

Dysfunctional Career Thoughts, Achievement Motivation, and Test Anxiety among University Students[#]

Anup Sud & Sonu Kumar

Himachal Pradesh University Shimla India

Individuals with dysfunctional career thoughts, low achievement motivation and high test anxiety are related by characteristics having logical similarities, indicating that perhaps they are distinct but related constructs. However, due to the limited use of the term dysfunctional career thoughts in psychological literature, (more particularly in India), the evidence regarding the correlation among these variables is lacking. In an attempt to study the relation between these three variables, 160 students (Girls=80; Boys =80) of Himachal Pradesh University were approached. Since it is empirically, demonstrated that the two components of test anxiety, worry (the cognitive component) and emotionality (the affective component) show different and specific relationship with performance (Stober, 2004). In the present study information on both these components was also collected along with total test anxiety scores. Findings of the present research shows, emotionality component of test anxiety has emerged as most important variable for present sample, showing positive and significant relationship with dysfunctional career thoughts and negative and significant relationship with achievement motivation.

Keywords: dysfunctional career thoughts, students, achievement motivation, test anxiety

Cognitions have been generally recognized as important factor that affect individuals' career decision making process and overall vocational development (Keller, Briggs & Gysbers, 1982; Lustig & Strauser, 2000, 2003; Sampson, Peterson, Lenz, Reardon, & Saunders, 1996). When one's thinking about assumptions, attitude, beliefs, plans and strategies about one's career are negative, they are referred to as dysfunctional career thoughts.

Dysfunctional career thoughts have been characterized by career theorists as dysfunctional career beliefs (Krumboltz, 1990); dysfunctional cognitions (Corbishley & Yost, 1989); dysfunctional self-beliefs (Borders & Archadel, 1987); self defeating assumptions (Dryden, 1999); and faulty self-efficacy beliefs (Brown & Lent, 1996). Usually revolving around the issues of self-worth

[#] Correspondence concerning this article should be addressed to Anup Sud, Department of Psychology, Himachal Pradesh University, Summer Hill Shimla-171005, India. <anupsud@gmail.com>

dysfunctional career thoughts are expressed through behavior (e.g., incomplete work), emotions (depression and anger) and verbal expression (e.g., negative statements). It has been suggested that higher levels of anxiety and low self-esteem (Betz & Hackett, 1981; Herr & Cramer, 1996); poor problem solving skills (Peterson, Sampson, & Reardon, 1991); lack of self knowledge related to career interests, abilities and values as well as maladaptive career beliefs and assumptions (Lustig & Strauser, 2003; Strauser, Lustig, Keim, Ketz, & Malesky, 2002) can lead to dysfunctional cognitions and perceptions that not only result in failure to realize individual career potential, they may often cause the individual to avoid it all together (Sampson, et al., 1996).

All the students are influenced by achievement motivation. Everyone has a need to achieve and a fear of failure, but these vary from person to person and from situation to situation. Individuals with need to achieve have high attitude toward success and work hard to ensure they are successful (Atkinson, 1974). They participate in the activity either for the sake of learning or improving their ability or with expectation of reward (Eskeles-Gottfried, Fleming, & Gottfried, 1998). On the other hand, fear of failure predisposes some students to have a little desire to accomplish a certain goal (Atkinson, 1999). They avoid failure at all costs. When students think they have low ability, to avoid failure and protect their self-worth they may actually decrease effort (Alderman, 1999) or choose not to have a goal or even attempt the task (Atkinson 1974; Grabe, 1979, Veroff, McClelland, & Marquis, 1971).

Tracy (1993) observed that whatever we accomplish is determined by the way we think and use our mind. Studies have shown that people with limited self beliefs (Simon, 1988) and low self-efficacy (Alderman, 1999) often lack confidence, are negative and pessimistic and they expect to fail. While high achievers are generally classified as driven, striving for success, competitive or taking charge. Low achievers are seen as quitters, non participants and failures (Parker & Johnson, 1981). Since exam results are decisive for educational and occupational careers today, test anxiety remains an important variable in basic research into cognitions and emotion (Dutke & Stober, 2001) as well as achievement motivation (Elliot & McGregor, 1999), playing major role for student's academic self-concept and career advancement (Pekrun, Gotz, Titz, & Perry, 2002; Stober & Pekrun, 2004).

