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1.1 Background of the Problem

The main focus of all schools of philosophy, the educationists, the sociologist, the institutes, and the teachers is on the overall development of a student for balanced and a progressive society. The proportionate growth and development of the student is essential in order to create good human being. Even the pages of any good book of sociology also ponder on the student and the society. A student has his fundamental right to grow according to his personality, aptitude and interest as the systematic development of a student is the universally accepted goal of education. There are many other factors that affect the growth and development of a student. Whenever an academic progress of a student is discussed, the matters of progress of a student that are based on various factors in life that affect his development cannot be avoided. As today’s world is growing fast, an element of competition and also of growth, progress and development are felt everywhere. The teachers in the schools are engaged and anxious to provide better experience and maximum opportunities to a student. Even the parents are anxious for their ward’s future. In the present formal educational system, a student enters in the system under the impression of their guardians. The guardians have no vision for the opportunities ahead. Proper guidance and counselling system at any stage of education has not been set up yet. Thus, a student enters in the system by external forces. At every stage, the student becomes a victim of those external forces of parents and society. The
chances have never been provided to him to think about his future. Consequently, he always remains under stress. The student is also under mental stress for his career or future profession. In such situations it is a quite a difficult task for the teachers, the parents and the students to select right career or course. A student’s career selected on the basis of either his friend’s choice or his parents’ force or keeping in mind only the present trends of society. If a student’s career is directed on the basis of the above mentioned and some other factors, there are less chances of success in life resulting in frustration in his life. On account of such situation his time, money and energy is wasted. Such type of wastage is neither beneficial to a society, to nation, to parents, to teachers nor to a student even.

After the S.S.C exam, a student has various options like arts, commerce, science, vocational courses, etc. to be selected. When a student has various types of courses or discipline available, he is tempted to join any of the courses without taking in consideration his area of interest, aptitude, mental ability, personality, etc. It is commonly observed that many of them joining different faculties or disciplines do not have clear perception of the future of the path that is to be selected or the usefulness of the study. His illiterate or half-educated friends who are senior to them by a year or two are not matured enough to guide such type of students. A proper and well-organized provision of systematic guidance programme for the students on the basis of their interests to join one of these
different faculties. Owing to absence of such a scientific guidance programme in the field of education, many square pegs are put in round holes. In India, the educational institutes are turn into the factories producing number of young unemployed boys and girls who do not pace with their respective field and ultimately they are frustrated.

It can be said that a student whose interest lies in the field of medicine, joins the course of engineering and cannot give his best services to the field of engineering as he lacks interest in that area. Though he is a person with higher I.Q., he fails to contribute to the betterment or advancement of himself or society. A person working as a tourist guide may not prove himself a successful person in his field if he does not possess required qualities to be a tourist guide. It is of great importance that the youth of the day be directed or guided to take up study that falls in line with his or her interest. Now the question that arises is how a career should be planned. For that apart from other factors, the knowledge of areas of interests becomes essentials.

The knowledge of the areas of the interest keeps the student, the parents, the teachers, a society or even nation to select and to direct a student’s career on a proper path. Even the counselors can utilize the knowledge of the areas of interest in counseling works. So keeping in view the above-mentioned facts the investigator thought it fit to investigate the areas of interest of the high schools students of Ahmedabad district in the context of some psycho-socio variables.
1.2 Importance of the Study

Whenever a research work is carried out, there will always be a question “What is the use of such a work?” The answer that can be given is solving the problems and making life easy or as one can think of its usefulness. Being an investigator the usefulness of the present study was thought to different components of education such as to the pupils, the parents, the teacher, the school, the counselor, the society and also to other investigators.

The common confusion that is felt by each student is what to do next, which faculty or discipline will prove to be lucrative. The parents of a student also face the same question. At present proper guidance to a student or to a parent is not available. The selection of career is made vaguely. The best way of selecting career is that a person should select it according to his own areas of interest. A right career or subject can be selected if the student is made aware of his area of interest.

Such practice can make the selection effective and fruitful to achieve the desired goal of life. It provides him platform for further progress in his or her life. Consequently, such selection will save time, money and energy of the students. This type of study will be useful to the parents too. The familiarity of the parents with the areas of interest can enable them to guide their children in the selection of the courses or careers. They can think of their children’s career well in advance and not just under the forces of others’ ideas.
The awareness of such study will make the teacher to guide their students in the selection of different disciplines. The teacher can also nurture the interests of the students. The teaching schedule can also be arranged in accordance with the general interest areas of the students.

