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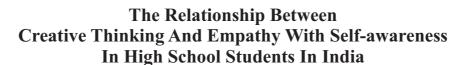
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## ORIGINAL ARTICLE



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## Abstract:

Previous studies revealed that there is moderate to strong correlation between creative thinking and empathy with self-awareness as three important skills in human life and the aim of the present study is to find out the relationship between these three aspects of life skills. The participants in the study contained of 96(54 males and 42 females) 10 grade of high school students from Mysore in India. Life skill questionnaire - India (LSQ-I), carried out on the group sample and date analyzed through Pearson correlation and multiple regression using SPSS soft ware.

The results revealed that self-awareness significantly has positive correlation with creative thinking (r=31, p<.01) and empathy(r=36, p<.01). Analysis of regression also shows that multiple relationships between three variables is significant (MR=0.36 and RS=.12, p<.01) and 12 percent of variation of self-awareness can be predicts by empathy and creative thinking.

# **KEY WORDS:**

Life Skills Components, Self-Awareness, Creative Thinking and Empathy

# INTRODUCTION

<u>Life skills</u> have been defined by the <u>World Health Organization</u> (WHO) as "abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life". They represent the psycho-social skills that determine valued behavior and include reflective skills such as problem-solving and critical thinking, to personal skills such as self-awareness, and to interpersonal skills. The central part set of skills (WHO, 1999) are Self-awareness, Problem solving, Decision making, Critical thinking, Creative thinking, Interpersonal relationship skills, Effective communication, Empathy, Coping with emotions and Coping with stress. The present study, examined the relationship between three aspects of life skills as: Self-Awareness, Creative Thinking and Empathy.

# Self-awareness

Self-awareness includes our recognition of ourselves, of our character, of our strengths and weaknesses, desires and dislikes. Developing self-awareness can help us to recognize when we are stressed or feel under pressure. It is also often a prerequisite for effective communication and interpersonal relations, as well as for developing empathy for others.

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Psychological research has mainly treated self-awareness as a construct within EI. The foundation of this can be seen in the work of Thorndike (1936), who researched the idea of? social intelligences. While casual observation and introspection suggest that people lie somewhere in between these two extremes that people are aware that they will have self-control problems, but underestimate their magnitude - the behavioral evidence is quite limited. One study worth mentioning is by Ariely and Wertenbroch (2001), discussed in Wertenbroch. They offer one group of subjects the ability to impose costly deadlines on themselves (e.g., binding deadlines for course papers), while for a second group evenly spaced deadlines are exogenously imposed. Subjects in the first group chose to impose deadlines on themselves, suggesting that they are not completely naive. But the deadlines they chose allowed more delay than evenly spaced deadlines, and by some performance measures - e.g., their grade for the course - they fared worse than people with exogenously imposed, evenly spaced deadlines. A comprehensive literature review reveals minimal discussion of the construct of self-awareness, making defining it difficult. Additionally, most of the research that has examined self-awareness is outdated. Brown and Ryan (2003) suggest that it is simply "knowledge about the self. Others suggest that self-awareness is awareness or knowledge of one's thoughts, emotions, and behaviors and can be considered a state; therefore, it can be situational (Fenigstein, Scheier, & Buss, 1975). It is believed to be similar to or synonymous with other constructs, such as selfconsciousness (Webb, Marsh, Schneiderman, & Davis, 1989) and insight (Grant, Franklin, & Langford, 2002; Roback, 1974).

#### **Creative Thinking**

Creative thinking is an ability to analyze and sort information, problems, and surrounding situations (World Health Organization, 1993). World Health Organization (1993) defined creative thinking means an ability to think extensively and diversely without sticking to a particular concept. Creative thinking is a kind of divergent thinking that is ability of brain to think in different dimensions for new inventions including discovering problem solutions successfully through divergent thinking, composing of originality, fluency, flexibility, and elaboration. Divergent thinking is opposite to convergent thinking that is emphasis on only one idea but divergent thinking supports variety of ideas both quality and quantity as it is believed that divergent thinking can pave the way for good and qualified ideas (Guilford, 1959). Hilgard (1962) noted that critical thinking is a basic ability for decision making to the situation or problems involving causes and effects.

# **Empathy**

Decety and Meyer (2008) argued that empathy was defined as the "natural tendency to share and understand the emotions and feelings of others in relations to oneself". Caselman (2007) also defined empathy as an ability to understand another's feelings, but added that empathy also is "the ability to understand what others feel and express that understanding in a caring way". Vreeke and van der Mark (2003) expressed "empathy is a response to a specific demand occurring in a specific context" (p.177), and further observed empathy as a social emotion which allows people to connect on an emotional level. Decety and Meyer's (2008) point begs the question that empathy may be natural in everyone, on the contrast, Caselman (2007) referred to empathy as an ability which could mean empathy could be learned. Empathy Skills If people, or in the case of this research, children, were able to experience empathy for another person, it affects their altruism, kindness, and peace, allowing them to relate to others and understand how other people are affected by life. In the end, children grow with this ability and are able to continue to develop into more successful people. Having the ability to experience things from the point of view of another person is an essential social skill (Barr & Higgins D'Alessandro, 2007; Davis & Franzoi, 1991; Feshbach, 1978; Staub, 1971). For the purposes of this study, empathy will be referred to as the ability to have feelings of understanding, sensitivity, and feelings towards another's experience.