In educational testing, test anxiety represents a bias that conceals the true potential of students. Test anxiety expresses its influence in

the form of troublesome and self-defeating thoughts. On the basis of extensive research, Sarason (1980) concluded that high test anxious individuals are more self-centered and self-critical than those who are low in test anxiety. They are more likely to be negatively self occupied and emit personalized derogatory responses (Sud, 2001; Sud & Prabha, 2004; Sud & Sud, 1997). They have chronic doubts about either producing adequate performance or being favourably evaluated by significant others (Wine, 1982). The self-image of high test anxious students has been found to be low, negative, and rejecting. They perceive themselves as ineffective problem solvers, having diminished personal control and lack of confidence with greater tendency to avoid solving problems (Blankstein, Flett, & Batlen, 1989; Sud, et al., 2001). High test anxiety has also been observed to be significantly associated with low achievement motivation (Sud, 2001).

Since worry (the cognitive component) and emotionality in test anxiety appeared to show specific and different relationship, they became basic conceptions. Thus to see if they could also show this relationship with dysfunctional career thoughts as well as achievement motivation both have been included in the present study.

In view of the commonality in the experience shared by individuals with dysfunctional career thoughts, low achievement motivation and high test anxiety, some relationship was expected among these variables. However, due to the limited use of the term dysfunctional career thoughts in psychological literature, evidence regarding the relationship among these variables is lacking completely, not only in India but in the west as well. Present study is a pioneering attempt to explore this relationship in Indian setting. For the present study it was hypothesized that:

- (i) Dysfunctional career thoughts will be negatively related to achievement motivation and positively related to test anxiety.
- (ii) Achievement motivation will be negatively related to test anxiety.

METHOD

Sample

The sample consisted of 160 university students (Boys = 80, Girls = 80) as it was assumed that those trying to get into the world of work will be more concerned about their career. Participants' age ranged from 21 to 25 years. Equal numbers of students, (Social

Sciences = 80, Physical Sciences = 80) were selected by using quota sampling technique from Himachal Pradesh University, India.

Instruments

Career Thoughts Inventory

Career Thoughts Inventory (CTI) was developed by Sampson et al. (1996). The inventory consists of 48 statements describing thoughts that some people have when considering career choices. The statements are worded negatively to represent dysfunctional career thoughts. Participants respond to the items using a 4 point Likert type scale ranging from Strongly disagree (SD) to Strongly agree (SA). Scores range from 48 to 192. High Scores indicate greater dysfunctional career thoughts. For the total score, internal consistency estimates ranged from 0.93 to 0.97.

Costello Achievement Motivation Scale

The scale was originally developed by Costello (1967). Hindi version of Costello's Achievement Motivation Scale (Mishra & Srivastava, 1990) was used in the present study. It is 24 items scale to be answered in yes/no format. The correlation found between both English and Hindi versions was 0.88, ($p < .01$). Item No. 2,3,5,7,9,11, 13,17,19,20,22 and 24 are given 1 mark if answered positively and 0 if answered negatively. Reverse holds for rest of the items. Scores range from 0 to 24. Higher scores indicate high achievement motivation. The test-retest and split half reliability coefficients were found 0.80 and 0.82 respectively.

Test Anxiety Inventory

Test Anxiety Inventory (TAI) was originally developed by Spielberger (1980). Hindi version of Test Anxiety Scale (Sud & Sud, 1997) was used in the present study. It consists of 20 items with two subscales for measuring worry and emotionality components of test anxiety. Factorial validity of Hindi TAI shows clear cut worry and emotionality factors, similar in strength as those reported in the English TAI. The scores range from 20 to 80 as the participants respond to each statement on a four point rating scale ranging from almost never to almost always. High scores indicate high level of test anxiety. Alpha coefficients of 0.89 and 0.83 for high school boys and girls attest to high internal consistency of the inventory.

Procedure

After a brief introduction of the research, participants were told that their results would be kept confidential to put them in a positive frame of mind. Then, the set of three questionnaires, career thoughts inventory, achievement motivation scale, and test anxiety inventory stapled together were given to each student in same order, with the standard instructions written on the top of each test. All the queries related to questionnaires were answered side by side.

RESULTS

Table 1

Correlation among dysfunctional career thoughts, achievement motivation, test anxiety, worry and emotionality (N = 160)

Variables		I	II	III	IV	V
I	Dysfunctional career thoughts	-	.11	.11	.08	.16*
II	Achievement motivation		-	-.10	-.11	-.17*
III	Test anxiety			-	.81**	.75**
IV	Worry subscale				-	.69**
V	Emotionality subscale					-

* $p < .05$; ** $p < .01$

Table 1 shows significant positive relationships between dysfunctional career thoughts and emotionality subscale of test anxiety ($r = .16$, $p < .05$); test anxiety and worry subscale ($r = .81$, $p < .01$); test anxiety and its emotionality subscale ($r = .75$, $p < .01$); and between worry subscale and emotional subscale of test anxiety ($r = .69$, $p < .01$). Table 1 also shows a significant negative relationship between achievement motivation and emotionality subscale of test anxiety ($r = -.17$, $p < .05$).