As far as the counsellors are concerned, they can get the best possible result if they have knowledge of such study. The counsellors can guide the pupils for future selection of courses or the subjects. Even the counsellors can update themselves with the help of such studies.

From the point of view of the schools, it is also useful as the school can guide the students for their future life. The school can provide various options to the students in the subject selection. The school can arrange the schedule of the school and the co-curricular activities keeping in mind the areas of interest of the students.

The society is to be considered as an integral part of education. The interest of the students can be developed or nourished with the help of the society. With the help of such study, the authority may be familiar with the trends of areas of interest of the students. They can introduce new policies in education or introduce some changes in the curriculum in the light of such study.

The final goal of any education system is to provide well-planned human resources to the nation for its balanced progress. This study will help the
system and nation for producing needed and molded human resources for the
development of the nation.

1.3 Statement of the Problem

The researcher tried to study the areas of interest of high school students. The researcher tried to study the effect of some variables like the gender, residential area, level of achievement and level of IQ of the high school students. The different six areas of vocational interests were studied in the context of these variables. The variables of the study are divided in two parts: socio variables and psycho variables so the he statement of the present study was as follow:

A Comparative Study of the Interest Areas of the High School Students in the Context of Some Socio-Psycho Variables

1.4 Objectives of the Study

The importance of writing objectives has been constantly emphasized in recent times in the field of research as objectives are expressions of what an investigator hopes to accomplish as a result of his investigation. As a result of the investigation process, the investigator should be able to draw out some concrete conclusions in the light of the pre-decided objectives. Objectives in research are statements which express specifically and in measurable terms the variables that will be investigated. They are policy statements of direction. They
are like the light house where the investigator wants to go. They provide the foundation of the entire investigative structure. They provide direction for the instructor. They provide a guide for selecting the research design, tools of the study, selection of population and samples and to some extent statistical treatment. They provide a guide for selecting suitable related literatures. The objective is an active statement about how the study is going to answer the specific research question. Objectives can (and often do) state exactly which outcome measures are going to be used within their statements. They are important because they not only help guide the development of the protocol and design of study but also play a role in sample size calculations and determining the power of the study. It is the precise objective and what the investigator is trying to measure that is of prime relevance in the practical setting. Study objectives define the specific aims of the study and should be clearly stated in the introduction of the research protocol.

Objectives provide the starting point on which all the conclusions are based.

The following objectives were kept in mind in order to carry out the study.

1. To investigate the areas of interest of the high school students.

2. To compare the areas of interest of the high school students in the context of their gender.

3. To compare the areas of interest of the high school students in the context of their residential area.
4. To compare the areas of interest of the high school students in the context of levels of their Achievement level.

5. To compare the areas of interest of the high school students in the context of levels of their I.Q.

1.5 Hypotheses of the Study

A hypothesis is a tentative statement about the relationship between two or more variables. A hypothesis is a specific, testable prediction about what you expect to happen in your study. A hypothesis is an assumption or suggested explanation about how two or more variables are related. It is a crucial step in the scientific method and, therefore, a vital aspect of all scientific research. Research hypotheses are the specific testable predictions made about the independent and dependent variables in the study. Usually the literature review has given background material that justifies the particular hypotheses that are to be tested. Hypotheses are couched in terms of the particular independent and dependent variables that are going to be used in the study for example, a study designed to look at the relationship between sleep deprivation and test performance might have a hypothesis that states, "This study is designed to assess the hypothesis that sleep deprived people will perform worse on a test than individuals who are not sleep deprived."
Unless you are creating a study that is exploratory in nature, your hypothesis should always explain what you expect to happen during the course of your experiment or research.

Remember, a hypothesis does not have to be right. While the hypothesis predicts what the researchers expect to see, the goal of research is to determine whether this guess is right or wrong. When conducting an experiment, researchers might explore a number of different factors to determine which ones might contribute to the ultimate outcome.

In many cases, researchers may find that the results of an experiment do not support the original hypothesis. When writing up these results, the researchers might suggest other options that should be explored in future studies.

