

Intelligence and Personality among Gurukul, Kreedakul and Gharkul School System Students

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ABSTRACT

The purpose of this study was to investigate relationship between personality and Intelligence among Gurukul, Kreedakul and Gharkul school system students. The study aimed to investigate how the different groups i.e. Gurukul, Kreedakul, and Gharkul, school system and Gender influence the personality and Intelligence of the students. The sample comprised of 90 students from 9th standard, from Jnana Prabodhini School, Nigdi, which included 30 from Gurukul (15 males, 15 Females), 30 from Kreedakul (15 males, 15 Females) and 30 from Gurukul (15 males, 15 Females). No significant gender difference found and in addition, difference due to school system was also not found. Among the Big Five Factors, Agreeableness was found to be correlated negatively with Intelligence ($r = -.275$). While exploring the differences due to school system on the correlation of personality factors and Intelligence, a significant negative correlation was found among agreeableness and Intelligence ($r = -.379, p < .01$) in participants from Gharkul school system.

Keywords: *Intelligence, Personality, Gurukul, Kreedakul, Gharkul School System*

In traditional education system, more emphasis was given on classroom teaching only. But recent education system also emphasizes on extracurricular activities such as sports and arts, which help in personality development and enhancing cognitive skills of the students, as a good personality and intelligence are very important in school life.

The present study was an investigation into the correlation between personality and intelligence among Gurukul, Kreedakul and Gharkul students from JnanPrabodhini School, Nigdi (J.P.N.V). The following are the detailed characteristics of each school system. (Retrieved from)

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Gurukul System

A gurukul is a type of school in India, residential in nature, with shishyas living in proximity to the guru, often within the same house. In a gurukul, shishyas reside together as equals, irrespective of their social standing, learn from the guru and help the guru in his day-to-day life. The guru-shishya tradition is an ancient tradition in Hinduism and appears in other religious groups in India, such as Jainism, Buddhism. Typically, a guru does not receive fees from a shishyas studying with him. At the end of his studies, a shishya offers the guru dakshina before leaving the ashram. The gurudakshina is a traditional gesture of acknowledgment, respect and thanks, which may be monetary, but may also be a special task the teacher wants the student to accomplish. (Kshalkar, 2013).

The Gurukul project attempts at personality development through this Panchakosha method. The Annamaya kosha i.e. the gross human body is the abode of God, the Pranamaya kosha i.e. the human breath is the cosmic energy itself. The Manomaya kosha i.e. the human mind is the centre of all good resolutions. The Vidnayanmaya kosha i.e. the human intellect is the medium of achieving oneness with the world; while the Ananadmaya kosha i.e. the divine power residing within man can make life an ocean of eternal happiness. Elevating a person's consciousness to these levels and opening up new realms of realization upon him is the true essence of education. A sense of pride and love for the country, the language and the culture is developed in the students.

Kreedakul System

J.P.N.V. has undertaken a special sports project - 'Kreedakul' which aims to create gold medalists on international level. To fulfill this aim they have been giving sports training in a scientific manner. They provide specialized sports training to create international sportsman They also have separate academic systems to facilitate sports achievement. To nurture sports intelligence in a scientific way expert sports coaches, sports psychologist and doctors are appointed. There is special guidance to encourage players to win the sports events.

Gharkul System

This section operates for the students between 10 - 15 yrs of age. This section executes novel projects to enhance formal education system, besides it gives emphasis on non-formal education system for the overall development of the child. This projects aim at students' personality building and emotional development. To achieve this development Prabodhini organizes 'Sanskar' programmes such as, 'Varsharambha Upasana' (prayer held in the beginning of the academic year). 'Deeksha grahan'. 'Pratignya grahan' (vow -taking ceremony) as well as weekly prayers are conducted. Students' cognitive abilities are tried to enhance with many thought - provoking talks and lectures. To encourage children's physical skills daily physical exercises as well as special training in different games is also organized. Technical department in the school develops technical abilities of the students through their training.

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The research on personality, cognitive, or temperament styles in relation to educational development has not been much in comparison to research in the area of cognitive abilities (Wang & Lindvall, 1984). It can be said, there is some importance probably to teachers' perceptions of students' personality traits on performance expectations, and also the probability that personality may have mediating role in which individuals perceive and interact with their environment.

In general, many studies showed that there is an association between intelligence and personality. The fields of Personality and Intelligence have parallel histories. Some theorists such as Raymond Cattle and Hans Eysenck, contributed to the study of both variables and suggested possible interfaces between the two constructs. Such as, intelligence was a factor in Cattle's theory of Personality, and Intelligence is closely related to personality in Eysenck's theory (Sternberg, 1994).

