Comparative study on total interest pattern between higher secondary level arts and science stream students

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Abstract
Interest is a behavior orientation towards certain objects, activities or experiences. The purpose of the study was to find out the total major vocations and avocations interest pattern among different streams (arts and science) of higher secondary level students. To determine the total major vocation and avocation interest pattern of two large groups. To find out if there is any difference in total major vocations and avocations interest pattern of arts stream and science stream subjects. Hundred (100) male students (50 arts stream students and 50 science stream students) were selected through purposive sampling method by the researcher at Latbagan High School as the subjects for this study. All male student of class XI and XII aged between 16 to 20 years from Barrackpore City. In this study causal comparative research design is used. The hypothesis selected for this study there was no significant deference in total vocations and avocations interest pattern of higher secondary level arts and science stream students. The psychological variable for this study was total major vocation and avocation interest pattern. This variable was measured by The Guilford-Zimmerman Interest Inventory (Joan S. Guilford and Wayne S. Zimmerman 1973). The data were analyzed by Mean and Guilford-Zimmerman Interest Inventory Norms. According to Norms (GZII) arts and science stream of total major vocation and avocation interest pattern mean score were significantly different. So it may be told that arts stream students (25.7) have less major vocation and avocation interest pattern than science stream subjects (28.1)

Keywords: Interest, Vocation, Avocation, Natural, Mechanical, Scientific, Creative, Literary, Artistic, Service, Enterprising, Leadership and Clerical

Introduction
Interest is a behavior orientation towards certain objects, activities or experiences as Aurthur D. Reber puts it – “the meaning of interest is loose at best and at one time or another has been used to imply all of the following: attention, curiosity, motivation, focus, concern, goal-directedness, awareness, worthiness, and desire (penguin’s Dictonary of psychology 1996).” Binghum defines interest as “a tendency to become absorbed in an experience and to continue it.” According to Crow and Crow “an interest may refer to attend to a person, a thing, or an activity or it may be the affective experience that has been stimulated by the activity itself.”

An inventory is an ordered listing or cataloging of illness. The term applies broadly to any checklist, test or questionnaire that assesses traits, opinions, beliefs, etc. Interest inventory is “an instrument design to evaluate a person’s interest in and performance for a verity of activity. (Thorndike and Hagen 1955) Examples of Interest- inventories are Kuder Inventories, strong inventories and Guilford-Zimmerman Interest Inventory (GZII).” The Guilford-Zimmerman Interest Inventory was designed to provide a short yet comprehensive and reliable instrument for measuring interests the GZII was preceded by a preliminary experimental version consisting of 450 items in 1962. From this preliminary study, 150 items were selected by trained psychometricians into one of the ten conceptualized categories of interest.

The present format of the inventory is a self-report and self-score able measure composed of 150 items. The items reflect a variety of activities designed to gauge interest–patterns related to major vocations and avocations. The interest scales proposed by Guilford and Zimmerman bear a close resemblance to the general occupational themes proposed by Holland (1973) gets
them appear to be somewhat more differentiated. The interest categories listed in GZII are as follows:

**Natural**: interest in being outdoors; a desire to work with plants and animal; a concern for the protection of natural resources.

**Mechanical**: interest in machines and tools, a preference for talking things apart and pulling those together, interest in technical knowledge concerning the operation of mechanical devices; construction, repair and design of machine and tools.

**Scientific**: interest in investigation in any of the areas of science; a preference for testing or research that is pain staring and detailed, a desire to explain natural phenomenon.

**Creative**: interest in delisting new ideas theories or objects, interest in discarding conversional ideas or methods and replacing them with unique substitutes and original creations.

**Literacy**: Appreciation of written and spoken language; interest in reading and writing; and preference for working with verbal materials so as to evaluate, use or improve them.

**Artistic**: Appreciation of beauty in art, music, dancing or drama, an interest in and desire enjoy, evaluate or participate in the creation of works of art that have emotional or aesthetic appeal.

**Service**: Interest in helping people in a personal way; humanitarian concerns; a preference for working for the welfare of others.

**Enterprising**: Interest in buying and selling, enjoyment of business dealings for their own sake orientation toward a profit motive; willingness to assume risks for possible financial gains.

