A Repercussion of Cognitive Correlates on Thinking Styles in Different Career Personality Types

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Abstract: Proliferation and amelioration are going on in the investigation in the field of thinking styles from last past decade. The coherence of the thinking styles are yet searching in a large frame of interest and knowledge in the field of psychology. The cynosure of this paper is to see the consanguinity of different cognitive variables on thinking styles of professionals having different career personality. The cognitive dimensions studied in this paper to unfold its impact on thinking styles are cognitive styles, metacognition and cognitive rigidity (stress, anxiety and depression) on 200 professionals with different career personality types. After having a systematic review on the cognitive correlates, this article puts a flag pole as thinking styles are the individual'spreferred way of doing the task, professionals in different career shows bifurcation in there thinking styles. Results after appropriate statistical techniques shows that there is consanguinity between the thirteen thinking styles and cognitive correlates that are metacognition, cognitive styles and cognitive rigidity in professionals.

Keywords: Thinking Styles, Career Personality Types, Cognitive Styles, Metacognition and Cognitive Rigidity, Professionals.

I. INTRODUCTION

Thinking styles are the preferred way of the individual while performing a task. They are defined as the favorable way of how we think a task possessing individual differences; it cannot be called as an ability but collective use of abilities an individual is having. What happens in an individual's life does not depend on how well we can think, but on the way we can think. From past years, the work related to thinking styles has developed interest of the scholars in contempt of its critical evaluations of this area (Coffield, 2005). Thinking styles can be termed as a preferred way in which individual uses his abilities. Individuals posses unique way of dealing with a situation which suits their style of thinking (Sternberg, 2006). Mental self government theory states that there are thirteen thinking styles are they are further divided into five dimensions that are (i) Function (ii) Forms (iii) Levels (iv) Scope (v) Leanings.

Revised Manuscript Received on May 28, 2019.

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Functions are further divided into three types that are legislative, executive and judicial thinking styles. Forms are divided into four types that are monarchic, hierarchic, oligarchic and anarchic thinking styles. Levels are divided into local and global thinking styles. Scope comprised of external and internal styles. Leanings are divided into conservative and liberal thinking styles (Sternberg, 2005). Individual have a preferred way of completing the task which varies from individual to other. We can say this by quoting that an Individual differences are their when performing a task i.e. one individual likes doing the task in a creative and unique way but another is fearful trying the noble or unique way of doing the task. Some people prefer the systematic way of completing the task but another reaches his goal defying systematization. As different individuals opt different careers and they succeed in it with their abilities and capacities, this study is an attempt to study the consanguinity of cognitive and behavioral dimensions on individual's thinking styles. This study is an attempt to investigate the individual's styles with different career personalities as individuals uses different abilities in different professions. Career personality types differ according to the activities that are related to abilities and competencies of an individual. In this study different cognitive and behavioral correlates are used to investigate their role on thinking styles. Cognitive correlates comprise of cognitive dimensions; metacognition, cognitive styles and cognitive rigidity. An empirical study which explains the relationship between the constructs thinking styles and metacognition indicates that: the judicial and legislative thinking styles contribute to the use of metacognitive strategies directly and in a positive way (Braojos, 2013). A significant positive relationship between monarchic, oligarchic, and conservative thinking styles and metacognitive awareness was found. (Heidari & Bahrami, 2012). Three creativity generating thinking styles (hierarchical, liberal and legislative) and the executive style shows consanguinity with metacognition (Zhang,2010). Thinking styles and cognitive styles were studied and found out that the internal thinking style (a neutral style) being significantly correlated with the dualism scale and the remaining of the thirteen thinking styles were significantly related to the dualism scale (Zhang, 2002).

Cognitive rigidity hampers the thinking style of the individual. In this study we

included stress, anxiety and depression as

correlates of cognitive rigidity.

Perceived stress a predictor of belief states that stress lowers the rational thinking of an individual (Lasikiewicz, 2015). The hierarchical thinking style (one Type I style) in Strenberg's mental self government theory negatively related to depression, whereas the judicial, anarchic, and internal styles did so positively (Zhang, 2010). Type I styles of thinking that are creativity generating thinking styles and external styles of thinking (a preference of working with people unless working alone) shows negative significance to anxiety and conservative thinking styles shows positive significance with anxiety (Zhang,2009). In this article, career personality is studied which is modeled by Holland's theory of vocational personality and work environment in which professionals are studied on RIASEC model which are related to their career choices. He added that individuals are a combination of six personality types that are Realistic, Investigative, Artistic, Social, Enterprising and Conventional (RIASEC) (Holland, 2015).

II. METHODOLOGY

Sample

The present study would be based on primary data. The sample would be selected by purposive sampling and which would be comprised of 200 individuals having different professions and career personality types i.e. Realistic, Investigative, Artistic, Social, Enterprising and Conventional with varying age group.

Psychological Tests/ Measures:

Thinking style inventory (TSI-R2); Sternberg & Wagner & Zhang (2007)

Cognitive style inventory (CSI); Pradeep Jha (2001) Metacognitive Skills Scale (MSS); Gupta and Suman (2017) Depression, anxiety and Stress scale (DASS-21);Lovibond & Lovibond (1995).

