



AN INVESTIGATION INTO VERBAL INTELLIGENCE OF ADOLESCENTS IN RELATION TO THEIR GENDER AND TYPE OF SCHOOL

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Abstract: The main aim of the present investigation was to study verbal intelligence of adolescence in relation to their gender and type of schools. For conducting this study, a sample of 200 male and female students studying in 9th and 10th class of senior secondary schools was selected by adopting random sampling. Data were collected with the help of Verbal Intelligence test constructed by Dr. R. K. Ojha (Jaipur) and Dr. K. Ray Choudhary (Aligarh). Means, S.D. and t-test were used for analysis of data. The findings of the study revealed that boys possessed more verbal intelligence as compared to girls. Private school adolescents had more verbal intelligence in comparison to government school adolescents. At the end of the paper, implications of the study have been discussed.

Index Terms - Verbal intelligence, Adolescents.

I. INTRODUCTION

Language is the most common way for people to express their thoughts, emotions and feelings. Spoken utterance of a particular person reflects his/her educational and cultural background, psychology, life-experience, reasoning his/her level of intelligence etc. This type of intelligence is associated with the verbal I.Q. Human uses verbal-linguistic intelligence when they speak to each other, whether through formal speech or informal conversation. It consists the ability to think words and to use language to express and appreciate complex meanings. Verbal intelligence refers to specific human based language skills, which are considered to reflect latent general ability. Verbal skills are necessary for development of self-advocacy and self-determination. Verbal intelligence is encompassed in storytelling and creating in all forms of human that involves such things as play on words, in the expected ending in a joke, and a various funny twists of the language. Intellect is the unique characteristics of mankind. Human is believed as most intelligent animal in all creatures. Intelligence means to decide, to grasp and infer intelligence in which language or words are used is called verbal intelligence. Our attraction for intellect and intelligent person is always there from ancient times till today. Individual differences in intelligence influence developmental trajectories across the lifespan, affecting socio-economic, psychological, and health outcomes. These variations in the development of intelligence are likely to be associated with children's family socio-economic status Verbal intelligence is the ability to analyze information and solve problems using language based reasoning. Verbal reasoning is important in most aspects of school work, even the more abstract courses such as Mathematics and Physics required verbal reasoning skills, as most concepts are either introduced orally by the teacher or introduced in written form in a text book. **Richard Lynn and Paul Irwing (2005)** found that the mean IQ of men exceeded that of women by up to 5 points on the Raven's Progressive Matrices test. Lynn's findings were debated in a series of articles for Nature. He argued that there is a greater male advantage than most tests indicate, stating that because girls mature faster than boys, and that cognitive competence increases with physiological age, rather than with calendar age, the male-female difference is small or negative prior to puberty, but males have an advantage after adolescence and this advantage continues into adulthood. **Asthani and Ahmadi (2006)** found that the verbal intelligence of the dyslexia- dysgraphia group was significantly lower than that of the normal student, while, the nonverbal

intelligence of the dyslexia- dysgraphia group was significantly higher than that of the other group. In addition, the verbal intelligence was significantly lower than the nonverbal intelligence for the students with dyslexia- dysgraphia. **Kaufman J. C. (2015)** in his article on ‘Why Creativity Isn’t in IQ Tests, why it Matters, and Why it won’t Change Anytime Soon Probably’ studied that intelligence and creativity are more conceptually related than we have thought. He concluded that there are several theories that are not (yet) represented in IQ tests that have much to offer. One common criticism of IQ tests is that they have largely remained stagnant over the last century. Study also argued that creativity offers a potential way to counter issues of test bias from different angles. **Singh et.al (2017)** studied Different Forms of Intelligence in Indian School Going Children and found out that even in the children with low IQ, many students had other forms of intelligences. The IQ scores correlated with only logical/mathematical, spatial, and musical intelligence. **Yavich and Rotnitsky (2020)** indicated that in excellent classes - 80.9% of students had logical intelligence, in at least one of the levels of dominance; in ordinary classes only 48.4% of students have logical intelligence, at least in one of the levels of dominance. Findings indicated that in excellent classes the percentage of students with two or three dominant intelligences was higher than the percentage in ordinary classes. **Blasco et. Al (2022)** highlighted the significant, positive and moderate relationship between intelligence and academic performance ($r = 0.367$; $p < 0.001$), highlighting the predictive capacity on school performance when the type of intelligence (general and implicit; 35%) or the country of origin (45%) is taken as a moderating variable, with the explanatory models on age or sex not being significant. Therefore, it can be concluded that intelligence, in addition to being a good predictor of academic performance, is influenced depending on the type of intelligence or theoretical model taken as a reference, and also depending on the country or culture of origin.

It has been observed from the literature that very few studies are on verbal intelligence among adolescents. For assessing the academic achievement, verbal intelligence testing is required. Hence, it was decided to undertake the present study to investigate the verbal intelligence of adolescents in relation to their gender and type of school.

OBJECTIVES OF THE STUDY

1. To study the verbal intelligence of male and female adolescents.
2. To study the verbal intelligence of Government and Private School adolescents.