**Leadership**: Interest in dealing or directing others, a preference for organizing groups and taking responsibility for their actions; liking for administrative activities and for assuming authority.

**Clerical**: Interest in office work; a preference for activities involving details, precision, accuracy and keeping things in order; interest in operating office machines and in deep routine computations or calculations.

The aim of the present study is to compare the total vocation and avocation interest pattern of the subject using Guilford-Zimmerman Interest inventory.

**Statement of the problem**
The problem selected for the study was entitled as “Comparative Study on Total Interest Pattern between Higher Secondary Level Arts and Science Stream Students”.

**Significance of the study**
1. The study will help to understand the total interest pattern of vocations and avocations of school going male students.
2. The findings of the study may establish the beneficial effects of total interests pattern vocation and avocation for individual as well as for community interest.
3. The study may help the Educator, Physical Educator and psychologists to motivate the students in developing their interest ability through proper way.

**Purpose of the study**
The purpose of the present research was to compare the difference of total interest pattern of vocations and avocations among different stream (arts and science) of higher secondary level students.

**Hypothesis of the present study**
There is no significance difference in interest ability of vocation and avocation of higher secondary level arts and science stream students.

**Methodology**

**Population**
In this present study all male student of class XI and XII, aged between 16 to 20 years from Barrackpore city (W.B) are the population of this study.

**Sampling**
Researcher has used non randomized purposive sampling method, to select the sample for the study. In population 100 XI and XII standard school going students were selected through purposive sampling method by researcher at Latbagan High School than researcher made two comparative groups. Group A arts stream students and group B science stream students, each group have equal number of student. Accordingly arts and science group consist of 50 subjects each. (Group A = 50, group B = 50 N = 100).

**Criterion measure**
Total interest pattern of vocations and avocations was measured by using the Guilford-Zimmerman Interest Inventory (1973).

**Design of the study**
In this study casual comparative research design is used.

**Statistical treatment for analyzing data**
The Guilford-Zimmerman Interest Inventory Norm and Mean were used.

**Materials required**
In the present study following materials were used. Such as – Guilford-Zimmerman Interest Inventory (GZII), booklet with answer sheet, report form and norms.

**Procedure and administration**
The GZII is self-score able and may be administered to groups or individual. The subjects are to be comfortably seated and the test booklet along with the responses sheet and required stationary are placed on a table in front of the subjects. After establishment of rapport, the subjects is to be
asked to read the instruction printed, while the administrator is to read the instructions aloud. This guarantees that careful attention is paid to the instructions. Any question or doubts of the respondent is to be cleared prior to beginning of the test. There is no time limit. However GZII can be completed in 20 minutes approximately. The administrator is to check that the answer sheet is being used in the correct order and manner. At the end of the test, the response sheet is to be collected and scored as per norms. After collection the data required statistical tools was used. End of the work analysis, interpretation and conclusion were drown.

Analysis and interpretation of data
The Guildford-Zimmerman Interest Inventory (GZII) Norm.

| Interest categories of vocation and avocation (Natural, Mechanical, Scientific, Creative, Literary, Artistic, Service, Enterprising, Leadership and Clerical) of arts and science groups. |
|---|---|---|---|---|---|---|---|---|---|---|
| **GZII Interest categories** | Natural | mechanical | scientific | creative | literary | artistic | service | Enterprising | Leadership | clerical | **Mean score of both group** |
| Total Mean score of arts group | 31 | 14 | 17 | 32 | 36 | 25 | 39 | 19 | 33 | 11 | 25.7 |
| Total Mean score of Science group | 33 | 25 | 36 | 31 | 34 | 23 | 35 | 25 | 25 | 14 | 28.1 |

From the table-1 it appear the mean weighted total score of arts group subjects in all categories of vocations and avocations interest are 31, 14, 17, 32, 36, 25, 25, 39, 19, 33 and 11. Science group subjects in all categories of interest of vocation and avocation are 33, 25, 33, 31, 34, 23, 35, 25, 25 and 14.

A group subject has obtained maximum score in the service (39) and literary (36) and science stream subject has maximum score in the scientific (36) and service (35) categories. Arts group subjects have scored the least in the clerical (11) category and science group subjects have least score in the clerical (14) category.