Elements of a Good Hypothesis

When trying to come up with a good hypothesis for your own psychology research or experiments, ask yourself the following questions:

- Is your hypothesis based on your research of a topic?
- Can your hypothesis be tested?
- Does your hypothesis include independent and dependent variables?
The primary research question should be driven by the hypothesis rather than the data. That is, the research question and hypothesis should be developed before the start of the study. This sounds intuitive; however, if we take, for example, a database of information, it is potentially possible to perform multiple statistical comparisons of groups within the database to find a statistically significant association. This could then lead one to work backward from the data and develop the “question.” This is counterintuitive to the process because the question is asked specifically to then find the answer, thus collecting data along the way (i.e., in a prospective manner). Multiple statistical testing of associations from data previously collected could potentially lead to spuriously positive findings of association through chance alone. Therefore, a good hypothesis must be based on a good research question at the start of a trial and, indeed, drive data collection for the study.

The research hypothesis is developed from the research question and then the main elements of the study — sampling strategy, intervention (if applicable), comparison and outcome variables — are summarized in a form that establishes the basis for testing, statistical and ultimately clinical significance. However, when formally testing statistical significance, the hypothesis should be stated as a “null” hypothesis.

The purpose of hypothesis testing is to make an inference about the population of interest on the basis of a random sample taken from that population. The null
hypothesis for the preceding research hypothesis then would be that there is no difference in mean functional outcome between the computer-assisted insertion and free-hand placement techniques. After forming the null hypothesis, the researchers would form an alternate hypothesis stating the nature of the difference, if it should appear. The alternate hypothesis would be that there is a difference in mean functional outcome between these techniques. At the end of the study, the null hypothesis is then tested statistically. If the findings of the study are not statistically significant (i.e., there is no difference in functional outcome between the groups in a statistical sense), we cannot reject the null hypothesis, whereas if the findings were significant, we can reject the null hypothesis and accept the alternate hypothesis (i.e., there is a difference in mean functional outcome between the study groups), errors in testing notwithstanding. In other words, hypothesis testing confirms or refutes the statement that the observed findings did not occur by chance alone but rather occurred because there was a true difference in outcomes between these surgical procedures. The concept of statistical hypothesis testing is complex, and the details are beyond the scope of this article.

Another important concept inherent in hypothesis testing is whether the hypotheses will be 1-sided or 2-sided. A 2-sided hypothesis states that there is a difference between the experimental group and the control group, but it does not specify in advance the expected direction of the difference. For example, we
asked whether there is an improvement in outcomes with computer-assisted teaching or whether the outcomes worse with computer-assisted teaching. We presented a 2-sided test in the above example because we did not specify the direction of the difference. A 1-sided hypothesis states a specific direction (e.g., there is an improvement in outcomes with computer-assisted teaching). A 2-sided hypothesis should be used unless there is a good justification for using a 1-sided hypothesis.

One-sided hypothesis testing should never be used as a device to make a conventionally non significant difference significant. The research hypothesis should be stated at the beginning of the study to guide the objectives for research.

Designing a research hypothesis is supported by a good research question and will influence the type of research design for the study.

The history of science is filled with stories of scientists claiming a flash of inspiration, or a hunch, which then motivated them to look for evidence to support or refute the idea.

While there is no single way to develop a hypothesis, a useful hypothesis will use deductive reasoning to make predictions that can be experimentally assessed. If results contradict the predictions, then the hypothesis under examination is incorrect or incomplete and must be revised or abandoned. If results confirm the
predictions, then the hypothesis might be correct but is still subject to further testing.

Both quantitative and qualitative research involves formulating a hypothesis to address the research problem. A hypothesis will generally provide a causal explanation or propose some association between two variables. Variables are measurable phenomena whose values can change under different conditions. For example, if the hypothesis is a causal explanation, it will involve at least one dependent variable and one independent variable. In research, independent variables are the cause of the change. The dependent variable is the effect, or thing that is changed. In other words, the value of a dependent variable depends on the value of the independent variable. Of course, this assumes that there is an actual relationship between the two variables. If there is no relationship, then the value of the dependent variable does not depend on the value of the independent variable.

In the present study the researcher tried to investigate the areas of interest of the high school students and also study these areas of interests in the context of gender, residential area, levels of achievement and levels of IQ.

➢ Ho for First Objective

The first objective of this present study was to investigate the areas of interest of the high school students so there was not possibility of formulation of Ho for this objective.
➤ **Ho for Second objective**

The second objective is to compare the areas of interest of the high school students in the context of their gender. The Ho for this objective is shown below.

**Ho1** *There is no significant effect of the gender of high school students on the various areas of vocational interest.*

➤ **Ho for Third objective**

The third objective is to compare the areas of interest of the high school students in the context of their residential area. The Ho for this objective is shown below.

