid heartbeat and nausea.[3] Studies indicate that test anxiety is associated with reduced student's progress while females have been found have more anxiety.[5,29] Impact of test anxiety also results in high school dropout.[6] Exam anxiety disturbs student's mental health before and after exam in view of academic achievement.[24] Higher level of test anxiety results into a lower test scores and there is an inverse relation of test anxiety and test performance.[24] Adverse exam stress can also result in metabolic syndrome, hypertension and infertility.[24] In view of negative effects, exam anxiety can be seen as anger, worry, dysfunctional memory, heartbeat, breathing, sweating, abdominal pain, nausea, over sleeping and absorption in television and games.[25] Students suffer from low self-esteem, constantly looking at time clock, pencil taping and giving worrying gestures.[24,25] Feelings for being evaluated for marks and continuously thinking about prospective results further reduces exam performance.[25] Other factors influencing student's health are disturbances in auto immune system with muscle and heartbeat, breathing rate, shaky legs, sleep disorders and tiredness etc.[25]

COPING MECHANISM

Though there are a lot of causes involved in acceleration of exam phobia but a variety of strategies have been devised by experts of educational and medical fields. Teachers can enhance test performance of students through study guides in prescribed contents and formats. Educational games and simulation test techniques can be fruitful in such conditions.[25.26] Other physical activities like engaging in positive self-talk, visualizing, choosing favorite items, taking deep breaths, relaxing muscles and help from parents is much helpful.[26] Relaxant and synthetic intervention techniques including eye movement desensitization (EMDR), cognitive behavior therapy (CBT), and acceptance based behavior therapy (ABBT) have been proved resentful.[26] There are other approaches like skill deficit method for study skills, test taking skills and mind based cognitive therapy (MBCT) on clinical basis to lessen its deterioration.[26,27] Behavioral modification techniques minimize test anxiety when cognitive test anxiety is very high.[27] In non-clinical interventions yoga has been an

effective strategy.[26,27]

Different studies indicated that despite of body conditioning, swimming and fencing yoga is helpful in short term reduction of anxiety.[26,27] Exam stress is a health problem and to cope with these stressors there are a plenty of cognitive and physical therapies which consists autogenic training (AT), relaxation response (RR) through sound prayer with muscle movement, bio-feedback training by therapists, guided image (GI) on written scripts and transcendental meditation (TM) through 20 minutes sound sequence by closing eyes in a deeply rested state.[28] Categorical measures have been proposed before, during and after test like well preparation before exam, reminding past successes, good night sleep, well prepared arrival, reduced unnecessary thoughts, calming practice, time management, good dinner or movie after test, conversation with teachers and adopting new techniques to decrease anxiety.[28] Result oriented time management, health care, regular sleep habits, deep breaths before exam, focusing on paper, developing systematic process to address questions and discussion with friends minimize these effects.[28,29] Yoga therapy has been much helpful in desensitization of exam phobia and stress in neurotic and psychosomatic disorders.[29]

Mental and physical preparation like physical relaxation, mediation and mindfulness about test can be helpful.[16] In view of social support network, students can seek help from parents, school psychologist, counselor, health professional, school nurse or family physician.[30,31] If level of test anxiety increases, then medication is last option which has temporary solutions.[31] Beta blocker as propranolol and anti-depressant like paroxetine, venlafaxine and sertaline have been approved by US Food and Drug Administration. However, they can be sedating and addictive.[31,32]

CONCLUSION

Test anxiety is a renowned phenomenon in reducing educational progress of institutions. It affects cognitive, physical and behavioral domains of student's life. Lack of coping strategies results in low performance and school dropout. To accomplish desired educational achievements test anxiety may be addressed through counseling, behavioral therapies, simulation techniques, yoga and medical rehabilitation.

Author email: suduzai333@hotmail.com
Conflict of Interest: None declared
Rec. Date: Dec 13, 2014 Accept Date: Feb 18, 2015

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