HYPOTHESES OF THE STUDY

1. There will be no significant difference in the verbal Intelligence of male and female adolescents.
2. There will be no significant difference in the verbal intelligence of Government and private school adolescents.

RESEARCH METHODOLOGY

For conducting the present investigation, survey technique under descriptive method of research was used.

Sampling

A representative sample of 200 students (100 males and 100 females) studying in 9th and 10th class of senior secondary schools was selected from four schools (2 government and 2 private) of Kangra District of Himachal Pradesh by using the technique of random sampling.

Research Tool Used

In the present study, Verbal Intelligence Test constructed by Dr. R. K. Ojha (Jaipur) and Dr. K. Ray Choudhary (Aligarh) was used to investigate the verbal intelligence of adolescents.

RESULTS AND DISCUSSION

The data were analyzed with the help of descriptive statistics and t-test was used to study gender-wise and school-wise difference in verbal intelligence among secondary school adolescents.

1. To test the hypothesis that “**There will be no significant difference between the Verbal Intelligence of male and female adolescents**” t-ratio was calculated between the mean scores of male and female adolescents on verbal intelligence. The results are also shown in the Table 1 which is given below:-

TABLE 1

Table showing significance of difference in mean scores of male and female adolescents on verbal intelligence

Group	Number	Mean	S.D.	df	t-value	Level of Significance
Male	100	47.24	12.18	198	2.73	Significant at 0.01
Female	100	42.41	12.76			

M :- Male

F:- Female

S:- Significant

NS:- Not significant

(‘t’ value to be significant at df 198 should exceed value of 1.97 at .05 level and 2.60 at .01 level)

Table 1 reveals that mean scores on the variable of verbal intelligence of male and female adolescents came out to be 47.24 and 42.41 respectively. The calculated t-value for comparing the means of verbal intelligence of male and female adolescents came out to be 2.73, which is significant at 0.01 level of significance, for df 198. This implies that there exists significant difference in verbal intelligence of male and female adolescents.

Hence, Hypothesis No.1 that, “**There will be no significant difference between the Verbal Intelligence of male and female adolescents**” is not accepted. Therefore, it may be interpreted that the male adolescents possessed more verbal intelligence as compared to female adolescents.

2. To test the hypothesis that “**There will be no significant difference between verbal intelligence of government and private school adolescents**” t-ratio was calculated between the mean scores of government and private school adolescents on verbal intelligence. The results are also shown in the Table 2 which is given below:-

TABLE 2

Table showing significance of difference in mean scores of government and private school adolescents on verbal intelligence

Group	Number	Mean	S.D.	df	t-value	Level of Significance
GSA	100	40.93	12.45	198	4.52	Significant at 0.01
PSA	100	48.65	11.63			

GSA = Government school adolescents.

PSA = Private school adolescents.

(‘t’-value to be significant at df 198 should exceed value of 1.97 at .05 level and 2.60 at .01 level).

Table 2 indicates that mean scores on the variable of verbal intelligence of government and private school adolescents came out to be 40.93 and 48.65 respectively. The calculated t-value for comparing the means of verbal intelligence of government and private school adolescents came out to be 4.52, which is highly significant at 0.01 level of significance, for df 198. This implies that there exists significant difference in verbal intelligence of government and private school adolescents.

Hence, Hypothesis No.2 that, “There will be no significant difference between verbal intelligence of government and private school adolescents” is not accepted. Therefore, it may be interpreted that the private school adolescents possessed more verbal intelligence as compared to government school adolescents.

CONCLUSIONS

1. The first objective was to study the verbal intelligence of male and female adolescents. Table 1 Indicates that t-ratio between mean scores of male and female adolescents on verbal intelligence is 2.73. As obtained ‘t’-value is exceeding the table value at both .05 and .01 level of significance. So, it indicates that there is significant difference in the mean score of male and female adolescents on verbal intelligence. Therefore, it may be interpreted that the male adolescents possessed more verbal intelligence as compared to female adolescents.
2. The second objective was to study the verbal intelligence of government and private school adolescents. Table-2 indicates that t-ratio between mean scores of government and private school adolescents on verbal intelligence is 4.52. As obtained ‘t’-value is exceeding the table value at both .05 and .01 level of significance. So, it indicates that there is significant difference in the mean score of government and private school adolescent on verbal intelligence. Therefore, it may be interpreted that the private school adolescents possessed more verbal intelligence as compared to government school adolescents.

IMPLICATIONS

The present investigation was conducted to investigate verbal intelligence of adolescents in relation to their gender and type of school. After drawing out the results from the study, it has been found that the mean scores of male adolescents are higher than the female adolescents. Male adolescents possessed more verbal intelligence as compared to female adolescents. It is therefore essential that some efforts should be made to raise the verbal intelligence among female adolescents. It is also observed that there is significant difference in the mean score of government and private school adolescent on verbal intelligence. Therefore, it may be interpreted that the private school adolescents possessed more verbal intelligence as compared to government school adolescents. So, there is a need to improve the verbal intelligence of government school adolescents. Teachers must be skillful and should help in solving various problems of the students regarding verbal intelligence of government school adolescents.

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