



A STUDY OF COGNITIVE STYLE AND MENTAL HEALTH AMONG COLLEGE GOING STUDENTS

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ABSTRACT:

The present study was undertaken to investigate cognitive style and mental health among male and female college going students. The first purpose of this study was to compare male and female college going students on their levels of cognitive style and mental health, and to examine relationship between cognitive style and mental health. For this study, total sixty college going students from science faculty were selected as a sample out of them 30 male students and 30 female students through simple random sampling method of probability sampling from Shirur (Dist- Pune, Maharashtra). The two psychological tests used for data collection - cognitive style inventory prepared by Jha (2001) and mental health battery prepared by Singh and Sengupta (1983). Data was analyzed and interpreted in terms of mean, standard deviation, t test and Co-efficient of contingency. Study revealed that female students had intuitive cognitive style and male student had systematic cognitive style. Male and female respondents significantly differed in their mental health. This study concluded that there exists significant relationship between cognitive style and mental health of college going students.

KEYWORDS : Cognitive style, Mental health and college students.

INTRODUCTION

According to modern psychological thought individuals are integrated unit of psycho-physical elements and human behavior is determining this both elements. Various abilities, traits are include in psycho physical system. Such as aptitude, attitude, interest, intellectual and cognitive capacities, etc. Out of them cognitive ability is important factor in human development, adjustment and mental health. Because, a good mental health of persons are depend upon his cognitive abilities.



COGNITIVE STYLE

Cognitive style or "thinking style" is a term used in cognitive psychology to describe the way individuals think, perceive and remember information. Cognitive style is an individual's preferred way of gathering, processing and evaluating data. It influences how we scan our environments for information, how we organise and interpret it, and how we integrate our interpretations into mental models and subjective theories that guide our behaviour. Many dimensions of cognitive style have been highlighted in the literature. Hayes and Allinson (1994) identified 29 of these, including, for example, field dependence – field independence, convergence – divergence, reflection – impulsivity, serialism – holism and rationality – intuition. Controversy exists over the exact meaning of the term cognitive style and also as to whether it is a single or multiple dimension of human personality.

Cognitive styles are the characteristic, self consistent modes of functioning which individuals' shows in their perceptual and intellectual activities. It means that the characteristic way in which an individual goes about taking information from the world is referred as cognitive style. It is a characteristic and systematic procedure within the psycho-physical functioning of an individual that helps him to grasp or hold certain signals, power from environment and to arrive at a desired end with the help of his innate potentialities, perceptions and his intellectual abilities like knowledge, understanding, comprehension, application, analysis and synthesis etc. So, it refers to the modes an individual employs in perceiving, organizing and labeling various aspects of the environment (Schilling, 1981).

Systematic processing encompasses thinking and decision making that is variously described as objective, sequential, convergent, and logical which is called as a systematic cognitive style. Intuitive processing, on the other hand, encompasses thinking and decision-making that is described as divergent, simultaneous, feeling and holistic which is called as an intuitivestyle. A number of authors have conceptualized systematic and intuition as opposing poles of a single overarching dimension of cognitive style (Allinson & Hayes, 1996)

MENTAL HEALTH

Mental health is perceived as a positive source contributing to asset development individually, socially, and economically (WHO, 2004). The World Health Organization conceptualized mental health separate from mental ill-health and defined the concept as: a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her own community.

OBJECTIVES

- 1) To find significant sex differences in cognitive style and mental health among science college going students
- 2) To compare cognitive style and mental health of science college going male and female students.
- 3) To study the relationship between the kind of cognitive style& the kind of mental healthamong selected science college going respondents.

HYPOTHESIS

- 1) There will be no significant sex differences in cognitive style and mental health among science college going students.
- 2) There will be positive and significant correlation between cognitive style and mental health among science college going students.

Method

i) Sample

For this study, total sixty science faculty college going students were selected as a sample out of them 30 male students and 30 female students through simple random sampling method of probability sampling from ShirurTahshil (Dist- Pune, Maharashtra).

ii) Variable

Independent variable -Male and female students (Science Faculty)

Dependent variable - cognitive style and mental health

iii) Research Tools

Cognitive Style Inventory (CSI)

Cognitive style inventory was developed by Jha in 2001. CSI is a self report measure of the ways of thinking, judging, remembering, storing information decision making and believing in interpersonal relationship. This inventory has 20 items and it measures two dimensions of cognitive style i.e., systematic style and intuitive style.

Mental Health Battery (MHB)

It was developed by Singh and Sengupta (1971). MHB intends to assess the status of mental health of persons in the age range of 13 to 22 years. As it is a battery of six subtests and 130 items in the MHB with six dimensions.

iv) Statistics Technique

Data was analyzed and interpreted in terms of mean, standard deviation, t test and Co-efficient of contingency.