From the table-1 it appear the mean score Natural interest of the arts group subjects is 31 and science group subjects the mean score of Natural interest were 33 respectively.

According to Norms (GZII) arts group natural interest were high level (29-32) and science group interest pattern of natural vocation and avocation were very high level (33-45).

So it may be told that science arts group subjects have less natural interest than science group subjects.

From the table-1 it appear the mean score of mechanical interest of the arts group subjects were 14 and science group subjects’ interest were 25 respectively.

According to GZII norms arts stream subjects’ mechanical interest was average level (5-15) and science stream subject’s mechanical interest were high level (22-27).

It appear for the table-1 that mean score creative vocation and avocation interest of arts group subjects were 32 and science group subjects were 31 respectively.

According to GZII norms arts stream subjects’ creative vocation and avocation interest were average level (25-34) and science stream subject’s creative vocation and avocation interest level were average (25-34).

So it may be told that both group subjects have same creative vocation and avocation interest.

Form the table-1 it appear the mean score of literary interest of arts group subjects were 36 and science group subjects were 34 respectively.

According to GZII norms arts stream subjects literary interest was high level (36-37) and the science stream subject’s literary interest was moderately average level (30-35).

So it may be told that arts group has more literary interest of vocation and avocation than science stream subjects.

It appear for the table-1 that mean score of arts stream subjects for artistic vocation and avocation interest were 25 and science stream subjects were 23 respectively.

According to GZII norms arts group subjects’ artistic interest was moderately low (24-28) and science group subjects artistic interest were low level (16-23).

So it may be told that arts stream subjects have more artistic interest than science stream subjects.

Form the table-1 it appear the mean score of service interest of the arts group subjects were 39 and science group subjects were 35 respectively.

According to norms (GZII) arts stream subjects vocation and avocation interest of service was high level (37-40) and science stream subjects vocation and avocation interest of service was moderately average (33-36).

So it may be told that arts stream subjects have more service interest than science stream subjects.

It appear for the table-1 that the mean score of arts group subjects for vocation and avocation enterprises interest were 19 and science group of subjects were 25 respectively.
According to Norms (GZII) arts stream subjects enterprising interest were average level (16-27) and science stream subject’s enterprising interest level were average (16-27) level.

So it may be told that arts and science stream subject’s vocation and avocation enterprising interest were same. From the table-1 it appear the mean score of vocation and avocation leadership interest of the arts group subjects were 33 and science group subjects were 25 respectively.

According to the Norms (GZII) arts stream subjects interest of leadership interest were high level (32-37) and science stream subject’s leadership interest were average level (16-26).

So it may be told that arts stream subjects have more vocation and avocation leadership interest than science stream subjects.

Form table-1 it appear the mean score of clerical interest of the arts group of subjects were 11 and science stream subjects were 14 respectively. According to norm (GZII) arts stream subjects’ interest of clerical interest was average (6-17) level and science stream subject’s clerical interest (6-17) level.

It appear for the table-1 that the mean score of arts group of subjects for total vocation and avocation interest pattern were 25.7 and science group of subjects were 28.1 respectively.

So it may be told that arts stream subjects have less total vocation and avocation interest pattern (25.7) than science stream subjects (28.1).

**Testing of hypothesis**
The null hypothesis stating that there will be no significant difference in interest ability of the higher secondary level arts and science stream subjects should be rejected, because the parameter of total vocation and avocation interest pattern is significantly different.

**Conclusion**
The total vocation and avocation interest pattern of the arts stream subjects has been found Natural, Literary, Service and Leadership interest were high level and Mechanical, Scientific, Creative, Artistic, Enterprising and Clerical interest were average level. Science stream subjects has been found to be Natural and scientific interest were very high, Mechanical interest was high level, and Literary, Artistic, Service and Leadership interest were moderately average, Creative and Clerical interest were average level and Artistic interest of the subjects was moderately low level. Tow stream of total vocation and avocation interest pattern mean score were significantly different. So it may be told that arts stream have less total vocation and avocation interest pattern than science stream subjects.

**Reference**
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