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Research Article

A Study On General Aptitude Of Arts And Science College Students

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ABSTRACT

The researcher has studied on General Aptitude of arts and science college students in cuddalore district, Tamilnadu. Based on the study, the researcher utilized the survey method for collecting data from the sample and constructed and standardized the present research tool based on general aptitude for his research work. Arts and Science college students in Cuddalore district are the population for the present research work, and 15 arts and science colleges are available. From the 15 colleges, the researcher has randomly selected eight arts and science colleges, including three government and one government-aided college, for the present research work. Finally, the researcher randomly selected 887 samples from the population. The researcher has utilized descriptive analysis and differential analysis for the interpretation of the data. The researcher found that the level of arts and science college students' general aptitude is average and there is no significant difference between stream of the college, gender and location of the college.

Introduction

Every year, millions of students apply to universities all across the world. By accepting certain students and rejecting others, universities make important decisions. It is unreasonable to base admissions choices just on one factor or standard, such as a student's high school grade point average (HSGPA). Thus, in many nations, standardized tests are now taken into consideration when making admissions decisions to institutions. Aptitude and achievement tests are the two sorts of examinations that are frequently utilized for this purpose. While achievement tests reflect accomplishment, aptitude tests are "focused on measuring verbal and mathematical abilities not directly tied to the curriculum" (Koljatic et al., 2012). Achievement exams are based on important concepts that students should understand and are useful for enhancing performance (Atkinson, 2001).

The use of standardized tests, especially aptitude tests, has two basic purposes. First, given the wide range in high school quality and grading flexibility, it is unjust for a university to admit students only on the basis of their HSGPA. According to Evans (2012), scores obtained from standardized tests are more comparable. The adoption of achievement and aptitude tests can be attributed to two factors: first, universities have an interest in admitting students who will succeed academically there (O'Connor & Paunonen, 2007); second, there is a growing consensus that standardized tests can be used to identify students who will succeed and receive consistently high grades year after year (Evans, 2012).

The predictive validity of achievement and aptitude tests which can forecast students' success in college is another factor in their utilization (Evans, 2012). For students from 41 institutions with comparable high school scores, Bridgeman, Pollack, and Burton (2004) discovered that SAT scores were a significant predictor of college "success," which is defined as the maintaining of a cumulative GPA within a specific range. Standardized examinations, according to Zwick (2007), can be valuable even though they only marginally improve universities' capacity to anticipate outcomes. This is especially true for institutions that lack the resources to interview candidates or thoroughly analyze their supporting documentation. Nonetheless, some contend that rather than using what Atkinson refers to as "ill defined notions," pupils should be evaluated on their understanding of the high school curriculum (Lemann, 1999).

The use of achievement and aptitude tests for postsecondary admissions has been the subject of debate in several countries. In addition to submitting their high school GPA (HSGPA), all applicants must complete the General Aptitude Test (GAT) in order to be considered for admission to universities. An achievement test is also one of the requirements for admission for several majors. A combination of a student's HSGPA, GAT

score, and National Achievement Test (NAT) results are taken into account by certain universities, like medical colleges, when admitting them (Bajammal et al., 2008). Universities use different formulas to weigh the three scores—HSGPA, GAT, and NAT—and produce a single score for each applicant when making an admissions decision. "A test that measures the analytical and deductive ability of the student, it focuses on the student potential for learning aside from his proficiency in a particular subject; through measuring student's ability to: read comprehension; understand logical relationships; solve problems based on basic mathematical concepts; conclude; and measure," according to the National Center for Assessment in Higher Education, is how the GAT is described (retrieved Nov. 1, 2012).

As previously stated, one of the motivations behind the adoption of aptitude tests for university entrance is its predictive validity. Given its significance, the main inquiry in this research is whether or whether the GAT can forecast university achievement for students.

Based on this, the researcher is using general aptitude for his research. Aptitude includes many traits that support our learning, and general aptitude also includes many traits. In our nation also conducting competitive exams, but not to avoid general aptitude questions and all kinds of UPSC, GATE, government, and private job recruiting exams include general aptitude questions. So, it is a very important part for students because they will try the job they know.

Need and Importance of the Study

The arts and science college students are having good academic achievement, but they have no chance to know the company's recruitment procedures and expectation, so the researcher would like to measure the students' general aptitude for the present research.

Many researchers had done for research in the same area and their results also reviewed here. From the standpoint of academic performance as put forth and endorsed by Misanchuk (1977), Crouse (1985), and College Board (2020), this subject has been extensively researched. According to Setiawati's (2020) analysis of the Deferential Aptitude Test's predictive validity for psychology programs, the test's verbal and numerical subtests have the greatest predictive power for students' future Grade Point Average (GPA), or their final cumulative grade for each term or year. It is obvious that university admission exams have a big impact on how legislators justify their choices and how other stakeholders, including parents and applicants, learn about the usefulness of these tests.

In the current scenario of the world, governments and private companies are conducting competitive exams to recruit suitable person for the posts. Now the researcher is using general aptitude for measuring the arts and science college students' curiosity, interest, intelligence, etc., because after completing a degree program, the students are searching for jobs, either private or government, with a good salary. At the same time, private organizations are also expecting a degree holder with good skills, so the researcher to find the students general aptitude.

