

# CAREER PREFERENCES IN RELATION TO LOGICAL THINKING OF SENIOR SECONDARY STUDENTS

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## ABSTRACT

*The present study was designed to study the career preferences in relation to logical thinking of senior secondary students of Chandigarh. Random sampling method was used to select two schools out of all the government schools of Chandigarh. Total sample of 100 students was selected by this method, selecting 50 from each school, comprising of 25 male and 25 female students. Career Preference Record by Vivek Bhargava and Rajshree Bhargava (2009) and Logical Thinking Test by Dr. Sujeet Kumar and Dr. Shikha Tiwari (2012) were used for collection of data. Results revealed no significant difference in mean scores of career preferences of male and female students in all streams, except for Science and Technology and Defence, which were preferred significantly more by male students as compared to their female counterparts. Logical thinking scores of male and female students also revealed no significant difference. Coefficient of correlation between the two variables revealed significant correlation, indicating better choice of career preference with higher logical thinking. The study will be helpful in improving the logical thinking skills that are lagging in the students, thereby help the students to have a better understanding of their career orientations.*

**Keywords :** Career preference, Logical thinking and Senior Secondary students.

## Introduction

The aim of education is multi-fold but the primary aim is to make an individual understand oneself and be able to decide upon the choice of vocation. Successful career development often involves setting realistic, deliberate goals, simultaneously searching for cohesiveness between employee and employer. Understanding how career preferences are identified based on knowledge of self and work can be instrumental in positive career development and satisfying occupational placement. Greater the maturity, greater is the probability that the individual is able to make wise, sincere and satisfactory decisions with regard to career choices. It enables an individual to cope with developmental tasks at different stages of vocational development (Dandekar & Makheeja, 2002).

Choosing a right career option is the most vital decision in everyone's life. Students may go through a dilemma of choosing a career after completing their 10th, 12th or graduation. Apart from the top paying and common career options such as

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Engineering, Management, Chartered Accountancy etc., numerous other options are available in the field of Health Care, Travel and Tourism, Media and so on. The choice of a career depends on the job prospects of the field and most certainly the interest of the students. When one thinks about a career choice, several things immediately come to the mind i.e. job description, training and education required, career outlook, salary etc. but there are a number of other factors that may influence the decisions like skills and abilities, interest and personality type, life roles, previous experiences, culture, social and economic conditions, childhood fantasies etc. ( Venable, 2011).

Logical thinking is simply a matter of organizing and manipulating information. Problems or situations that involve logical thinking call for structure, for relationships between facts, and for chains of reasoning that "make sense." Research into practical thinking processes has shown that there are two contrasting types of reactions that many people have, with relatively few folks falling in the middle. On one hand, there is the challenge reaction. One person sees the situation as an opportunity for a bit of mental exercise, in addition to a problem in need of resolution. Such a person who enjoys clear, logical thought responds positively to being handed a situation that calls for analysis. At the other extreme, there is the avoidance reaction. This person sees the situation as threatening, uncomfortable, involving an unpleasant and defeating experience. He or she experiences what might be called the failure reflex, a snap reaction feeling of dread, which originates in ancient experiences of having been defeated by situations similar to the one presenting itself. By various means, the logical thinker has opportunities to master certain basic mental procedures that work well in a broad variety of situations and has been rewarded in different ways for using these mental processes successfully. The person with an aversion to logical thinking has found this kind of experience consistently unsuccessful, defeating and unpleasant. Because no one will repeatedly seek out experiences that threaten his or her self-esteem, this person falls into a self-reinforcing pattern of avoiding experiences that would help to develop these skills. It has been proven that specific training in logical thinking processes can make people "smarter" (Aggarwal, 2001).

Kim (2011) studied the Relationship between thinking style differences and career choices for high-achieving students. The findings of this study demonstrated that the effect of program on the different thinking styles was statistically significant. The findings showed that external thinking style was a good predictor for choosing social science areas as future careers. However, students with higher external thinking styles chose computer and math areas 73% less often than students with lower external thinking styles. In addition, the findings demonstrated that high-school students attending a program with an academic focus on liberal arts tended to be more people oriented and outgoing and valued sharing ideas with others as opposed to students in a program

with an academic focus on science and

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technology. Finally, students attending a program with an academic focus on liberal arts tended to be more systematic and set priorities more often than students in a program with an academic focus on science and technology.

