© Journal of the Indian Academy of Applied Psychology, July 2007, Vol. 33, No.2, 291-294.

# Career Choice and Personality as Predictors of Cognitive Interference

#### Janki Moorjani, Manika Mohan Saxena and Sujata Gupta

University of Rajasthan, Jaipur

Cognitive interference refers to unwanted and often disturbing thoughts that intrude an individual's cognitive world. It plays an important role in stress, poor performance, maladjustment and in psychopathological behaviour. The present study is an attempt to explore the effect of professional/non-professional career choice and personality on cognitive interference of boys and girls. On the basis of criteria of inclusion and omission, a group of 240 students were selected from both the categories. Professional Group (Engineering and Medical College Students) consisted of 120 boys and 120 girls, while students pursuing their graduation (science) were treated as non-professional group. Cognitive Interference Questionnaire by Sarason and Rotter's Locus of Control Scale were administered to all the students individually or in groups depending upon the availability of Ss fulfilling the demand of sample 2x2x2 factorial design was applied. The results obtained displayed significant difference with regard to gender and the career choice on C.I., while personality (Internal Locus of Control and External type) did not show significant effect on C.I.

Cognition means 'knowing'. It involves all kinds of higher mental processes as thinking, reasoning, decision making, memory ability, intelligence, problem solving ability, attention, perception, language and thoughts. It plays an important role in career selection and success in the chosen professional or nonprofessional courses during settlement period through which his/her whole life gets shape and ascertains one's achievements for becoming an ideal citizen of the society. The extremely challenging and competitive world has created a chaotic situation before an awakened adolescent, which interferes his/her cognitive processes. The excessive cognitive interference may diminish the attention capacity and may make the performance level down making him/her to feel unhappy, tense and anxious (Sarason, 1986). One of the major

concerns for young generation in our society is selection of the appropriate and suitable occupational/professional course according to their abilities and interests which ultimately may provide a satisfactory means for their livelihood, giving them a sense of success. Over the last two decades, some of the cognitive psychologist as Broadbent, Cooper, Fitzgerald and Parkers (1982), Communion (1993), Ishiyama and Munson (1993), Kendall and Ingram (1989), mainly Sarason, Keefe, Hays and Shearin (1986) have focused their attention on cognitive interference which includes general absent mindedness, forgetfulness, wondering thoughts during work, pre-occupations with unidentified worries and anxiety. It is evident that the youth of this era is experiencing /undergoing extreme stress, tension, anxiety, uncertainty with

regard to their career choice, professional courses, interest, and ambitions.

Some of the cognitive psychologists advocate the positive effect of cognitive interference (Sarason, Sarason & Pierce, 1995; Pierce Ptacek, Henderson, Joseph & Lofferdo, 1995). According to them cognitive interference is entering a thought consciously while performing some task, so if thoughts are relevant and contextual, it may positively contribute to the performance of person. Contrary to it, if these thoughts increase worries, anxiety level and brings down one's performance, then it may require the cognitive intervention techniques to eliminate the psychopathological symptoms prevailing in one's personality. Thus, it is important to analyze the type of intrusive thoughts whether it is generated internally or these thoughts external arose from environment. Personologists explained these two kinds of cognitive interference through 'State and Trait' approach. The first kind of 'intrusion' is being caused by 'trait ' of one's personality, while the another reflects the environment of an individual, where person does not have the general tendency of experiencing C.I. but experience it occasionally and in particular situation targeting a goal. Sarason and Sarason (1995), Pierce (1995), Sarason Keffe, Hays and Shearin (1986), Broadbant, Cooper, Fitzgerald and Parkers (1982) employed the scientific tools and devices to assess the existence of cognitive interference, the type of intrusion and type of personality.