Results

Table no. 1
Mean, SD and 't' value for cognitive style (systematic and intuitive style) among male and female college going students.

Sr. No	Cognitive Style	Male students			Female students			't' value	p
		M	SD	N	M	SD	N		
1	Systematic Cognitive style	75.68	10.75	30	70.22	10.30	30	2.01*	0.05
2	Intuitive Cognitive style	70.03	10.23	30	73.33	9.06	30	1.32	NS

Table 1 shows gender wise mean and standard deviation of college going students having systematic cognitive style. The mean score and SD of males (N= 30) having systematic cognitive style is 75.68 and 10.75, and of females (N=30) is 70.22 and 10.30 respectively. And the value of 't' for the variable of systematic cognitive style 2.01 which is significant at 0.05 level of significance for df 58 (df 58 = 2.01p < 0.05).

The mean score and SD of males (N= 30) having intuitive cognitive style is 70.03 and 10.23, and of females (N=30) is 73.33 and 9.06 respectively. And the value of 't' for the variable of intuitive cognitive style 1.32 which is insignificant at 0.05 level of significance for df 58 (df 58 = 1.32 p < NS).

Table no. 2

Mean, SD and 't' value for mental health sub-variable among Science College going male and female students.

Sr. No	Factor	Male students			Female students			't' value	p
		M	SD	N	M	SD	N		
1	Emotional Stability	68	8	30	72	6	30	2.31*	0.05
2	Over all Adjustment	52	7	30	51	8	30	0.55	N. S.
3	Autonomy	56	5	30	51	8	30	3.06**	0.01
4	Security - Insecurity	58	8	30	64	10	30	2.35*	0.05
5	Self - concept	78	9	30	77	7	30	0.49	N. S.
6	Intelligence	46	6	30	48	8	30	1.15	N. S.

The table 2 shows that the significant difference between the students with college going male and female students in terms of their emotional stability as a mental health variable ($df = 58 = 2.31$ $p < 0.05$). That is no significant difference between college going male and female students group was found on over all adjustment variable ($df = 58 = 0.55$ $p < NS$). The significant difference between the college going male and female students group was found on autonomy variable ($df = 58 = 3.06$ $p < 0.01$). The significant difference between college going male and female students group was found on security – insecurity variable ($df = 58 = 2.35$ $p < 0.05$). That is no significant difference between college going male and female students group was found on self - concept variable ($df = 98 = 0.58 < NS$). That is no significant difference between college going male and female students was found on intelligence variable ($df = 58 = 1.15 < NS$).

Table no. 3

Correlations among variables measured across two scales (cognitive style and mental health)

Measure	1	2	3	4	5	6	7	8
1. Systematic Cognitive style	--							
2. Intuitive Cognitive style	.29*	--						
3. Emotional Stability	.26*	.19	--					
4. Over all Adjustment	.22	.20	.16	--				
5. Autonomy	.27*	.21	.23	.19	--			
6. Security– Insecurity	.29*	.16	.25*	.25*	.17	--		
7. Self– concept	.37**	.29*	.12	.15	.21	.13	--	
8. Intelligence	.48**	.37**	.15	.22	.12	.16	.19	--

Correlations among all variables are presented in Table 3. Ten of the twenty eight correlations were statistically significant ($p < .05$). Systematic cognitive style was positively and significantly related to intuitive cognitive style ($r = .29$), emotional stability ($r = .26$), autonomy ($r = .27$), security – insecurity ($r = .29$), self - concept ($r = .37$) and intelligence ($r = .48$). Intuitive cognitive style was positively and significantly related to self - concept ($r = .29$), and intelligence ($r = .37$). Emotional stability was positively and significantly related to security- insecurity ($r = .25$). Over all adjustment was positively and significantly related to security- insecurity ($r = .25$).

CONCLUSIONS

This study concludes that male and female college going students had significant difference on their cognitive style. Male college going students had more systematic cognitive style than female college going students. This study reveals no significant difference of intuitive cognitive style between male and female college going students.

This study reveals that is male students more autonomous (variable of mental health) in comparison to female students. But, female students more emotional stable (variable of mental health) in comparison to male students. That is female students more security - insecurity in comparison to male students. There is positive and significant correlation between some factors of cognitive style and mental health (Systematic cognitive style was positively and significantly related to intuitive cognitive style, emotional stability, autonomy, security – insecurity, self -concept and intelligence. Intuitive cognitive style was positively and significantly related to self – concept, and intelligence.)

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