Objectives of the Study

1. To study the level of General Attitude of Arts and Science college students in Cuddalore District.
2. To find out whether there is any significant difference in the general attitude of arts and science college students with respect to their:

a. Stream (Arts and Science)
b. Gender (Male/Female)
c. Locality of the College (Rural/Urban)

Hypotheses of the Study

1. The level of General Aptitude of Arts and Science college students are average.
2. There is no significant difference in the general aptitude of arts and science college students with respect to their:

a. Stream (Arts and Science)
b. Gender (Male/Female)
c. Locality of the College (Rural/Urban)

Design of the Study

The researcher has utilized the survey method for collecting data from the sample and constructed and standardized the present research tool based on general aptitude for his research work. Arts and Science college students in Cuddalore district are the population for the present research work, and 15 arts and science colleges are available. From the 15 colleges, the researcher has randomly selected eight arts and science colleges, including three government and one government-aided college, for the present research work. Finally, the researcher randomly selected 887 samples from the population. The researcher has utilized descriptive analysis and differential analysis for the interpretation of the data.

Data Analysis and Interpretation

Hypothesis -1

The level of General Aptitude of Arts and Science college students are average.

Table No: 1.1 LEVEL OF GENERAL APTITUDE

Variable	Score range	Category
General Aptitude	Above 11	High
	8 – 10	Average
	Below 8	Low

An above table 1.1 indicates the level of general aptitude scores range and it is divided by researcher based on the score range above 11 is high, 8-10 is average, below 8 is low.

Table – 1.2 The Mean and Standard Deviation for General Aptitude of Arts and Science College Students

Sl. No.	Demographic Variables	Sample	N	Mean	S.D
1	Stream	Arts	445	9.39	2.73
		Science	442	9.33	2.75
2	Gender	Male	433	9.23	2.72
		Female	454	9.48	2.75
3	Locality of the College	Rural	399	9.41	2.76
		Urban	486	9.31	2.72

From table 1.2 it is found that while the arts stream students have got 9.36 average level of general aptitude and science stream students have got 9.33 and it is too average level of general aptitude and the arts and science stream students standard deviation scores are 2.73 and 2.75 in the general aptitude.

Hence, the arts and science college of male and female students got 9.23 and 9.48. It indicates the arts and science college students male and female have an average level of general aptitude and their standard deviation scores are 2.72 and 2.75 in general aptitude.

The researcher utilised one of the sample is the locality of the college (rural and urban) of arts and science students have got 9.41 and 9.31 average level of general aptitude and their standard deviation scores are 2.76 and 2.72 in general aptitude.

Hypothesis – 2

There is no significant difference between arts and science stream of college students in general aptitude.

Table: 1.3 – General Aptitude - Stream – "t" Value

Demographic Variable	Sample	N	Mean	S.D	't' Value	Remarks
Stream	Arts	445	9.39	2.732	0.329	Significant at 0.05 level
	Science	442	9.33	2.757		

Table 1.3 shows that the mean and standard deviation values of arts and science stream of college students in general aptitude. An above calculated 't' value 0.329 is less than the Critical 't' value 1.96 at 0.05 level of significance. Hence, the null hypothesis is accepted. The present study reveals that there is no significant difference between arts and science stream of college students in general aptitude.

Hypothesis - 3

There is no significant difference between male and female arts and science college students in general aptitude.

Table: 1.4 – General Aptitude - Gender – "t" Value

Demographic Variable	Sample	N	Mean	S.D	't' Value	Remarks
Gender	Male	433	9.23	2.724	1.32	Not Significant at 0.05 level
	Female	454	9.48	2.759		

Table 1.4 shows that the mean and standard deviation values of male and female arts and science college students of general aptitude. An above calculated't' value 1.32 is less than the Critical't' value 1.96 at 0.05 level of significance. Hence, the null hypothesis is accepted. The present study reveals that there is no significant difference between male and female arts and science college students in general aptitude.

Hypothesis - 4

There is no significant difference between rural and urban locality of the college of arts and science students in general aptitude.

Table: 1.5 - General Aptitude – Locality of the College – "t" Value

Demographic Variable	Sample	N	Mean	S.D	't' Value	Remarks
Locality of the College	Rural	399	9.41	2.766	.514	Not Significant at 0.05 level
	Urban	486	9.31	2.724		

Table 1.5 shows that the mean and standard deviation values of rural and urban locality of the college of arts and science students in general aptitude. An above calculated't' value 0.514 is less than the Critical't' value 1.96 at 0.05 level of significance. Hence, the null hypothesis is accepted. The present study reveals that there is no significant difference between rural and urban locality of the college of arts and science students in general aptitude.

Implications of the Study

Based on the research output the arts and science college students are having average general aptitude. So, the arts and science college administrators and managements can help career counselors provide more tailored advice to students, guiding them toward careers that align with their strengths and interests. The researcher suggested that the admin of the colleges to provide which aptitudes are in high demand in the job market, helping students make more informed decisions about their career paths and necessary skill development. General aptitude can help students understand their strengths and areas for improvement, boosting their confidence and self-awareness.

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