Personality also influence one's motives, set of ideas, emotions, beliefs, mode of thinking, problem solving orientation, strategies, flexibility and adaptability for opting new advances and new concepts. Personality is perceived by Rotter (1966), in terms of internal and external locus of control through which an individual analyzes the other person, events and circumstances. Few of the researches indicated that internals do better during school and college period and cope up with their stresses in better manner (Cooper & Sawaf, 1997; Cynthia, 2002). Jenkins (1975) concluded that type 'A' people usually neglect other aspects of life due to their deep commitment towards their vocation/profession. The present research was aimed at studying the effect of career choice (professional/nonprofessional) and personality on cognitive intrusions among boys and girls.

It was hypothesized that the type of career choice, personality (Internal vs. External Locus of Control) and gender will independently as well as jointly affect the cognitive interference.

#### Method

# Sample:

A sample of 240 students consisting of 120 males and 120 females was drawn from professional (Engineering and Medical courses) and non-professional (Science graduation courses) group.

# Tools:

Tools employed for data collection were (i) Locus of Control Scale (Rotter) (ii) Cognitive Interference Questionnaire (Sarason & Sarason) were administered individually/group as per availability of the suitable Ss.

## **Results and Discussion**

Table 1: Mean, SD and t-values of C.I.differentiating professional and non-professional groups (N=240)

Career Choice	Mean	SD	t-value
(i) Professional	46.68		
(ii) Non-Profession	al 43.09	10.62	2.27*

\* p<0.05

Table-2: Mean, SD and t-values of C.I. differentiating males (120) and females (N=120)

Gender	Mean	SD	t-value
(i) Males	48.68	13.5	
(ii) Females	41.20	19.87	4.83**
** 0.04			

\*\*p<0.01

#### Janki Moorjani, Manika Mohan and Sujata Gupta

Table-1 clearly indicates that professional and non-professional career chooser significantly differed on cognitive interference irrespective of their gender. (2.27, p<0.05). The obtained results show higher cognitive interference among the students pursuing professional courses in comparison to nonprofessional group.

Table-2 shows the significant difference between boys and girls irrespective of their courses being pursued. It means that boys manifested higher level of cognitive interference as compared to girls while Ss possessing internal locus of control and external locus of control did not show significant difference on cognitive interference.

Few of the studies substantiate the findings of the present research work. Dindia and Allen (1992) found adolescent girls more stable, more balanced, more target oriented with less intrusive thoughts who showed better concentration over the assigned job. They showed higher tolerance and persuasion ability to deal with the critical situations.

Further, the results analyzed through ANOVA also indicates the higher level of cognitive interference among the students pursuing professional courses in comparison to the non-professional group irrespective of their gender, F(2, 118) = 5.125; p<0.05). Male students were found highly cognitively interfered I comparison to female students irrespective of their courses being pursued, F(2, 118) = 23.92; p<0.01). While the third variable - personality (internals/externals) did not show significant difference on cognitive interference. Contrary to the results obtained in the present study, Sarason (1984) found the Ss possessing external locus of control highly cognitively interfered while internals were found more target oriented, persuasive, more committed to their work, persistent and possessing higher level of concentration capacity with less cognitive interference.

The interactive effect of career choice, gender and personality was found insignificant. Thus, the framed hypotheses of this study is partially proved true. One of the important findings emerged from this study that students pursuing the professional courses (Medical/Engineering) had higher degree of cognitive interference as compared to science students (Non-Professional course). It appears from the results that different professions/ occupations oriented courses demand extreme concentration and at the same time diversification also, which develops a tendency to be preoccupied with several assignments at a time, resulting in stresses and worries due to the heavy load of studies. Simultaneously they are under going excessive competition and challenges, rapidly increasing excellence. Another cause of higher cognitive interference found among these students is uncertainty regarding their jobs and settlement in future life, as availability of good jobs with satisfactory perks in both the professional areas is day by day getting tougher due to the growing number of students pursuing these courses.

Subjects possessing internal locus of control did not differ from external on C.I. It seems that as the present research work was carried over limited number of students that's way it could not differentiate the two different types of persons. Cognitive interference is found considerably and significantly affected by gender also. Adolescent girls were found more stable, more balanced, more target oriented with less intrusive thoughts who showed better concentration over the assigned job. They showed higher tolerance and persuasion ability to deal with the critical situations.