III. RESULTS AND DISCUSSIONS

Correlation analysis

Correlation between independent variables and dependent variables

This study highlights the consanguinity of the dependent variable i.e. thinking styles with independent variables i.e. cognitive styles, metacognition and cognitive rigidity. To study the relationship and apply logic to understand impact among the variables is one of the objectives of this study. In order to study the impact, the relations of the independent variables i.e. metacognition and its dimensions planning skill, implementation, monitoring and evaluation; cognitive styles and its dimension systematic and intuitive; cognitive rigidity i.e. stress, anxiety and depression with dependent variable thinking styles, Karl Pearson's correlation coefficient was applied and relationship were seen in table 1

Correlation between thinking styles and metacognition

Correlation between thirteen dimensions of thinking styles and four dimensions of metacognition ranging between .04 to .46 in table 1. Legislative thinking styles shows positive correlation with four dimensions of metacognition that are planning skills, implementation, monitoring and evaluation with 0.46, 0.30, 0.37 and 0.34 (p <0.01) respectively. Executive thinking styles also shows positive correlation with four dimensions of metacognition that are planning skills, implementation, monitoring and evaluation with 0.46, 0.58, 0.26 and 0.37 (p<0.01) respectively. Judicial thinking styles shows positive correlation with two dimensions of metacognition that are planning skills, implementation with 0.31 and 0, 40 (p<0.01) respectively. Global and local thinking styles shows positive correlation with four dimensions of metacognition that are planning skills, implementation, monitoring and evaluation with 0.60, 0.65, 0.51 and 0.60 (p<0.01) respectively and 0.66, 0.57, 0.46 and 0.41 (p<0.01) respectively. Liberal thinking styles shows positive correlation with four dimensions of metacognition that are planning skills, implementation, monitoring and evaluation with 0.74, 0.73, 0.69 and 0.71. Conservative thinking styles shows positive correlation with two dimensions of metacognition that are planning skills, implementation with 0.46 and 0.42 (p<0.01) respectively. Hierarchical thinking styles and monarchic thinking styles shows positive correlation with four dimensions of metacognition that are planning skills, implementation, monitoring and evaluation with 0.22,0.33,0.27 and 0.25 and 0.52,0.57,0.47 and 0.40 respectively. Oligarchic thinking styles shows positive relation with planning skills, implementation, monitoring with 0.47, 0.46 and 0.24 respectively. Anarchic thinking styles shows positive relations with 0.24, 0.34 and 0.31 respectively. Internal and external thinking styles shows significant positive relations four dimensions of metacognition 0.56,0.59,0.49, 0.55 and 0.30, 0.34, 0.52 and 0.38 respectively.

Correlation between thinking styles and cognitive styles

Correlation between thirteen dimensions of thinking styles and two dimensions of cognitive styles ranging between .05 to .67 in table 1. Legislative thinking styles shows positive correlation with one dimension of cognitive style i.e. intuitive thinking styles with 0.32 (p<0.01). Executive (0.52,0.28), judicial(0.58,0.46), global(0.59,0.55), local(0.67, 0.56),liberal(0.54,0.52) and conservative(0.52,0.34) thinking styles shows positive relation with both the dimensions of cognitive styles. Hierarchical thinking styles shows positive relation with systematic cognitive styles having value of 0.25 (p<0.05). Monarchic and oligarchic thinking styles shows positive relations with systematic and intuitive thinking styles. Anarchic thinking styles shows significant relation with intuitive thinking styles with 0.22 (p<0.05).

Internal and external thinking styles shows positive relation with both systematic and intuitive styles with 0.53 and 0.57

 $\begin{array}{lll} (\text{p}{<}0.01) \text{and} & 0.38 & \text{and} \\ 0.28 & (\text{p}{<}0.01) \\ \text{respectively.} \end{array}$



Correlation between thinking styles and cognitive rigidity

Correlation between thirteen dimensions of thinking styles and three dimensions of cognitive rigidity ranging between .00 to .88 in table 1. Legislative thinking styles shows negative correlation with stress having a value of 0.25(p<0.05). Executive thinking styles shows negative correlation with three dimensions of cognitive rigidity having a value of -0.26 (p<0.05),-0.29 and -0.47 (p<0.01) with stress, anxiety and

depression respectively. Global thinking styles shows negative relation with depression with value of 0.43 (p<0.01). Liberal, conservative, hierarchical, monarchic and oligarchic thinking styles shows negative relation with depression with values of -0.45,-0.26,-0.26,-0.36 and-0.22 respectively. External style of thinking shows negative correlation with stress, anxiety and depression with value of -0.34,-0.27 and -0.34 respectively.

