

EMOTIONAL INTELLIGENCE AND CREATIVITY OF SCHOOL STUDENTS

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Present study compared emotional intelligence and creativity of students in three types of schools: Gurukuls, Public schools and Govt. schools and found best performance in Public schools. .

INTRODUCTION

Emotional intelligence has been conceptualised as a multidimensional construct as proposed by Goleman (1995, 1998) and Mayer and Salovey (1993, 1995). According to this conceptualization, emotional intelligence consists of “abilities such as being able to motivate one and persist in the face of frustrations; to control impulses and delay gratification; to regulate one’s moods and keep distress from swamping the ability to think; to empathize and to hope”. Further research in this area has indicated that an emotionally intelligent person is likely to be skilled in two key areas within one’s emotional competence framework, namely “personal competence” – how one manages the self; and ‘social competence’ - how one manages relationships. While the former essentially implies self-awareness (of internal states, preferences, resources, and inhibitions), self-regulation (of internal states, impulses and resources) and motivation (traits that facilitate accomplishing goals); the later comprises empathy (the ability to understand other’s emotions, and other’s talents or skills needed to influence, communicate, lead, develop others, manage conflicts, promote team work, or catalyse change), and social skills such as expertise in inculcating desirable responses in others (Kierstead 1999; Bhalla and Nauriyal 2004). Thus, emotional intelligence is made up of a set of skills and these skills can be improved through education. Schools serve as the prime location for the promotion of emotional intelligence (Tiwari and Srivastava 2004). Goleman (1998) considered school as one place which can turn to compensate children’s deficiencies in emotional and social competence. As such schools face the challenge to teaching as well as nurturing the emotional skills of children.

There are four distinct approaches of creativity: (a) product, (b) person, (c) press, and (d) process. The product approach to creativity focuses on outcomes and those things that result from creative process. It is concerned with important characteristics that distinguish more creative from less creative products as perceived by different people for different purposes. Creative products are emphasized for elements of newness, freshness, and inventiveness they have. The quality of originality is represented in these products involving fusion of perception in new way, finding new connections and relationships, producing new insights, and moulding of experiencing in new organizations. Creative products are novel – they are not imitations, nor are they mass produced. (Barron 1988; Sternberg 1988; Torrance 1981). The person approach is based on research on personal characteristics. Advocates of this approach have attempted to identify personality and motivational characteristics, cognitive abilities, and behavioural or biographical dispositions associated with creativity. Personality researches have also considered intrinsic motivation as core characteristic of creative persons (Amabile 2003). Some cognitive correlates of creativity such as field independence, (Noppe & Gallagher 1977), problem solving styles, cognitive complexity and wisdom (Sternberg 2003) have also been identified. The press approach to creativity typically includes the total complex situation (press) in which creative processes are initially stimulated and sustained through completion. Press influences may be general and operate through implicit evaluation and tradition; or more specific. Family structure and school environments have been found to be relevant contributors in the development of creative potentials (Gaynor & Runco 1992; Hasirci & Demirkan 2003). The process approach has been less personal and more behavioural and has been more oriented to delineate various steps, styles,

and strategies within the creative process. Generally, creativity is taken as a process of seeing or creating relationships comprising process of discrimination from many alternatives and synthesizing elements in altogether new and original ways (Pesut 1990, Sternberg 2003). In tune with this approach, Torrance through factor analytic studies has identified four factors of creative thinking - fluency, flexibility, originality, and elaboration which are indexed in his famous tests of creativity.

OBJECTIVE

To examine the relative effects of three types of school environment on the levels of emotional intelligence and creative thinking.

METHOD

Sample

The sample consisting of 300 girls (100 each from three types of schools – Public, Govt. and Gurukuls) participated in the present study. One sample of 100 secondary school girl students in the age range of 14 to 16 years was drawn from various public schools of Rohtak city. Only those subjects were included in the samples who were residing in city and whose parents belonged to villages originally and still have social contacts with their native places. The second sample also consisting of 100 girls in the same age range and grade was drawn from Govt. High schools for girls of Khanpur Kalan and Gohana. Parents of these girls were basically from villages. The third sample was drawn from BPS Kanya Gurukul, Khanpur Kalan (Sonapat) in the same age range and grade. It may be noted that subjects drawn from three types of schools, came from the same stock, and belonged to the same socio-economic strata. Right from the beginning they had almost same living style, dietary habits, and family environment; but different school environments. By doing so it was assumed that students of three samples belonged to the same population and could be regarded as comparable before they joined their respective schools. However, no empirical data were available to compare their intellectual capacities before they joined their respective schools.

