Study the Difference between the Boys and Girls Secondary School Students on Intelligence and Creativity

Dr. B.L. Lakkannavar
Professor of Education
Department of Studies in Education
Karnataka State Akkamahadevi
Women's University, Vijayapura

Shaila Sheelavant
Research Scholar
Karnataka State Akkamahadevi
Women's University, Vijayapura
Email: sheelavantshaila@gmail.com

Abstract

The purpose of the study is to "Study the difference between the means of Boys and Girls Secondary School students on Intelligence and Creativity" The normative Survey method is capable of rendering important service, as it determines the present trends and helps to solve current problems in a practical way. The local of the present investigation was confined to the student's high schools. The whole sample comprised a of total 600 secondary schools from Dharwad Taluka through randomized sampling. The findings concluded that; i) The male students have a higher mean of Intelligence than their Girls counterparts. ii)The male students have a higher mean of Creativity than their Girls counterparts .

Keywords

Intelligence, Creativity.

Reference to this paper should be made as follows:
Received: 25.05.2024
Approved: 12.06.2024

Dr. B.L. Lakkannavar, Shaila Sheelavant
Study the Difference between the Boys and Girls Secondary School Students on ...

Vol. XV, No.1
Article No.07,
pp. 048-53

Similarity Check: 21%

Online available at
https://anubooks.com/journal/journal-global-values
DOI: https://doi.org/10.31995/jgv.2024.v15i01.007

Introduction

Creativity is the capacity of the individual to avoid the usual routine conventional ways of thinking and doing things and to produce several ideas or products which are original, novel or uncommon but are workable. It is goal-directed. It may involve the forming of new patterns and combinations of information derived from past experience and the transplanting of old relationships to new situations or the generation of entirely new relationships.

The now well-known research of Guilford and his associates at the University of California. The structure of intellect (1950, 1956) has brought to the fore the existence of two distinct types of thinking abilities, namely, convergent and divergent thinking. Convergent thinking came to be identified with intelligence as usually defined and measured by well-known intelligence tests : while divergent thinking gave the most obvious indication of what is generally understood by the term creativity. Thurstone wrote in f1952, "To be extremely intelligent is not the same as to be gifted in creative work".

It has been seen that intelligence is integral to human nature as a whole and so it is not easily definable. But we do distinguish individuals as more or less intelligent in our everyday life. Generally speaking, 'alertness' with regard to the actual situation of life is an index of intelligence. Cognitive faculties like observation, memory, imagination, conception, and reasoning are also included in the meaning of intelligence.

Intelligence and intellect are not the same thing, intelligence is wider in meaning than the intellect. Intellect means cognitive powers or activities like perceiving, observing, remembering, imaging, and thinking, but intelligence on the other hand means not only intellectual activities but also the capacity for solving practical problems of life as well.

Importance of Intelligence

No one would worry about who has intelligence, or why, if it did not matter. Indeed, one of the claims made by the opponents of testing in the 1960s and 1970s was that intelligence tests just measured academic performance, and that even there they did not do a good job. One of Herrnstein and Murray's major contributions has been to expose this bit of Mokita. Intelligence, as measured by the tests, really does matter in both school and workplace, although it may matter in somewhat different ways than The Bell Curve suggests.

To argue that IQ is a determinant of economic outcomes, Herrnstein and Murray relied on two sources of evidence. One was the recent literature, and

especially John Hunter's (1986) summary of the relation between IQ scores and workplace performance. The other was their own analysis of data from the National Longitudinal Survey of the Labor Market Experience of Youth (NLSY). The NLSY is a Department of Labor survey that has followed over 12,000 participants since 1979. The respondents are now in their late 20s and early 30s. Early in the survey many participants took the Department of Defense's ASVAB test. Herrnstein and Murray used the AFQT score, which is derived from the ASVAB subtest scores, as a measure of IQ. They then related IQ to subsequent life events, such as being employed or being below the official poverty line.

Hunter reviewed studies of the relationship between job performance and scores on the General Aptitude Test Battery (GATB), a Department of Labor test which was widely used until the late 1980s, when the testing program became embroiled in a controversy over its fairness to minorities. The GATB was withdrawn as a political rather than a scientific decision. After a detailed statistical analysis, Hunter concluded that the "true" relation between intelligence and job performance in the population is about 0.5. This conclusion depended heavily upon extrapolating relationships beyond the data, which assumes linearity. A National Science Committee reviewing the GATB argued that Hunter should have used the observed correlations, which were almost all in the 0.2 to 0.3 range. The truth probably lies between these estimates, providing that the extrapolation is to comparable jobs (Hunt 1995). And that is an important qualification.

The GATB was designed to screen applicants for entry-level jobs in blue-collar and lower-level white-collar occupations. In terms of averages (something that is well established), we are talking about occupations where the mean IQ is in the 90-110 range, which covers about half of the population. But recall that as intelligence goes up cognitive abilities become more differentiated. Also, as experience goes up the IQ-performance connection gets weaker. These factors would lead to a reduction in IQ-performance relations within higher-level job classifications, and when dealing with experienced and older individuals. (In fact, the GATB is known to be less accurate in predicting the performance of older workers.)