Table 1. Correlation Matrix

Different individual's posses different thinking styles and

Variables	Li	Ex	Ju	Gl	Lo	Lib	Со	Hi	Мо	OI	An	In	Ext	Ps	lm	Mn	Ev	S	ı	St	Α	D
Li	1	.04	.08	.22	.13	.43	.00	.06	.33	.26	.14	.46	.30	.37	.39	.37	.34	.21	.32	J.	_	-
	1	.04	.00	.22	.13	.43	.00	.00	.55	.20	.14	.40	.50	.57	.55	.57	.54	.21	.52	.25	.13	.23
Ex	.04	1	.33	.34	.40	.28	.70	.32	.22	.42	-	.08	.25	.46	.58	.26	.37	.52	.28	-	-	-
											.04									.26	.29	.47
Ju			1	.34	.17	.21	.21	-	.18	.11	.22	.21	.06	.31	.40	.10	.14	.58	.46	.05	-	-
								.01													.00	.23
Gl				1	.55	.40	.48	.32	.65	.23	.32	.44	.43	.60	.65	.51	.60	.59	.55	- .02	- .07	43
Lo					1	.49	.50	.30	.57	.50	_	.29	.37	.66	.57	.46	.41	.67	.56	.02	.04	- 43
20					_	. 13	.50	.50	.57	.50	.16	.23	.57		.57			.07	.50	.02		.19
Lib						1	.17	.30	.45	.26	.26	.57	.22	.74	.73	.69	.71	.54	.52	-	-	-
																				.18	.19	.45
Со							1	.42	.56	.64	.02	.06	.38	.46	.42	.25	.21	.52	.34	-	-	-
																				.07	.04	.26
Hi								1	.40	.25	.35	.20	.49	.22	.33	.27	.25	.25	.05	16	10	- 26
Мо									1	.49	.16	.39	.40	.52	.57	.47	.40	.51	.54	.16	.10	.26
IVIO									_	.43	.10	.55	.40	.52	.57	.47	.40	.51	.54	.14	.05	.36
Ol										1	-	.29	.31	.47	.46	.24	.18	.50	.47	-	-	-
											.05									.12	.11	.22
An											1	.18	.30	.18	.24	.34	.31	.14	.22	-	-	-
													_	_	_					.11	.06	.19
In												1	.21	.56	.59	.49	.55	F2	.57	.04	.06	-
Ext													1	.30	.34	.52	.38	.52	.28	_	_	.19
LXL													1	.30	.54	.52	.36	.30	.20	.34	.27	.34
Ps														1	.75	.77	.74	.80	.66	-	-	-
																				.08	.10	.33
Im															1	.64	.73	.74	.59	-	-	-
																				.37	.38	.68
Mn																1	.85	.63	.57	-	- 27	-
Ev																	1	.60	.54	.35	.37	.48
EV																	1	.60	.54	.34	.34	.54
S																		1	.79	.01	-	-
																					.01	.28
I																			1	.09	.15	-
																						.14
St																				1	.88	.79
A																					1	.84
D																			1			1

Sgnificant level .22 at 0.05 level Significant level .28 at 0.01 level

their capabilities and capabilities to do a job differ. In the same way individuals with different profession posses

IV. CONCLUSION

different thinking styles and there capabilities to reach to THE EXPLORING EX

their goal is different. This study is an attempt to nail out the different styles of thinking posses by different professional in their field by studying the impact of cognitive dimensions. This article is an attempt

to study the cognitive variables of the thinking styles in different career personality having different professions. Cognitive variables are studied on different dimensions that are metacognition, cognitive styles and cognitive rigidity. Statistical techniques are applied results showed consanguinity of cognitive dimensions with different styles of thinking. Metacognition dimensions show positive correlation with different styles of thinking that means individual differences plays an important role in performing a task so, professionals metacognition skills helps them to accomplish the goal as their styles of thinking permit them in different tasks (Zhang, 2010). Cognitive styles are the styles in which professionals utilizes their cognitive skills. Results shows that the cognitive styles have a positive effect on the different styles of thinking. Professionals different styles of thinking helps them to perform a task according to the thinking styles they are possessing and there cognitive styles alter with their thinking styles too (Gozef, 2015). Cognitive rigidity is measured on three dimensions that are stress, anxiety and depression. Rigidity of the cognitive skills hampers the individual's capacity to complete a task. Thinking styles shows negative relationship with stress, anxiety and depression. This means that if an individual is showing cognitive rigidity, he faces problem to reach out to his goal. Stress, anxiety and depression have a negative impact on the individual's style of thinking (Lasikiewicz, 2015; Zhang , 2010; Zhang 2009). We can conclude this article that different professionals have different styles of thinking and their cognitive correlates helps them to accomplish a task which suits to their styles. So, working on the tasks that are suitable with their styles of thinking is an icing on the cake for the professionals with different career personality.

Implications of the study

- Career Choice Selection,
- Helps in identifying the area of interest to complete a job
- Career development
- Preferred selection of Jobs
- Task oriented jobs
- The specificity of individual work is known which helps in achieving of goal faster.
- Career guidance to students in school's studies and university
- Increase in performance in organizations
- Commitment towards organizations
- Satisfaction level can be boosted
- Motivational level of the employees is escalated
- Avoid burnouts and exhaustion if career is chosen according to abilities.

Stressors can be reduced

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