DISCUSSION

The purpose of the present study was to investigate the relationship between dysfunctional career thoughts, achievement motivation, and test anxiety. Dysfunctional career thoughts, usually revolve around the issue of self-worth, over generalization and have the tendency to decrease the likelihood of overall life satisfaction (Sampson et al., 1996). Dysfunctional career thoughts have also been linked to a person's self-perceptions of his/her current career related status. People with self-limiting belief and low self-efficacy have been

found to lack confidence, are negative and pessimistic, and they expect to fail. Fear of failure predisposes such people to give up. They are so much paralyzed with doubt about their capabilities that rather than face humiliation of failure, to protect their self worth they choose to either decrease their effort or not to do the task at all (Veroff, et al., 1971). There are possibilities that individuals with more dysfunctional career thoughts will have low achievement motivation and may find it tough to think of broader career perspectives. However, in the present study, the relationship between the two variables has turned out to be non significant.

It has been observed that highly motivated participants show higher facilitating anxiety, and lower debilitating anxiety, are more confident and express higher success expectations (Fontaine, 1991). Having internal locus of control (Kothari, 1993) such subjects are less inclined to attribute failure to ability than those low in achievement motivation (Scapinello, 1989).

University students are generally regarded as job hunters and are desperate about getting a good job. Since it is just a beginning of their career, it is not unusual for them to have high achievement motivation. However, because in India job opportunities are very few, as observed by Lustig and Strauser (2003), perhaps limited opportunities to make vocational decisions; distorted, misinformed, and biased career beliefs; lack of self knowledge related to career interests, abilities, and values; and maladaptive career beliefs and assumptions, could have been some of the factors responsible for high level of dysfunctional career thoughts experienced by the sample of the present study. This finding highlights that perhaps dysfunctional career thoughts and achievement motivation are two independent constructs. Or perhaps the drive to reach their goal has been so high among these students, that the dysfunctional career thoughts could not influence their achievement motivation negatively. However, lack of supportive evidence, highlights the need for much future research for firm conclusions. A need exists to understand the functioning of individual's perception of probability of success, strength of motivation, need to achieve, nature of motivations (intrinsic or extrinsic) and persons' attitude in controlling the negative influence of dysfunctional career thoughts on achievement motivation.

Some of the determinants of test anxiety like ambiguity and complexity of situation, perceive pressure for achievement, set by teachers, parents or other students acting as reference group, probability of failure connected with inability to deal with high levels of aspiration are quite similar to those perceived for dysfunctional

career thoughts. Hence a positive relationship was expected among these two variables.

However, the result indicates that only emotionality component of test anxiety has turned out to be significantly and positively related to dysfunctional career thoughts. Perhaps the higher levels of dysfunctional career thoughts are more responsible for autonomic reactions (the emotionality aspect of test anxiety) that are evoked by evaluative stress than the cognitive concern about the consequences of failure (the worry component). This finding also supports the observation by Corbishley and Yost (1989) that one of the ways in which individuals reveal dysfunctional career thoughts is through emotions.

However, the negative and significant relationship between achievement motivation and emotionality, highlights that perhaps the higher facilitating anxiety and lower debilitating anxiety, more confidence and higher success expectation of these subjects (Fontaine, 1991) could also counter the effect of emotionality for these subjects. However, since no clear relationship has emerged between achievement motivation and worry as well as test anxiety, no firm conclusion can be drawn, without more research. Further, while in earlier studies achievement motivation has been observed to be significantly associated with test anxiety (Sud, 2001), lack of evidence with regard to its relationship with worry and emotionality components of test anxiety also highlights the need for much future research.

Also since both worry and emotionality together contribute to total test anxiety scores, significant contribution of only emotionality and not worry for dysfunctional career thoughts might have been further responsible for lack of significant relationship between dysfunctional career thoughts and overall test anxiety.

Overall it can be said that since not much research has been done with dysfunctional career thoughts and the variables of the present study, the evidence to support the present findings is lacking. Thus much future research is recommended for firm conclusions.

REFERENCES

- Alderman, M. (1999). *Motivation for achievement: Possibilities for teaching and learning*, New Jersey: Lawrence Erlbaum Associates, Inc., Publishers.

