
A Study of General Intelligence among College Students in Aizawl City

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Abstract

It is a well-known fact that students with high intelligence are easier to educate, direct, and guide than those with low intelligence. In order to instruct bright students, approaches or procedures that require a higher level of thinking and reasoning can be used. The present study is an attempt to find out the level of general intelligence of college students in Aizawl, the capital of Mizoram and to compare them with reference to their gender, locale and their mothers' working status. "Standard progressive matrices" prepared by R.C Raven was used to find out the level of general intelligence of college students. It was found that majority of the college students in Aizawl has average level of general intelligence, There were no significant difference in the general intelligence of college students with reference to gender, locale and their mothers' working status.

Keywords: *Intelligence, College students, Aizawl City*

Introduction

On this planet, life necessitates adjustment, which requires a certain level of intelligence. Every organism on the planet has the potential to adapt and learn, but only the human species has an additional skill: the ability to think, reason, and judge. That is why people are referred to as "intellectual beings." According to the preceding description, adjustment is a change in behaviour in response to changing circumstances and life conditions. It is the ability to adapt one's mind to new difficulties and circumstances in life. A balanced individual has a realistic perspective and always plans, thinks, and acts pragmatically. Intelligence has a significant

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influence in the adjustment process. It appears that a well-adjusted person has the ability to cope with adversity by making required behavioural changes. Intelligence is the ability to change and manipulate one's behaviour.

Definitions

According to Wechsler (1958), intelligence is the "aggregate or global capacity of an individual to act purposefully, to think rationally and to deal effectively with his environment."

According to Gardner (1983), "Intelligence is the ability to solve problems or to create products that are valued within one or more cultural settings."

According to Anastasi (1992), "Intelligence is not a single unitary ability, but rather a composite of several functions. The term denotes that combination of abilities required for survival and advancement within a particular culture."

According to Horst (2002), "Intelligence is the successful performance of the system in a complicated environment."

According to Sternberg (2003), "Intelligence is used to achieve success in life. It is the skill in achieving whatever you want to attain in your life within your socio-cultural context".

According to Anderson (2006), "Intelligence is that fact of mind underlying our capacity to think, to solve novel problems, to reason and to have knowledge of the world."

Types of Intelligence according to Thorndike (1914)

- Social intelligence: The ability to make effective adjustments with others is referred to as social intelligence. People with high intelligence have mastered the skill of making friends and influencing them. This intelligence is found in leaders, ministers, and social workers.
- Concrete intelligence: An individual's capacity to comprehend real-life situations and respond appropriately. When a person is managing concrete objects, this form of intelligence comes into play. This intellect is found in engineers, mechanics, and architects.
- Abstract intelligence: The capacity to effectively respond to verbal and numerical symbols. This is the result of a thorough study of books and literature. This intellect is found in professors, attorneys, and philosophers.

Rationale of the Study

For a teacher and the education system as a whole, knowing one's students' general intelligence is critical. Whatever teaching method the teacher employs, the role of intelligence in the education of the learner must be taken into account. In terms of teaching and learning, the fundamental role of intelligence is what the student can accomplish for the teachers; thus, general intelligence and the ability to learn are critical. Intelligence influences the teaching and learning processes. Both activities must meet specific requirements in order to be successful. Without intelligence, learning is impossible. In other words, intelligence is the basis of learning. The degree of intelligence influences the effectiveness of learning.

It is a well-known fact that students with high intelligence are easier to educate, direct, and guide than those pupils with low intelligence. In order to instruct intelligent children, teachers can use methods or procedures that require a higher level of thinking and reasoning. Additionally, they require less drilling. Similarly, it is a widely held belief that the higher one's intelligence, the better one's learning ability; hence, the greater one's learning or achievement, or the higher one's grades. As a result, a student with high intelligence may be able to achieve decent grades in college while putting in a reasonable amount of time and effort. Intelligence influences the efficacy of both teaching and learning.

As a result, knowing one's own students' general intelligence level will aid the instructor in managing his or her own teaching methods and changing his or her approach to teaching to meet the demands of the pupils. Teachers would be able to provide greater advice to children in their overall growth if they know their general intelligence level. As a result, this research was undertaken.

Objectives of the Study

1. To find out the level of intelligence of college students in Aizawl city.
2. To compare the general intelligence of college students in Aizawl city with reference to their gender.
3. To compare the general intelligence of college students in Aizawl city with reference to their locale.
4. To compare the general intelligence of college students in Aizawl city with reference to their mother's working status.