Procedure

The following tests were administered to the subjects of all the three samples: (1) Multidimensional Measure of Emotional Intelligence (Darolia 2003); and (2) Torrance Test of Creative Thinking with Words (Torrance 1966). Multidimensional Measure of Emotional Intelligence (MMEI) developed by Darolia (2003) consists of sixty five multiple response choice items indexing five dimensions of emotional intelligence viz., Empathy, Self-awareness, Motivating Oneself, Managing Emotions, and Handling Relations. On each item subject is required to check and report one of the five response choices that describes his or her behaviour the best. The internal consistency coefficients for five scales have been assessed in terms of alpha coefficients and were found to be ranging from .76 to .83. The construct validity of scales was established through factor analysis and found to be satisfactory. Torrance Test of Creative Thinking with Words comprises a verbal battery of seven subtests known as 'activities'. Each activity is believed to bring into play somewhat different mental processes, yet each requires the subject to think in divergent directions. Scoring of these activities provides scores for four basic dimensions of creativity namely, fluency, flexibility, originality, and elaboration. The testing sessions were conducted in classroom settings. Both the tests, being group tests, were administered to a group of 15-25 subjects in respective classes. The test responses were scored as per respective scoring keys/procedures mentioned in manuals. The MMEI was scored for five variables, namely empathy, self-awareness, motivating-oneself, managing emotions, and handling relations. Torrance test of creative thinking with words was scored for four factors of creativity

viz. fluency, flexibility, originality, and elaboration. Nine variables in total (5 of MMEI), and 4 of TTCT) were used in the present study.

RESULTS AND DISCUSSION

The obtained data were analysed using descriptive statistics (mean, standard deviation, skewness, and kurtosis) and t-ratios. Frequency distributions of all the nine variables used in the study were set up separately for three groups of subjects (Public schools, Gurukuls and Govt. schools). Descriptive statistics were computed to ascertain the normalcy of data, and t-ratios were computed to compare the three groups in terms of significance of differences in mean scores of different measures.

Public school students scored significantly high on three of five measures of emotional intelligence, namely Empathy (Pub. Sch. Mean = 53.87, SD= 8.38; Gurukul Mean = 48.98, SD = 5.62; $t = 4.85$ $p < .01$), Motivating oneself (Pub. Sch. Mean = 55.64, SD = 6.64; Gurukuls Mean = 48.03, SD = 7.49' $t = 7.60$ $p < .01$), and Handling Relations (Pub. Sch Mean = 52.75, SD = 7.52; Gurukuls Mean = 47.96, SD = 8.24; $t = 4.29$ $p < .01$) and low on Managing Emotions (Pub. Sch. Mean = 49.22, SD = 6.36; Gurukuls Mean = 50.51, SD = 4.86; $t = -1.61$ NS) than their counterpart Gurukul students. Both groups did not significantly differ on the mean scores of Self-awareness. It posits that public school students tend to be more empathetic, motivating themselves, and apt in handling relations but less capable of managing their emotions while interacting with others than their counterpart Gurukul students. It was also found that Public school students scored significantly high on all the four dimensions of creativity i.e. Fluency (Pub. Sch. Mean = 54.04,SD = 14.06; Gurukuls Mean = 42.33, SD = 10.85; $t = 6.59$ $p < .01$), Flexibility (Pub. Sch. Mean = 34.60, SD = 8.93; Gurukuls Mean = 24.60, SD = 6.74; $t = 8.94$ $p < .01$), originality (Pub. Sch. Mean = 42.26, SD = 15.48; Gurukuls Mean = 26.91, SD = 9.23; $t = 8.52$ $p < .01$), and Elaboration (Pub. Sch. Mean = 15.36, SD = 7.64; Gurukuls Mean = 11.54, SD = 3.79; $t = 4.48$ $p < .01$) than their counterpart Gurukul students. Hence, Public school students tend to be high on all the four factors of creativity - fluency, flexibility, originality, and elaboration.