- Atkinson, E. (1999). *Key factors influencing pupil motivation in design and technology*. Retrieved September 19, 2000. <http://scholar.Lib.vt.edu/ejournals/JTE/vionz/atkindon.html>.
- Atkinson, J. (1974). *Motivation and achievement*. Washington, DC: V.H. Winston and Sons.
- Betz, N. E., & Hackett, G. (1981). The relationship of career-related self-efficacy expectations to perceived career options in college women and men. *Journal of Counseling Psychology*, 28, 399-410.
- Blankstein, K. R., Flett, G. L., & Batlen, I. (1989). Test anxiety and problem solving self-appraisals of college students. *Journal of Social Behavior and Personality*, 4(5), 531-540.
- Borders D., & Archadel, K. A. (1987). Self-beliefs and career counseling. *Journal of Career Development*, 14, 69-79.
- Brown, S. D., & Lent, R. W. (1996). A social cognitive framework for career choice counseling. *The Career Development Quarterly*, 44, 336-354.
- Carver, C. S., & Scheier, M. F. (1984). Self focused attention in test anxiety: A general theory applied to a specific phenomenon. In H. M. Vander Ploeg, R. Schwarzer, & C. D. Spielberger, (Eds.), *Advances in test anxiety research*: Vol. 3 (pp. 3-20). The Netherlands: Swets and Zeitlinger.
- Corbishley, M. A., & Yost, E. B. (1989). Assessment and treatment of dysfunctional cognitions in career counseling. *Career Planning and Adult Development Journal*, 5(3), 20-26.
- Costello, C. G. (1967). Two scales to measure achievement motivation. *Journal of Psychology*, 66, 231-235.
- Dryden, W. (1999). *Rational emotive behavior therapy: A training manual*. New York: Springer.
- Dutke, S., & Stober, J. (2001). Test anxiety, working memory, and cognitive performance: Supportive effects of sequential demands. *Cognition and Emotion*, 15, 381-389.
- Elliot, A. J., & Mc Gregor, H. A. (1999). Test anxiety and the hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, 76, 628-644.
- Eskeles-Gottfried, A., Fleming, J., & Gottfried, A. (1998). Role of cognitively stimulating home environment in children's academic intrinsic motivation: A longitudinal study. *Child Development*, 69, 1448-1460.

- Fontaine, A. M. (1991). Impact of social context on the relationship between achievement motivation and anxiety, expectations or social conformity. *Personality and Individual Differences*, 12(5), 457-466.
- Grabe, M. (1979). Achievement motivation as a predictor of effort and achievement in mastery learning course. In Grand Forks, N. D. Midwestern Psychological Association Annual Meeting. (ERIC Document Reproduction Service Number ED 176.174).
- Herr, E. L., & Cramer, S. H. (1996). *Career guidance and counseling through the lifespan: Systematic approaches* (5th ed.) New York: Harper Collins.
- Hodapp, V., & Benson, J. (1997). The multidimensionality of test anxiety: A test of different models. *Anxiety, Stress and Coping*, 10, 219-244.
- Keller, K. E., Biggs, D. A., & Gysbers, N. C. (1982). Career counseling from a cognitive perspective. *The Personnel and Guidance Journal*, 60, 367-371.
- Kothari, R. (1993). *Poverty: Human consciousness and the amnesia of development*. London: Zed Books.
- Krumboltz, J. D. (1990). *Helping clients change dysfunctional career beliefs*. Paper presented at the annual meeting of the American association for counseling and development, Cincinnati, OH.
- Lustig, D. C., & Strauser, D. R. (2003). The moderating effect of sense of coherence on work adjustment. *Journal of Employment Counseling*, 40, 129-140.
- Lustig, D. C., & Strauser, D. R. (2000). *An empirical typology of career thoughts of individuals with disability*. Poster session presented at the American psychological association 106th Annual meeting, Washington, DC.
- Meijer, J. (2001). Learning potential and anxious tendency: Test anxiety as a bias in educational testing. *Anxiety, Stress and Coping*, 14, 337-362.
- Meijer, J., & Elshout, J. J. (2001). The predictive and discriminant validity of the zone of proximal development. *British Journal of Educational Psychology*, 71, 93-113.
- Mishra, O. P., & Srivastava, S. K. (1990). *Hindi version of Costello's achievement motivation scale*. Ambika Pustak Sadan.
- Morris, L.W., & Liebert, R. M. (1970). Relationship of cognitive and emotional components of test anxiety to physiological arousal and