Hypotheses

1. There is no significant difference in the general intelligence of college students in Aizawl city with reference to their gender.
2. There is no significant difference in the general intelligence of college students in Aizawl city with reference to their locale.
3. There is no significant difference in the general intelligence of college students in Aizawl city with reference to their mother's working status.

Research Methods

The study employed the descriptive survey method as the researchers tried to find out the level of general intelligence of college students in Aizawl city and compare them with reference to their gender, locale, and mother's working status.

Population and sample

The population of the study consisted of all the college students in Aizawl city. Cluster sampling techniques was employed for selection of samples. Students of each college in

Aizawl city constituted a cluster and 130 students were selected from a cluster of students of Government Hrangbana College out of which 69 were males and 61 were females.

Tool used

Standard Progressive Matrices prepared by JC Raven (1990) was used as a tool for collection of data.

Analysis of Data

The data collected through Standard Progressive Matrices was scored and tabulated. The mean as well as the standard deviation of the scores were computed and it was found to be 41.24 and 9.034 respectively. In order to classify the students into different levels, those who scored one standard deviation below the mean were categorized as having below average general intelligence, and those students who scored one standard deviation above the mean were categorized as having above average general intelligence. Those students scoring between minus one standard deviation and plus one standard deviation were categorized as having average level of general intelligence. The students were also compared in their general intelligence with reference to their gender, locale and their mothers' working status.

Findings

The findings of the study are presented in accordance with the objectives as follows:

Objective no. 1: To find out the level of general intelligence possessed by college students in Aizawl city

Table no 1
Level of general intelligence of college students in Aizawl city

Respondents	Below Average Intelligence	Average Intelligence	Above Average Intelligence
All respondents (130)	19 (14.62%)	100 (76.92%)	11 (8.46%)
Male respondents (69)	10 (14.49%)	53 (76.81%)	6 (8.7%)
Female respondents (61)	9 (14.75%)	47 (77.05%)	5 (8.2%)
Urban respondents (81)	10 (12.35%)	67 (82.72%)	4 (4.94%)
Rural respondents (49)	9 (18.37%)	33 (67.35%)	7 (14.29%)
Respondents from non-working mothers (78)	11 (14.1%)	59 (75.64%)	8 (10.26%)
Respondents from working mothers (52)	8 (15.38%)	41 (78.85%)	3 (5.77%)

Table no. 1 shows that majority (76.92%) of all the respondents had average level of general intelligence while 14.62% of students had below average general intelligence and 8.46% of students had above average general intelligence. The table also shows that majority (76.81%) of the male student respondents had average general intelligence, while 14.49% of male students had below average general intelligence and 8.70% of male students had above average general intelligence. It can also be seen from the table that majority (77.05%) of the female students had average general intelligence, while 14.75% of female students had below average general intelligence and 8.20% of female students had above average general intelligence. When we look at the urban respondents, it can be seen that majority (82.72%) of the urban students had average general intelligence, while 12.35% of urban students had below average general intelligence and 4.94% of urban students had above average general intelligence. The table also shows that among the rural respondents majority (67.35%) of the rural students had average general intelligence, while 18.37% of rural students had below average general intelligence and 14.29% of rural students had above average general intelligence. Looking at the respondents from non-working mothers majority (75.64%) of the student respondents whose mothers are not working had average general intelligence, while 14.10% of respondents whose mothers are not working had below average general intelligence and 10.26% of student respondents with non-working mothers had above average general intelligence. Lastly, the table also shows that majority (78.85%) of the student respondents whose mothers are working had average level of general intelligence, while 15.38% of respondents with working mothers had below average general intelligence and 5.77% of student respondents with working mothers had above average level of general intelligence. It may be noted that rural respondents had the least percentage of average intelligence, but they are the ones who had the highest percentage of below average as well as highest percentages of above average intelligent students.

Objective no. 2: To compare the general intelligence of college students in Aizawl city with reference to their gender.

In order to compare the general intelligence of male and female college students, the mean and standard deviation of the scores of male and female were calculated. The mean differences of these two groups were tested by applying 't' test and the details are presented in the following table no 2.

Table 2

Comparison of general intelligence of college students in Aizawl city with reference to their gender

Groups	Number	Mean	SD	MD	SE _{MD}	t- Value	Sig level
Male	69	41.67	9.309	0.863	1.586	0.544	NS
Female	61	40.8	8.765				

Table 2 reveals that the calculated 't' value of .544 is lower than the criterion 't' value at both .01 and .05 level. Therefore, it can be concluded that there is no significant difference in the general intelligence between the male and female college students. Hence, the hypothesis that there is no significant difference in the general intelligence of college students in Aizawl city with reference to their gender is accepted.