Students involved in professional courses may be suggested to have less cognitive interference for maximizing their learning capacity and cognitive abilities because their success depends upon the sharp intelligence, keen observation convergent/ divergent thinking ability, faster problem solving ability, sharp memory, independent type of cognitive style, higher abstraction ability, originality and creativity, which may be enhanced through meditation, Vippashayana, muscle relaxation through Yoga and the other effective intervention techniques. Male students may be provided guidance and counseling to over come this cognitive intrusion, enabling them to choose the right career at right age, 'as the success never comes in a day, it takes a long way to reach one's desired destination'.

Students and their parents may be provided counseling programmes for making aware of their actual potentials, interests, intelligence level, temperament, type of personality, concentration, memory capacity, etc. to prove them successful in their professions.

### References

- Broadbent, D.E., Cooper, P.F., Fitzgerald, P., & Parkers, K.R. (1982). The cognitive failure questionnaire and its correlates. *British General of Clinical Psychology*, *21*, 1-16.
- Communion, A.L. (1993). Anxiety, cognitive interference and school performance of Italian children. *Psychological Reports*, 73, 747-754.
- Cooper, R., & Sawaf. A (1997). *Executive EQ.* New York: Orient Books.
- Cynthia, K . (2002). Science in the News Stress and illness - website http://www.manythings.org/ voa.com.
- Dindia, R., & Allen, M. (1992). Sex differences in self disclosure. *Psychological Bulletin*, 112, 106-124.

Predictors of Cognitive Interference

- Ishiyama, F.I., & Munson, P.A. (1993) Development and validation of a self critical cognition scale. *Psychological Reports,* 73, 147-154.
- Jenkins, C.D. (1975). *Jenkins Activity Survey*. Cleveland, OH: Psychological Corp.
- Kendall P.C., & Ingram, R.E. (1989). Cognitivebehavioral perspectives: Theory and research on depression and anxiety. In P.C. Kendall & D Watson (Eds) Anxiety and Depression and Overlapping Features, San Diego. CA: Academic Press.
- Pierce, G.R, Ptacek, J.T., Henderson, C.A. Joseph, H.J., & Lofferdo, C. (1995). Exploring the transituational nature of cognitive interference. Manuscript submitted for publication.
- Sarason, I.G. (1984). Stress, anxiety and cognitive interference, *Journal of Personality and Social Behaviour, 46*, 929-938.
- Sarason, I.G, Sarason, B.R, Keefe, D.F, Hays, B.E., & Shearin, E.N. (1986), Cognitive interference: Situational determinants, trait and characteristics. *Journal of Personality and Social Psychology*, 45, 110-123.
- Sarason, I.G. (1986), Test anxiety, worry and cognitive interference. In R. Schwarzer (Ed.), self-related cognitive in anxiety and motivation (pp 19-33). Hillsdale NI: Lawrence Erlbaum Associates.
- Sarason, I.G., Sarason, B.R., & Pierce, G.R. (1995). Cognitive interference at the intelligencepersonality crossroads. In D. Saklofske and M. Zeidner (Eds.) International handbook of personality and intelligence (pp-285-296), New York: Plenum.
- Sarason, I.G., Pierce, G.R., & Sarason, B.R. (1996) Cognitive Interference - theories, methods and findings, University of Washington, Lawrence Erlbaum Associates, Publishers, Mahwah, New Jersey.

Received: March 18, 2006 Accepted: May 24, 2007

Janki Moorjani, PhD, Assistant Professor Department of Psychology, University of Rajasthan, Jaipur.

**Manika Mohan Saxena,** PhD, Associate Professor Department of Psychology, University of Rajasthan, Jaipur.

Sujata Gupta, Research Scholar, Department of Psychology, University of Rajasthan, Jaipur.

## 294