**Ho2** *There is no significant effect of the residential area of high school students on the various areas of vocational interest.*

➤ **Ho for Fourth objective**

The fourth objective is to compare the areas of interest of the high school students in the context of levels of their Achievement. The Ho for this objective is shown below.

**Ho3** *There is no significant effect of the achievement of high school students on the various areas of vocational interest.*
➢ Ho for Fifth objective

The fifth objective is to compare the areas of interest of the high school students in the context of their levels of IQ. The Ho for this objective is shown below.

**Ho4** There is no significant effect of the IQ of high school students on the various areas of vocational interest.

1.6 Limitation and Delimitations of the Study

A good research work is that which has its own fencing or boundary. Moreover, these boundaries or fencing should be clearly revealed in the research task or outcome. The limitations and delimitations of the present study were following

1. The present study was delimited only to Sabarkantha district.

2. The present study was delimited only to Gujarati Medium schools of Sabarkantha district.

3. The students studying in the 9th and 8th standard were considered as the high school students.

4. The I.Q. test by standardized by the researcher was administered in order to decide the level of I.Q. so the limitation of the said test would be the limitation of the present study.

5. The score secured by the students at their school level exam was considered for the classification of the achievement level.
1.7 Operational Definitions

Whenever the research activity is carried out, certain terms play a vital role in the activity so the definitions of the terms used in the research becomes essential. The terms used in the present study were defined as under.

Comparative study

Dr. Sharma in “Dictionary of Educational Terms” writes that “by expression ‘comparative study’ we mean a systematic study of one fields or aspects in order to discover resemblances and differences, the cause behind resemblance and differences, and why variant solutions have been attempted (and with what result) to problems that are often aroused”. We may say that a comparative study is an attempt to find out the solutions behind resemblances and differences among the aspects.

In the present study, the researcher will try to study the similarities and differences of the interest areas of the student of the High School. He will try to the study such similarities and differences.

Interest

The conceptual clarity of the term ‘Interest’ is discussed in the following chapter and various definitions given by different psychologist are mentioned. For the present study the following operational definition is accepted.
Interests are the activities for which a person has a liking or disliking and for which he goes towards or away from, or a liking or disliking state of mind accompanying the doing of an activity or thought of performing the activity. These activities or thought are with special reference to different vocations. Therefore, interest is here meant vocational interest.

**Interest Areas**

Gene H. Hawes and Lynne Slope Hawes write in “The Concise Dictionary of Education” (p: 121) that students’ pattern of interests as are ascertained by an interest inventory, which is a type of psychological test using questions, are generally known as interest areas.

As far as the present study is concerned, the patterns of interests of students as are ascertained by an interest inventory standardized by the investigator are considered as interest areas. It is also written as area of interest or interest area. Vocational interest area is known as interest area for the present study.

**High school students**

The schools which provide for instruction to from VIII to X standard and recognized as high schools by the Department of Education of the state. The students studying in such type of schools are known as the high school students.

**Socio-psycho variables**
Dr Sharma in “The Dictionary of Educational Terms” writes, “The factors that are, generally, studied under the caption of sociology, are considered as socio factors.” From the definition, it becomes clear that society, class, caste, creed, religion, economic status, social status, etc are the factors that are studied in sociology.

In the present study, the investigator studied the effect of sex and residential area as the socio variables.

Psychology is an ever-expanding behavioral science. Many aspects are included in psychological study. There aspects are related to behavior, brain, environment or interaction effect of all these.

In the present study, the effect of the psychological variable like I.Q. was studied.

1.8 Variables of the Study

Anything which varies; something which can have different values are known as variables. Any measure of performance or behavior taken in a study is referred to as a variable, because it can have different values depending on circumstances. A concept which can take on different quantitative values is called a variable. A variable is a characteristic that takes on two or more values. It is something that varies. It is a characteristic that is common to a number of individuals, groups, events, objects, etc. The individual cases differ in the extent
to which they possess the characteristic. Thus, age (young, middle-aged, old), income class (lower, middle, upper), caste (low, intermediate, high), education (illiterate, less educated, highly educated), occupation (low status, high status), etc., are all variables. It is not unusual to see some confusion between variables and the attributes or categories of which they consist. 'Gender' is a variable consisting of two categories of male and female. Income' is a variable consisting of different categories of destitute, poor, middle class and rich persons. The researcher has to be clear of this distinction between variable and category.

**Dependent Variables**

If a value of a variable depends on the particular experimental or non-experimental situation, which was set up, it, is known as the dependent variable. If one variable depended upon or is a consequence of other variable, it is termed as a dependent variables. A *dependent* variable (also called Y variable in statistics) is one which changes in relationship to changes in another variable(s). The dependent variable is the condition that we are trying to explain.