# Literature review

Creativity and self-awareness. Research has shown self-awareness processes to have a conceptual and empirical association with creativity (Silvia & Phillips, 2004). For example, when using Duval and Wicklund?s original conceptualization of OSA, that is, where becoming self-aware tends to highlight performance gaps and generate negative effect, the theoretical effect on creativity likely would be negative because of deleterious effects accruing from negative effect. In addition, focusing mental processes on how well one is performing necessarily reduces the amount of processes that can be focused on task. Some



empirical research supports this notion as well (Szymanski & Harkins, 1992). Bass (1990) reviewed literature showing that managers at higher levels of management tend to be more creative and that creative intelligence correlates higher with performance measures as level of management increases.

In a conceptual review of empirical literature, Silvia and O?Brien make the case that creative processes require the same self/standard performance assessments that other noncreative endeavors require (Silvia and O?Brien, 2004). If such a process were not in place, then creative individuals would be without a quality control mechanism and consequently more apt to produce easily-degraded work product. Taken as whole, empirical and theoretical work suggests that self-awareness processes likely operate in both directions, either helping or hindering creative processes. Too little self-awareness increases the possibility of creative junk, while too much self-awareness saps creative resources, produces negative effect, and reduces quality of creative output.

Empathy and self-awareness, Intuitively, empathy and self-awareness appear to be mutually exclusive because the former tends to be an outward focusing by the individual, while the latter is an inward focusing. Asendorpf, Warkentin, and Baudonniere (1996), however, believe self awareness and otherawareness develop at about the same time in children and are part of the same process, which they refer to as secondary representation. Secondary representation is the ability of the individual to cognitively construe hypothetical representations of self and others. In other words, perspective taking and self-awareness can be viewed as part of the same broader process. Davis and Franzoi (1991) conducted research in which high school students were asked to complete the Self-Consciousness Scale (discussed above) and the Interpersonal Reactivity Index. The IRI includes a measure for each of the four sub dimensions described above. Davis and Franzoi found perspective taking to be correlated with empathic concern (r = .46, p < .001) and private self-consciousness (r = .15, p < .01). In summary, self-awareness includes a need to "tune into" others in order to get accurate feedback regarding gaps in personal behaviors, traits, and goal progress. Such information gathering is enhanced by focusing on those individuals pivotal in establishing goals and evaluating goal progress. People high in perspective taking, for example, might be better equipped to vicariously evaluate performance from the vantage point of another. Empathy is expected to correlate positively with self-awareness.

The present study has two aims: the first aim is to examine the relationship between creative thinking and empathy with self-awareness in high school students in Karnataka and the second aim is to examine the effects of gender on students' levels of creative thinking, empathy and self-awareness.

# METHOD AND MATERIAL

# Sample:

The participants of the study contains 96 students of 10 grade high school (54 males and 42 females), were selected via random sampling in India (Mysore city). The mean age of the students was 14.2 and they were selected from two kinds of schools (government and private).

# Materials:

In order to measure the three mentioned variables in the study, the researchers used of three subscale of life skills questionnaire – India (LSQ-I) developed based on central set of skills in world health organization (WHO, 1997). The responding design is followed a likert format with four response options range from 1 = completely disagree to 4 = completely agree.

Self-Awareness: In the study we used of 16 items questionnaire, developed by karimi and Venkatesh Kumar (2012). The whole of inventory comprises of 142 items in relation to 10 core areas of life skill. The test is helpful in screening the self awareness in students who may need further psycho-diagnostic study and counseling for their consciousness. This scale possesses high reliability by split half method (for self awareness subscale it was 0.88) and concurrent validity also computed 0.81 for this subscale. More over the internal consistency alpha coefficient was computed 0.83. (karimi and venkatesh kumar 2012).

Empathy: This scale contains of 14 items of life skills questionnaire – India (LSQ-I) developed by karimi and venkatesh kumar (2012). This scale was designed to gather information about student's level of Empathy regarding the other life skills. The validity of the scale approved by face validity through four expert psychologists and a separate analysis about the psychometric properties of this scale has shown that internal consistency alpha coefficient computed 0.82 (karimi and venkatesh kumar, 2012).

Creative Thinking: This scale also derived from life skills questionnaire – India, with 14 items with four response options range from 1 = completely disagree to 4 = completely agree. The aim of this set



of items is to gather information about student's level of Creative Thinking regarding the other life skills. Analysis about the psychometric properties of this scale has shown that this scale possesses high reliability by split half method (0.86) and concurrent validity also computed 0.83 for this subscale. More over the internal consistency alpha coefficient was computed 0.84.