It is a common observation that the students of senior secondary classes are confused over selecting their streams for further studies. It has been found that most of the students choose a particular stream either due to the pressure they get from their parents or the influence they have from their peers. So many students, due to lack of proper guidance and lack of understanding of their own abilities and interest, select wrong streams which lead to failures and disappointments. This further leads them into a dilemma of what career to choose and what job to do for their survival. So keeping this situation in view, the present study was undertaken.

### **Objectives of the study**

- To study the career preferences of male and female students of senior secondary schools of Chandigarh.
- To study the level of logical thinking of male and female students of senior secondary schools of Chandigarh.
- To study the relationship between career preferences and logical thinking of male and female students of senior secondary schools of Chandigarh.

### **Hypotheses of the study**

- There exists no significant difference in career preferences of male and female students of senior secondary schools of Chandigarh.
- There exists no significant difference in the logical thinking of male and female students of senior secondary schools of Chandigarh.
- There exists no significant relationship between career preference and logical thinking of students of senior secondary schools of Chandigarh.

### **Selection of Sample**

In this study, a representative sample of 100 students of class XI from two Government Schools, namely Government Senior Secondary school, Sector -27 C, Chandigarh and Government Senior Secondary school Sector -46 C, Chandigarh were selected using random sampling method. There were two sections in each school with 50 students in each section. Sample was selected randomly from each section again by lottery system. Total number of sample selected by this method from each school was 50 (25 boys and 25 girls).

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## Tools Used

In the present study, following standardised tools were employed:

- Career Preference Record by VivekBhargava and RajshreeBhargava (2009)
- Logical Thinking Test by Dr.Sujeet Kumar and Dr.ShikhaTiwari (2012)

## Statistical Analysis

In this study, descriptive and inferential statistics were used to calculate the Mean, Median, Mode and Standard Deviations of the data to study the general nature of data. Skewness and kurtosis were worked out to see the general trend of departure of the sample distribution from normal distribution curve. After this, t-values were calculated to find the significance of difference between the mean scores of male and female students. Then, the Pearson's coefficient of correlation was calculated to study the relationship between Career Preferences and Logical Thinking of senior secondary students.

## Results and Discussion

**Table 1**  
**Showing Descriptive Statistics of Different Streams for Career Preferences among Students**

Variable	N	Mean	Median	Standard deviation	Skewness	Kurtosis
Mass Media & Journalism (MMJ)	100	6.85	7.0	4.74	0.108	-.815
Artistic & Designing (AD)	100	7.69	8.0	4.43	0.010	-.595
Science & Technology (ScT)	100	7.10	8.0	4.48	-0.081	-.787
Agriculture (AG)	100	5.65	6.5	4.06	0.199	-.520
Commerce & Management (CM)	100	6.90	7.0	4.69	0.394	-.423
Medical (M)	100	5.27	6.0	3.98	0.191	-.975
Defence (D)	100	6.07	6.0	4.27	0.050	-.342
Tourism & Hospitality (TH)	100	5.96	7.0	4.18	0.039	-.094
Law & Order (LO)	100	7.13	7.0	4.29	0.172	-.062
Education (E)	100	7.67	8.0	4.77	-0.055	-.999

As seen in Table 1, the mean as well as median values of all the streams of career preferences are close to each other, showing normal distribution of the population. However, the skewness values of all the streams of career preferences are positive, except for Science and Technology and Education, indicating that distribution is slightly positively skewed. The values of Kurtosis of all the streams of career preferences are less than the table value of 0.263, indicating leptokurtic nature of curve.