Objective no. 3: To compare the general intelligence of college students in Aizawl city with reference to their locale

To compare the general intelligence of urban and rural students, the mean and standard deviation of the scores of urban and rural students were calculated. The mean differences of these two groups were tested by applying 't' test and the details are presented in the following table no 3.

Table 3

Comparison of general intelligence of college students in Aizawl city with reference to their locale

Groups	Number	Mean	SD	MD	SE _{MD}	t- Value	Sig level
Urban	81	41.68	7.465	1.108	1.803	0.614	NS
Rural	49	40.57	11.21				

As shown in the above table, the calculated 't' value of .614 is lower than the criterion 't' value at both .01 and .05 level. Therefore, it can be concluded that there is no significant difference in the general intelligence between the urban and rural college students. Hence, the hypothesis that there is no significant difference in the general intelligence of college students in Aizawl city with reference to their locale is accepted.

Objective no. 4: To compare the general intelligence of college students in Aizawl city with reference to their mother's working status

To compare the general intelligence of students having working and non-working mothers, the mean and standard deviation of the scores of students having working and non-working mothers were calculated. The mean differences of these two groups were tested by applying 't' test and the details are presented in the following table no 4.

Table 4

Comparison of general intelligence of college students in Aizawl city with reference to their mother's working status

Groups	Number	Mean	SD	MD	SE _{MD}	t- Value	Sig level
Working mother	52	41.29	8.839	0.045	1.61	0.028	NS
Non-working mother	78	41.24	9.218				

Table 4 reveals that the calculated 't' value of .028 is lower than the criterion 't' value at both .01 and .05 level. Therefore, it can be concluded that there is no significant difference in the general intelligence between students having working and non-working mothers. Hence, the hypothesis that there is no significant difference in the general intelligence of college students in Aizawl city with reference to their mother's working status is accepted.

Discussion

Although no significant difference was observed when general intelligence was compared with reference to gender, locale and mothers' working status of the college students, yet the study found pertinent outcomes when the level of general intelligence possessed by college students was established. These were discussed as follows:

1. The present study was done amongst college students and one would not expect a mentally challenged student among college students. This was one reason why these students were classified into below average, average and above average intelligent students. Now, it was found that majority of the student respondents had average level of general intelligence. This is not surprising because by and large majority of people are fairly normal in most things, be it study habit, academic achievement, aptitude, attitude, intelligence, etc.
2. It was found that the percentages of both male and female respondents had almost similar intellectual level whether it is below average, average or above average level of intelligence. The reason maybe because intelligence is largely inborn and just because one is born a male or a female does not mean that intelligence between these two genders should differ.
3. The present findings shows that rural respondents had the least percentages of average intelligence, at the same time, they were also found to have the highest percentage of below average and above average level of intelligence, When compared with urban respondents, they were found to possess almost 10% higher in the category of above average intelligence. One reason for this could be because those students from urban areas (mostly Aizawl) who were intellectually capable had the opportunity of studying

outside the state, while the rural students who are more intellectually capable would come and study in the state capital as colleges are established only in some district capitals of Mizoram. Therefore, it could be that the rural students who were intellectually bright formed the highest percentage of above average intelligence in the present study.

4. Findings also revealed that respondents whose mothers are not working were found to possess almost 5% higher in the above average level of intelligence when compared to those respondents whose mothers are working. The reason could be due to more time being given to children by non-working mothers and creating an environment where children are provided all the necessary tools to flourish in their road to sharpening their intelligence.

Suggestions

Intelligence is not really defined by knowing more than others. It is all about challenging the brain, solving problems, and learning new things. The following, according to various research findings, may be able to improve brain health and intellect over time.

1. One of the most effective strategies to boost brain function is to stay physically active.
2. Sleep is also necessary for optimal cognitive performance. During sleep, the brain consolidates memories formed throughout the day and improves its ability to learn new information after waking up.
3. Practicing meditation is another approach to improve intelligence.
4. Eating foods rich in omega-3 fatty acids, flavonoids, and vitamin K, which enhance brain function, may help to improve brain health.
5. Learning to play an instrument is a pleasant and creative way to increase intelligence because it tests both sensory and cognitive talents.
6. Reading engages every section of the brain, as well as the neural connections that connect them; thus, reading has the potential to enhance intelligence.
7. Continuing education improves cognitive processes; hence a longer period of education is associated with greater intelligence.
8. Because humans are social creatures, remaining social may help to improve mental fitness by stimulating the mind and cognitive abilities.

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