## **RESULTS & DISCUSSION**

### Results

The results of Mean, SD and number of students in two genders are shown in table 1:

Table 1: Mean, SD and number of students in three variables

Variables	Groups	Mean	SD	N	
Empathy	Male	40.33	11.3	54	
	Female	41.75	10.92	42	
	Total	41.02	11.18	96	
Self-Awareness	Male	34.8	10.31	54	
	Female	38.9	10.21	42	
	Total	36.8	10.26	96	
Creative Thinking	Male	34.31	11.01	54	
	Female	34.71	10.78	42	
	Total	34.49	10.34	96	

# Results about hypothesis of research:

According to the assumption of the current investigation, the analysis of data divided in two parts:

At first part the relationships between three variables have evaluated and in the second part the gender differences in three variables analyzed.

Hypothesis1. There is significant correlation between Creative thinking with self-awareness in high school students in India:

Hypothesis 1.1. There is significant correlation between Creative thinking with self-awareness in Male: Hypothesis 1.2. There is significant correlation between Creative thinking with self-awareness in Female: The correlation between levels of Creative thinking with self-awareness is presented in the correlation matrix table 2 below:

Table 2. Correlation coefficient between Creative thinking with self-awareness

Variables		Sample	Statically Index		
Variable1	Variable 2		Correlation	Sig. Level	N
Creative	Self-	Total	.31	P<.01	96
Thinking	Awareness				
		Male	.32	P<.01	54
		Female	.29	P<.01	42



As it is shown in table above, there is significant relationships between Creative thinking with self-awareness (r=.31, p <.01). Regarding to this result the first hypothesis is accepted. More over there is significant relationships between Creative thinking with self-awareness in male and female samples and hypothesis No. 1.1 and 1.2 also is accepted.

Hypothesis2. There is significant correlation between Empathy with self-awareness in high school students in India:

Hypothesis2.1. There is significant correlation between Empathy with self-awareness in Male:

Hypothesis 2.2. There is significant correlation between Empathy with self-awareness in Female:

The correlations between levels of Empathy with self-awareness are presented in the correlation matrix table 3 below:

Table 3. Correlation coefficient between Empathy with self-awareness

Variables		Sample	Statically Index		
Variable1	Variable 2		Correlation	Sig. Level	N
Empathy	Self- Awareness	Total	.36	P<.01	96
		Male	.38	P<.01	54
		Female	.33	P<.01	42

As it is shown in table above, there is significant relationships between empathy with self-awareness[r= 0.36, p < .01]. Regarding to this result the first hypothesis is accepted. More over there is significant relationships between empathy with self-awareness in male and female samples and hypothesis No. 1.1 and 1.2 also is accepted.

Hypothesis4. There is significant Multiple relationships between Empathy with self-awareness in high school students in India:

Table 4. Correlation coefficient between Creative thinking with self-awareness

Variables		Statistical indexes					
criterion	predictor	Multiple	Predict	F	Regression indexes		
		relations	coefficie		Creative	Empathy	
		hips	nt		Thinking		
Self-	Creative	. 36		F= 19.43	β=. 36		
Awareness	Thinking		.12	P=.0001			
					t=6.47		
					P=.0001	1	
	Empathy	.36	.12	F= 18.32	β=. 36	β=. 34	
				P=.0001	t=6.47	t=6.21	
					P=.0001	P=.0001	



As it is shown in table above, the results of regression analysis revealed that multiple regression for Creative Thinking and Empathy with self-awareness is significant (MR= .36, RS= .12 and P<.01). According to these results, 12 percent of variance of self-awareness can be predicted by Creative Thinking and Empathy, and then the third hypothesis also accepted.

#### **DISCUSSION**

The first hypothesis of the current investigation suggested that there is significant relationship between creative thinking and empathy with self-awareness in high school students. The results of the study revealed significant relationship between creative thinking with self-awareness (r = .31, p < .01). This means that students who have high creative thinking tended to perform more scores in Creative Thinking. However, those who have low Self-Awareness tended to perform high scores in self-awareness. These findings corroborate pervious findings which report significant relationships between creative thinking with self-awareness (Silvia & Phillips, 2004) and Szymanski & Harkins, 1992.

This result also supported the previous findings of Orr and Westman (1990) whom concluded that hardiness is positively related to adjustment difficulty.

The second hypothesis of the study suggested that there is significant relationship between empathy and empathy with self-awareness in high school students. The results of the study revealed significant relationship between empathy with self-awareness (r = .36, p < .01). This means that students who have high empathy tended to perform more scores in Creative Thinking.

The finding of this part also supported the previous findings of Asendorpf, Warkentin, and Baudonnière (1996), which concluded that empathy is positively related to self-awareness. In support of previous studies this study has established the fact that creative thinking and empathy is good predictor of self-awareness.

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