**Table 2**

**Showing Significance of Difference between career preference of male and female students**

Group	Mean (Males)	Mean (Females)	SD (Males)	SD (Females)	t-value	Level of significance
Mass Media & Journalism (MMJ)	7.76	5.94	4.60	4.77	1.943	N.S.
Artistic & Designing (AD)	7.78	7.60	4.64	4.27	0.202	N.S.
Science & Technology (ScT)	8.14	6.06	4.71	4.03	2.374	0.05
Agriculture (AG)	6.34	4.96	4.19	3.86	1.712	N.S.
Commerce & Management (CM)	7.64	6.16	5.05	4.23	1.589	N.S.
Medical (M)	5.76	4.78	4.04	3.90	1.233	N.S.
Defense (D)	7.26	4.88	4.34	3.89	2.885	0.01
Tourism & Hospitality (TH)	6.56	5.36	4.25	4.06	1.443	N.S.
Law & Order (LO)	7.32	6.94	4.13	4.49	0.440	N.S.
Education (E)	8.20	7.14	4.83	4.72	1.111	N.S.

Table 2 represents means, standard deviations and t-values of scores of various streams of career preferences of male and female students. As seen in this table, there is no significant difference in mean scores of all streams of career preferences of male and female students, except for Science and Technology and Defence, which were preferred significantly more by male students as compared to their female counterparts.

**Table 3**  
**Showing Descriptive Statistics of Logical Thinking Scores of Students**

Variable	N	Mean	Median	Standard Deviation	Skewness	Kurtosis
Logical Thinking	100	24.13	24	4.30	.097	-.828

Table 3 shows the mean, median, standard deviation, skewness and kurtosis of Logical thinking scores of 100 students. The mean as well as median values of logical thinking scores are close to each other, showing normal distribution of the population. However, the skewness value of logical thinking score is positive, indicating that distribution is slightly positively skewed. The value of Kurtosis is less than the table value of 0.263, indicating leptokurtic nature of curve.

**Table 4**  
**Significance of Difference between Logical Thinking of Males and Female Students**

Group	N	Mean	SD	t-value	Level of significance
Male	50	24.00	5.12	0.301	Not significant
Female	50	24.26	3.34		

Table 4 represents means, standard deviations and t-values of scores of logical thinking of male and female students, showing no significant difference between logical thinking scores of male and female students.

**Table 5**  
**Showing Coefficient of Correlation between Career Preferences and Logical Thinking**

Career Preference	Logical Thinking	Level of significance	N	Df
Mass Media & Journalism (MMJ)	.221*	0.05	100	98
Artistic & Designing (AD)	.336**	0.01	100	98
Science & Technology (ScT)	.323**	0.01	100	98
Agriculture (AG)	.230*	0.05	100	98
Commerce & Management (CM)	.337**	0.01	100	98
Medical (M)	.276**	0.01	100	98
Defense (D)	.211*	0.05	100	98
Tourism & Hospitality (TH)	.295**	0.01	100	98
Law & Order (LO)	.208*	0.05	100	98
Education (E)	.260**	0.01	100	98

Note: \*. Significant at the 0.05 level ( $r = 0.195$ ). \*\*. Significant at the 0.01 level ( $r = 0.254$ ).



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Table 5 shows that coefficient of correlation (r) between various career preferences and logical thinking of students. The values coefficient of correlation (r) in the areas of Artistic & Designing (AD), Science & Technology (ScT), Commerce & Management (CM), Medical (M), Tourism & Hospitality (TH), & Education (E) with logical thinking are greater than the table value of 0.254, hence significant at 0.01 level. However, the coefficient of correlation (r) values in the areas i.e. Mass Media & Journalism (MMJ), Agriculture (AG), Defence (D), Law & Order (LO) and logical thinking are greater than the table value of 0.195 but less than 0.254, hence significant at 0.05 level. Hence, there exists significant correlation between the two variables, indicating better choice of career preference with higher logical thinking. Similar findings have been suggested in a study conducted by Kim (2011).

The present study is helpful in understanding the career options for girls and boys. It can help a teacher to make students more aware towards their career and goals and prepare them likewise. The study can help in providing better guidance programmes in schools. It can also help in improving the logical thinking skills that are lagging in the students. This will help the students to have a better understanding of their career orientations.

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