Importance and Need

The quote Prof. Nunn "You are forever you, and i.e., it has been amply proved by the psychologists that all persons do not have the same amount of intelligence and all cannot work with the same speed and efficiency. The assumption that given the same opportunities all men will be equally successful is based upon faulty foundations. Intelligence tests are of great use in the schools To be a successful

teacher, one must know one's pupils thoroughly and one must possess an instrument with which one can measure the intelligence of one's pupils and one must know the proper use of that instrument. The work of a teacher is the work of handling young growing minds and he must, therefore, know as much as possible of these minds. Intelligence Tests help to discover whether a child is backward or dull or intelligent. It is not possible to gauge the intelligence of children without the use of mental tests. The children's intelligence cannot be estimated from the marks obtained by them in their school subjects. A child of 12 years may be put on the same level if they obtain the same number of marks. But this is a defective method. The child of 12 years is more intelligent than the child of 14 years in this illustration. Similarly, the child of 12 years is more intelligent than the child of 14 years in this illustration. Similarly, a child may be more industrious but comparatively dull and may score more marks than another child, who may intact be more intelligent but less industrious. There are important spheres in which intelligence tests can be employed.

Objectives of the Study

1. To study the difference between the means of Boys and Girls Secondary School students on the Intelligence Scale
2. To study the difference between the means of Boys and Girls Secondary School students on the Creativity Scale

Hypothesis

1. There is no significant difference between the means of Boys and Girls Secondary School students on Intelligence.
2. There is no significant difference between the means of Boys and Girls Secondary School students on Creativity.

Methodology

The study adopts a Normative survey method for investigation

Sample

The local of the present investigation was confined to the students high schools. The whole sample comprised a of total 600 secondary schools from Dharwad Taluka through random sampling. The whole sample constituted with different groups namely Type of school, (Govt., aided and unaided school) and Locale (Urban, semi-urban and High) are considered for the study.

Tools

To carry out any research the selection of tools of research must be such that data can be gathered to test the hypothesis effectively. The data-gathering tools used for the study are:

Shows that list of research tools

Sl. No.	Variable	Name of Tools Applied	Constructed and Standardized by
1	Intelligence	Intelligence	Dr. P.N. Mehrotra
2	Creativity	Creativity	Dr. Baqer Mehdi
3	Academic achievement Test	Academic Achievement Test (SAT)	By Investigator. (Constructed and standardized by Self)

Statistical Techniques

Differential Statistics

Analysis and Interpretation

Difference between/among different categories of Secondary School students in Intelligence:

To test this hypothesis, the 't' test of significance for the difference between Means of Boys and Girls Students on the Intelligence scale was employed and the details are presented in tables

$H_0$1: There is no significant difference between the means of Boys and Girls Secondary School students on Intelligence Scale

Table-1 Mean, S.D. t-value of scores of Intelligence Boys and Girls

Variable	N	Mean	SD	't' value	Significance
Boys	300	80.19	8.918	35.837	Significant at 0.05
Girls	300	63.03	5.298		

(Table value of t = 1.960 is at 0.05 level of significance and degree of 598)

It is evident from the above table that there is a significant difference between the Means of Boys and Girls Secondary School students on the Intelligence Scale ('t' = 35.837 is significant). Hence, the null hypothesis is rejected and the alternative hypothesis is accepted and concluded that the Boys and Girls Secondary School students differ in their level of Intelligence. It is also observed from the table that, the Boys Students have a higher mean (Mean=80.19) of Intelligence than their Girls counterparts (Mean=63.03).

$H_0$2: There is no significant difference between the means of Boys and Girls Secondary School students on Creativity Scale

Table-2 Mean, S.D. t-value of scores of Creativity Boys and Girls

Variable	N	Mean	SD	't' value	Significance
Boys	300	142.37	24.482	128.876	Significant at 0.05
Girls	300	65.32	20.115		

(Table value of t = 1.960 is at 0.05 level of significance and degree of 598)

It is evident from the above table that there is a significant difference between the Means of Boys and Girls Secondary School students on the Creativity Scale ('t' = 128.876 is significant). Hence, the null hypothesis is rejected and the alternative hypothesis is accepted and concluded that the Boys and Girls Secondary School students differ in their level of Creativity. It is also observed from the table that, the Boys Students have a higher mean (Mean=142.37) of Creativity than their Girls counterparts (Mean=65.32).

Findings

1. The male students have a higher mean (Mean=80.19) of Intelligence than their Girls counterparts (Mean=63.03).
2. The male students have a higher mean (Mean=142.37) of Creativity than their Girls counterparts (Mean=65.32).

Discussion and Conclusion

In this study, the researcher aimed to Study the difference between the means of Boys and Girls Secondary School students on Intelligence and Creativity; i) The male students have a higher mean (Mean=80.19) of Intelligence than their Girls counterparts (Mean=63.03) ii) The Boys Students have a higher mean (Mean=142.37) of Creativity than their Girls counterparts (Mean=65.32).

Bibliography

1. Agarwal, J.C. (2000). Educational Reforms in India for 21st Century. Shipra Publication: New Delhi.
2. Ahmed, S. (1980). Effect of Socio-Cultural Disadvantage on Creative Thinking. *Journal of Psychological Researches*. 24. Pg. **96-106.**
3. Bhargava, M. (1979). Personal variables and second-order personality correlate with creativity. *Indian Psychological Review*. Vol.17(3-4).
4. Bull, K.S., Montgomery, D., Baloche, L. (1995). Teaching creativity at the college level: A synthesis of curricular components perceived as important by instructors. *Creativity Research Journal*. 8. Pg. **83–90.**
5. Chadha, N.K., Chandna, S. (1990). Creativity Intelligence and Scholastic Achievement: A Residual Study. *Indian Educational Review*. 25(3). Pg. **81-82.**