- academic performance. *Journal of Consulting and Clinical Psychology*, 35, 332-337.
- Morris, L. W., Davis, M. A., & Hutchings, C. H. (1981). Cognitive and emotional components of anxiety: Literature review and a revised worry-emotionality scale. *Journal of Educational Psychology*, 73, 541-555.
- Mueller, J. H., Lenhart, K., & Gustavson, K. (1989). Study habits and contextual dependency as a function of test anxiety-level. In R. Schwarzer, H. M. Van der Ploeg, and C. D. Spielberger (Eds.) *Advances in Test Anxiety Research*, 6, 77-86; Lisse: Swets and Zeitlinger.
- Parker, J., & Johnson, C. (1981). *Affecting achievement motivation*. Charlottesville, VA: University of Virginia. (ERIC Document Reproduction Service Number ED 226 833).
- Pekrun, R., Gotz, T., Titz, W., & Perry, R. P. (2002). Academic emotions in students self-regulated learning and achievement: A program of qualitative and quantitative research. *Educational Psychologist*, 37, 91-106.
- Peterson, G. W., Sampson, J. P., & Reardon, R. C. (1991). *Career development and services: A cognitive approach*. Pacific Grove, CA: Brooks/Cole.
- Sampson, J. P., Peterson, G. W., Lenz, J. G., Reardon, R. C., & Saunders, D. E. (1996). *Career thoughts inventory: Professional manual*. Odessa, FL: Psychological assessment resources, Inc.
- Sampson, J. P., Peterson, G. W., Lenz, J. G., Reardon, R. C., & Saunders, D. E. (1998). The design and use of a measure of dysfunctional career thoughts among adults, college students and high school students: The career thoughts inventory. *Journal of Career Assessment*, 6, 115-134.
- Sarason, I. G. (Ed.) (1980). *Test anxiety: Theory, research, and applications*. Hillsdale, NJ: Lawrence Erlbaum.
- Scapinello, K. f. (1989). Enhancing differences in the achievement attributions of high and low motivation groups. *Journal of Social Psychology*, 129 (3), 357-363.
- Simon, S. (1988). *Getting unstuck*. New York: Warner Books.
- Spence, J. (1983). *Achievement and achievement motives*. San Francisco, CA: W. H. Freeman and Co.
- Spielberger, C. D. (1980). *Test Anxiety Inventory*. Palo Alto: Consulting Psychologists Press.

- Stober, J. (2004). Dimensions of Test Anxiety: Relations to ways of coping with pre-exam anxiety and uncertainty. *Anxiety, Stress, and Coping*, 17(3), 213-226.
- Stober, J., & Pekrun, R. (2004). Advances in test anxiety research. *Anxiety, Stress, and Coping*, 17(3), 205-211.
- Strauser, D. R., Lustig, D. C., Keim, J., Ketz, K., & Malesky, A. (2002). *Analyzing the differences in career thoughts based on disability status*. Retrieved from <http://www.worksupport.com/documents/proed-empirical.PDF>.
- Sud, A. (2001). Test anxiety research in India: Twentieth century in retrospect. *Psychology and Developing Societies*, 13(1), 17-25.
- Sud, A., & Prabha, C. (2004). Perfectionism, procrastination and test anxiety. *Journal of Community Guidance and Research*, 21(3), 330-337.
- Sud, A., & Sud, P. (1997). *Manual of test anxiety inventory*. Rupa Psychological Centre, Varanasi, India.
- Sud, A., Avasthi, M., & Sud, A. (2001). Study habits, test procrastination, test anxiety and academic performance of high school institutionalized children. *Journal of Research and Application in Clinical Psychology*, Vol. IV, 53, 61.
- Tracy, B. (1993). *Maximum achievement*. New York: Simon and Schuster.
- Veroff, J., & McClelland, L., & Marquis, K. (1971). *Measuring intelligence and achievement motivation in surveys* (Report Number CEO-4180). Washington, D.C: American Educational Research Association Annual meeting. (ERIC Document Reproduction Service Number ED 146 177).
- Volkmer, R. E., & Feather, N. T. (1991). Relationship between type A scores, internal locus of control and test anxiety. *Personality and Individual Differences*, 12(2), 205-209.
- Wine J. (1982). Evaluation anxiety: A cognitive-attentional construct. In: Krohne, H. W. & Laux, L. (Eds.). *Achievement, stress, and anxiety*, (pp. 207-219). Washington, DC: Hemisphere.
- Wlodkowski, R. (1985). *Enhancing adult motivation to learn*. San Francisco, CA: Jossey-Bass, Inc.

Received: June 13, 2005.