In the present study the following mentioned was the dependent variable:

(1) The areas of interest of high school students
**Independent Variable**

The variable that is antecedent to the dependent variable is termed as an independent variable. The variable that is antecedent to the dependent variable is termed as an independent variable. For example, height depends upon age, then height is a dependent variable and age is an independent variable.

Further, if in addition to being dependent upon age, height also depends upon the individual’s sex, then height is a dependent variable and age and sex are independent variables. Similarly, readymade films and lectures are examples of independent variables, whereas behavioral changes occurring as a result of environmental manipulations are examples of dependent variables. An independent variable is the presumed *cause* of the dependent variable—the presumed *effect*. When we say, A causes B, it means A is independent variable and B is dependent variable. The independent variable thus is one which explains or accounts for variations in the dependent variable. Independent variable (also called X variable in statistics) is one whose change results in the change in another variable. In a controlled experiment, the independent variable is the experimental variables, i.e., one which is withheld from the control group. In experiments, the independent variable is the variable manipulated by the experimenter.

For example, a teacher wants to know which method of teaching is more effective in the students’ understanding: lecture method, question-answer
method, visual method or combination of two or more of these methods. Here, teaching method is dependent variable which is manipulated by the teacher. The "effect on students' understanding" is the dependent variable. In this experiment, besides the methods of teaching, other independent variables could be personality types (of students), social class (of students), types of motivation (reward and punishment), class atmosphere, attitude towards teacher, and so on. Similarly, in studying juvenile delinquency (dependent variable), the independent variables (i.e., causes) could be poverty, type of associations, nature of family control, and so on.

It may be noted that a variable which is dependent in one study can be independent in another. Take the case of relation between farmer's income and availability of water. If we take income as dependent variable and water availability (for irrigation) as independent variable, the relationship between the two variables may be shown as: higher the availability of water, higher would be income and vice-versa. But, if we want to show relationship between income (independent variable) and quality of life (dependent variable), we may say: higher the income, higher the quality of life (or living standard). In the first study, income is the result and in the second, study it is the cause.

In the present study the following mentioned were the independent variables:
Controlled Variables

Controlled variables, commonly called control variables, are held constant or prevented from varying during the course of study. This is to limit the focus of the research. For example, in age, all males and females under 18 years of age may be excluded from study. This would mean that the hypothesis is not concerned with specific sub-groups. Thus, variables may have different degrees of magnitude or different categories (e.g., positive or negative) so that the category of characteristics, in which the case falls, differentiates it from others.

In the present study the following mentioned were the controlled variables:

1. Gender
2. Area of residence
3. Level of Achievement
4. Level of IQ

The variables with their respective levels are shown in the below table.

**Table-1.3 Variables with Levels**

<table>
<thead>
<tr>
<th>Sr</th>
<th>Variables</th>
<th>Level of Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender</td>
<td>2- Male &amp; Female</td>
</tr>
<tr>
<td>2</td>
<td>Area of Residence</td>
<td>2- Rural &amp; Urban</td>
</tr>
<tr>
<td>3</td>
<td>Level of Achievement</td>
<td>2- Low &amp; High Achievement</td>
</tr>
<tr>
<td>4</td>
<td>Level of IQ</td>
<td>2- Low &amp; High IQ</td>
</tr>
</tbody>
</table>
1.9 Scheme of Subsequent Chapters

The report of the present study has been presented in five chapters.

The second chapter deals with theoretical perspectives in which the concept of interest is discussed, the classification of interest is mentioned and the relationship of different variables with the vocational interest is discussed with research basis. In this chapter, the research gap is also discussed. It also encompasses the review of the past studies in which review of studies in India and review of studies in abroad are discussed in detail.

The third chapter covers the research methodology, research design, source of data, population, sample, sampling procedure, and data gathering instruments, scoring of test and statistical treatment.

The fourth chapter presents the collected data in tabular form; its analysis and interpretation object wise.

The fifth chapter deals with the brief summary of the actual work and the conclusion drawn on the basis of analysis of each aspect of the data. Further suggestions with a view to encouraging further investigation into the field of vocational interest and for any other purposes are given.

An attempt is made to give different types of tables and graphs wherever required. A list of exhaustive bibliography is given at the end of the report. Besides this, the inventory and I.Q. test is also included in appendices.
End Notes


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