METHODOLOGY

Participants

Incidental sample was used for the present study. The sample consisted of 90 students from Jnanprabodhini Nigdi School of 9th standard. All students' age range was 14 to 15 years.

Tools for Measurement

Data were collected on the following tools. The description of the instruments used for the survey is given below.

Standard Progressive Matrices

Raven's Standard Progressive Matrices (SPM) developed by Raven, Court and Raven (1938) was administered as a group test. The scale consists of 60 problems divided into five sets of 12. In each set the first problem is as nearly as possible. Self-evident. The problems which follow become progressively more difficult. Though the task was untimed, the total time taken on an average was 30 minutes. Test-retest reliability of the test as reported in the manual for the age group of the sample used is .88.. It is a non verbal test to measure creative thinking of pupils.

Big Five Inventory

The Big Five Inventory was developed by Martinez and John (1998). The test consists of 44 brief personality descriptors to which the test-taker responds with degree of agreement or disagreement on a 5-point Likert scale. Norms used are the Gosling/Potter norms for adults. For children the present author gathered data on 216 teenagers ranging in age from 12 to 17 (all the public school students in a small Oregon community). Norms for males, females and different age groups are used as appropriate in scoring a given report. Reliability for the five traits of the BFI are is adequate. Trait Mean Standard Deviation K-R 21 Reliability is satisfactory. The

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Marathi meaning of the test items were also written to make it easy for the students to understand.

Personal data sheet

The personal data sheet was prepared seeking biographic information such as age, gender, languages known, education, etc. It also included the information related to family size, type of family and family annual income.

Procedure

For data collection the researcher approached the 9th standard Gharkul, Kreedakul and Gurukul groups from Jnanaprabodhini, Nigdi, School. The Big five inventory and Raven's Standard Progressive Matrices test was administered in each of the 3 classrooms, Kreedakul, Gharkul, and Gurukul. One session of administration of test was done on one group at a time, consisting of 30 students from one group, including 15 boys and 15 girls. The total time taken by the respondents to complete the questionnaire ranged from 45 minutes to 60 minutes, and thus the researcher provided encouragement to the respondents occasionally for honestly completing the relatively lengthy test. The respondents were assured of the confidentiality of their personal details and responses. The data was then put through the statistical analysis.

RESULTS AND DISCUSSIONS

The sample put through statistical analysis comprised of a total of 90 respondents. From 9th standard (15 males and 15 females from Gurukul, Kreedakul, and Gharkul, each). Given below are the results of the descriptive and inferential statistics.

While exploring the gender differences among the various dimensions of personality and Intelligence, no significant differences were observed, so the combined data were considered for further analysis. Pearson product moment correlation was computed to identify the possible relationship among Big Five Personality Factors and Intelligence, as seen in Table 1.

Table - 1: Correlation for Intelligence with Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism for Total Sample. (N= 90)

	O	C	E	A	N	I
O	1					
C	.412**	1				
E	.358**	.271**	1			
A	.440**	.454**	.231*	1		
N	-.343**	-.465**	-.531**	-.349**	1	
I	-.033	.030	-.026	-.275**	-.003	1

Note: ** $p < .01$, * $p < .05$

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Table 1, result shows that there is no significant relation between Intelligence and personality factors, except Agreeableness.

While exploring the differences due to school system on the correlation of personality factors and Intelligence, a significant difference was observed. In Gharkul students, a significant negative correlation was found among agreeableness and Intelligence ($r = -.379, p < .01$) and in the other systems it was insignificant. The possible reason could be, as Gurukul and Kreedakul systems, both are higher on training discipline as well as academic achievement, so they curb disagreeableness. Whereas in Gharkul, it's a normal school system, where rules and regulation are as strict as any other school system but they remain less as compared to Gurukul and Kreedakul. So there, being low on agreeableness can be associated with higher intelligence.

Table 2: Correlation between Intelligence and Big Five Personality factors in Gharakul school system

	O	C	E	A	N	I
O	1					
C	.377*	1				
E	.479**	.272	1			
A	.515**	.428*	.323	1		
N	-.570**	-.511**	-.586**	-.275	1	
I	.091	.222	-.004	-.379*	.021	1

Note: ** $p < .01$, * $p < .05$

The findings of the present study may be explained through a study, which found no support for the idea that openness/Intellect is related to change in intelligence over time, using IQ at ages 11 and 79 years (Gow, Whiteman, Pattie, & Deary, 2005).