Public School students scored significantly higher than their counterpart Govt. School Students on Empathy (Pub. Sch. Mean = 53.87, SD = 8.38; Govt. School Mean = 47.57, SD = 8.61; $t = 5.25$ $p < .01$), Motivating oneself (Pub. Sch. Mean = 55.64, SD = 6.64; Govt. Sch. Mean = 47.93, SD = 7.39; $t = 7.76$ $p < .01$), Self-awareness (Pub. Sch. Mean = 49.57,SD = 6.27;Govt. Sch. Mean = 46.29, SD = 8.77, $t = 3.04$ $p < .01$), and Handling Relations (Pub. Sch. Mean = 52.75, SD = 7.52; Govt. Sch. Mean = 48.36, SD = 6.29; $t = 4.48$ $p < .01$). On fifth measure of emotional intelligence i.e. Managing Emotions, both the groups did not differ significantly. Hence, Public School students tend to be more empathetic, motivating themselves, self-aware of their emotions, and apt in handling relations while interacting with others than their counterpart Govt. School students. It was also found that Public school students scored significantly higher than their counterpart Govt. School students on all the four measures of creativity viz. Fluency (Pub. Sch. Mean = 54.04,SD = 14.06; Govt. Sch. Mean = 42.74, SD = 16.05; $t = 5.30$ $p < .01$), Flexibility (Pub. Sch. Mean = 34.60, SD = 8.93; Govt. Sch. Mean = 28.68, SD = 11.08; $t = 7.13$ $p < .01$), and Elaboration (Public Sch. Mean = 15.36, SD = 7.64; Govt. Sch. Mean = 4.67, SD = 3.68; $t = 12.60$ $p < .01$). Hence, Public school students tend to be high on divergent thinking capacities such as fluency of thoughts, flexibility of thoughts, originality or novelty of thoughts, and elaboration of thoughts than the Govt. school students. This significant high level of creative potentials in Public School students (Stimulating Environment Group) can be attributed to the stimulating environment of the public schools.

Gurukul students scored significantly high on two measures of emotional intelligence i.e. Self-awareness (Gurukul Mean = 49.24, SD = 6.92; Govt. school Mean = 46.29, SD = 8.77; $t = 2.64$ $p < .01$), and Managing Emotions (Gurukuls Mean = 50.51, SD = 4.86, Govt. Sch. Mean = 48.47, SD = 5.32; $t = 2.83$ $p < .01$) than their counterpart Govt. school students. Hence, Gurukul students tend to be more capable of self-awareness and management of their own emotions while interacting with other than Govt. school students. In case of four measures of creativity, Gurukul students scored significantly high only on Elaboration (Gurukuls mean= 11.54, SD=3.79; Govt Sch. Mean =4.67, SD=3.68; $t=13.01$ $p<.01$) than their counterpart Govt. school students. On remaining three measures of creativity i.e., fluency, flexibility, and elaboration two groups did not differ significantly. Hence, Gurukul students tend to have more elaborative thoughts than their counterpart Govt. school students.

The comparative evaluation of three types of school students hereby posits that Public School students have scored significantly high on three measures of emotional intelligence (empathy, motivating-oneself, and handling-relations) than the students of Gurukuls; and on four measures of emotional intelligence as compared with Govt. School students (empathy, motivating-oneself, self-awareness, and handling relations). Overall, Public school students tend to be high on emotional competencies as compared to the students of Gurukuls, and Govt. Schools. It suggests that public schools provide more stimulating and prompting environment for the cultivation of emotional competencies and skills than Gurukuls and Govt. schools. Comparison of Gurukul students with those of Govt. schools in terms of their performance on five measures of emotional intelligence suggests that Gurukuls tend to provide slightly more stimulating environment for the cultivation of emotional skills among their students than Govt. Schools.

Overall comparison of students of three types of schools in terms of their performance on verbal measures of creative thinking suggests that Public School students have scored significantly high on all the measures of creativity i.e., fluency, flexibility, originality, and elaboration than the students of Gurukuls, and Govt. schools. It suggests that Public Schools tend to provide more stimulating and prompting environment for the cultivation and enhancement of divergent thinking capacities among their students than Gurukuls, and Govt. schools. Govt. and Gurukul students have not found to be significantly different from each other in terms of their performance on creativity tests. It implies that both the Gurukuls and Govt. schools do not tend to provide conducive environment for the cultivation of creative thoughts among their students.

CONCLUSION

The findings cannot be considered fully generalisable since the control of genetic factors was somewhat inadequate. For more generalisable findings, more large scale studies with control of genetic, familial, and socio-cultural variables are required. On the basis of present finding, it is suggested to the management of both the Gurukuls and Govt. schools to look forward for the strategies required for the cultivation of emotional competencies and creative thinking among their students, so that they can be brought at par with the students of Public schools.

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