From the few studies that NEO PI-R facets and separated verbal and nonverbal intelligence, it appears that the stronger association of Intellect (Ideas) than Openness with intelligence may be especially for nonverbal intelligence (DeYoung et al., 2005; McCrae, 1993; Moutafi et. al., 2006). The Openness facets appear more likely to be associated with verbal intelligence than with nonverbal intelligence, whereas Ideas is often associated with both forms of intelligence about equally. Intellect may be associated with both verbal and nonverbal intelligence, whereas Openness may be associated primarily with verbal intelligence. And as for the present study Intelligence test that was used for measuring intelligence was Non-Verbal, i.e. Raven's SPM, thus it follows that the findings of the present study with regard to Intelligence and Openness stand supported. And with regard to Intelligence and Conscientiousness as well.

With regard to Intelligence and Extraversion, in a study by Ackerman and Heggstad (1997) showed that Correlations between the date of publication of the study and the observed

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extraversion–intelligence correlations were generally negative, which suggested a change in the magnitude of the extraversion–intelligence relation over time.

Studies show that any weak positive correlation intelligence with Extraversion might be artifactual, simply reflecting Extraversion's Positive correlation with Openness/ Intellect (DeYoung, 2006; Digman, 1997) rather than a real association with intelligence specifically. In the present study, Intelligence was found to be negatively correlated with Openness and Extraversion, both weakly. So it might be simply reflecting Extraversion's correlation with Openness/ Intellect rather than a real association with intelligence specifically. Studies assessing the association of Extraversion and Intelligence while controlling for Openness/Intellect could help to resolve this question.

In the present study a positive, but non-significant correlation was found between Intelligence and conscientiousness. It may be explained by a study to investigate the relationship between conscientiousness and intelligence, Conscientiousness was not found to correlate with any of the intelligence measures. Furthermore, the well replicated correlations between openness and intelligence; and neuroticism and intelligence were not found either. This led to the conclusion that more research is needed, using well-validated measures, to assess whether a relationship exists between conscientiousness and intelligence and what this may be. (Grant, 2006). So, the findings of the present research stand supported.

In a study, using Big Five Inventory, Agreeableness was negatively correlated with Intelligence ($\beta = -.28$), in the cognitively superior older group (Thomas & Baker, 2006). This study may be helpful to support the finding.). Here, individuals who tend to be un-friendly and uncooperative keep higher levels of general knowledge. Agreeableness negatively correlated with intelligence, suggesting that a disagreeable nature goes hand in hand with general intelligence in young age. This result is in accordance with previous research that suggests that those who are highly intelligent are more independent (Harris, Vernon, & Jang, 2005). Agreeableness is less necessary when you don't rely on others. In addition, a negative relationship between Agreeableness and intelligence has been previously reported among highly intelligent young adults (ages 17–39) (Allik & Realo, 1997), which suggests that a disagreeable nature may harness non-reliance on others means that in turn leads to cognitive intelligence in young age. In the present study, it was found that, there is a statistically significant negative correlation between intelligence and agreeableness ($r = -.275, p < .01$).

In the present study, it was found that, the negative correlation between Intelligence and Neuroticism, is not statistically significant. This could be explained by study in which correlation between neuroticism and intelligence was not found (Grant, 2006). In a study which attempted to ascertain whether intelligence systematically moderated the relationship of extraversion (e) and neuroticism (n). From 215 male, 5 groups of 43 subjects each were ranked from high to low on

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the basis of intelligence test scores, and within each group E and N measures were correlated. No pattern of correlations emerged that indicated any moderating effect of intelligence. Most of the correlations were in the negative direction and insignificant (Farley, 1968). The consensus view states that there are no sex differences in intelligence. However, Lynn (1994, 1999) has formulated a developmental theory of sex differences in intelligence that challenges that view. The theory states that boys and girls mature at different rates such that the growth of girls accelerates at the age of about 9 years and remains in advance of boys until 14–15 years. At 15–16 years the growth of girls decelerates relative to boys. As boys continue to grow from this age their height and their mean IQs increase relative to those of girls. So, among children up to the age of around 14 year the sex differences are smaller because girls mature earlier than boys. And in the present research as the sample was of age 14, much gender difference on Intelligence was not seen.

In addition, for the personality factors, the sample's age is small to have been through any gender differentiating experience. Both male and female students get the same education and being in an urban environment, they might not have got different treatment. And their personalities are in a developing stage. So the results didn't show any gender differences. This explanation can support the findings. In the present study gender differences or school system differences were not found among personality and Intelligence, this could be explained through the research limitation that other factors such as socio-economic status, parent's education, family environment which might influence the scores were not controlled to see if groups are mainly having any effect on their personalities.

The findings of this study suggests that more research, especially in the educational and teaching methodology context for young age students, employing other important variables, such as emotional intelligence, anxiety, academic achievement, etc. is necessary to gain a better understanding of the gender differences and group differences in this regard.

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