

EFFECT OF GENDER, ACADEMIC STREAM AND NON PRINT MEDIA USE ON MODERNIZATION OF SENIOR SECONDARY SCHOOL STUDENTS

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ABSTRACT

The present study was undertaken to find out the effect of gender, academic stream and non print media use on modernization of senior secondary school students. The present study has been conducted on a sample of 240 male and female senior secondary school students of Una and Kangra district of Himachal Pradesh. Non print media scale developed and standardized by the investigator herself. Comprehensive Modernization Inventory (CMI) by Ahulwalia, S.P and Kalia, A.K. , published by psychological corporation, Agra, U.P India have been used as tool and administered on the selected sample. Mean, S.D, T-test and (2X3X2) analysis of variance have been used for analysis of data. The result of the study revealed that currently (i) science stream students are more modernized as compared to arts and commerce stream students (ii) students making more and less use of non print media do not differ significantly on the modernization (iii) significant interaction was found between non print media use and gender (iv) gender, stream and non print media use interact significantly in modernization.

INTRODUCTION

A medium is a 'channel of communication' a mean through which people send and receive information. Non print media use a physical object such as a television, radio, and internet to distribute their information. Internet media provides many mass media services, such as e-mail, websites, blogs and internet based radio and television.

In popular sense, "to modernize" means "to render something old fashioned up to date" or "to reshape something out of date to suit the requirements of modern times"(chodak, 1973). Modernization as a term in sociology is used to denote complex process of social change from traditional way of living and thinking. Modernization, to be precise, refers to the deeper change in man's way of thinking and feeling, a change in his whole attitude to life's problems, the society and the universe.

Wilberg Schramm (1964) reiterated that the modernization of industrial and agricultural sectors in developing nations required the modernization of human resources. Education and mass media, then vested with crucial responsibility in the process of modernization of human resources. He noted that task of mass media of information and the new media of education is to speed and ease the long, slow social transformation required for economic development, and in particular, to speed and smooth task of mobilizing human resources behind the national effort.

OBJECTIVES

1. To develop and standardize a scale to measure the impact of non print media use on senior secondary school students.
2. To study the modernization of senior secondary school students with respect to:
 - a) gender,
 - b) stream,
 - c) non print-media use.
3. To study two factor interaction effect of:

- a) gender and stream,
 - b) gender and non print-media use,
 - c) stream and non print-media use
- on the modernization of senior secondary school students.

4. To study three factor interaction effect of:
gender, stream and non print-media use on the modernization of senior secondary school students.

HYPOTHESIS

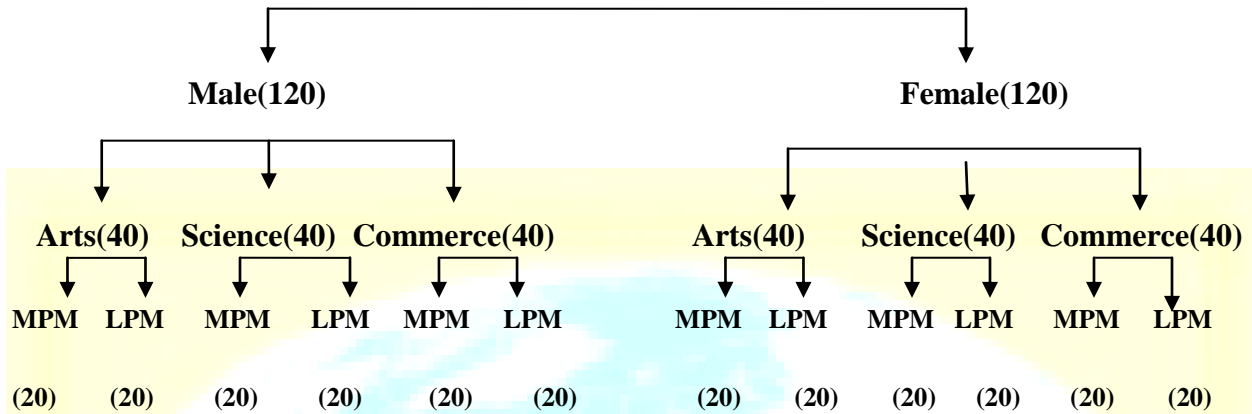
1. There will be significant difference in the modernization of senior secondary school students with respect to:
 - a) gender,
 - b) stream,
 - c) non print-media use.
2. There will be significant two factor interaction effect of:
(a) gender and stream (b) gender and non print-media use (c) stream and non print-media use on the modernization of senior secondary school students.
3. There will be significant three factor interaction effect of:
gender, stream and non print-media use on the modernization of senior secondary school students.

SAMPLE

The data comprised of 240 students studying in 10+1 and 10+2 class. For the selection of the sample senior secondary school students of District Una and District Kangra of Himachal Pradesh were selected.

LAY OUT OF THE RESEARCH DESIGN

Sample(240)



MPM- More Non print media Preferred,

LPM- Less Non print media Preferred

TOOLS USED

For the collection of data following tools were used:

1. Non print media scale developed and standardized by the investigator herself.
2. Comprehensive Modernization Inventory (CMI) by Ahulwalia, S.P and Kalia, A.K. , published by psychological corporation, Agra, U.P India.

STATISTICAL TECHNIQUE USED

Descriptive statistical techniques such as mean, standard deviation, t-test and Analysis of Variance (2X3X2 factorial design) were used.

ANALYSIS AND INTERPRETATION OF DATA

The data was analyzed to determine the nature of the distribution of scores by employing mean and standard deviation. The total scores and means of different sub groups have been presented in Table-1.

TABLE 1
TOTAL SCORES AND MEANS OF MODERNIZATION OF STUDENTS' W.R.T THEIR GENDER, STREAM AND NON PRINT MEDIA USE

Type of Gender		Total scores and Means of males	Total scores and Means of Females	Combined Scores and Means	Stream wise Scores and Means	Non Print Media use wise Scores and Means
Science	More use	3595 (179.75)	3608 (180.4)	7203 (180.07)	14109 (176.36)	More Non Print Media Use (1)+(3)+(5) 20850 (173.74)
	Less use	3436 (171.80)	3470 (173.50)	6906 (172.65)		
Arts	More use	3219 (160.95)	3495 (174.75)	6714 (167.85)	13133 (164.16)	Less Non Print Media Use (2)+(4)+(6) 20318 (169.31)
	Less use	3366 (168.35)	3053 (152.65)	6419 (160.47)		
Commerce	More use	3374 (168.72)	3559 (177.95)	6933 (173.32)	13926 (174.07)	
	Less use	3464 (173.23)	3529 (176.45)	6993 (174.82)		
Gender wise Combined Scores and Means		20307 (170.45)	20714 (172.61)	41021 (170.91)	---	---

The sum of squares, degree of freedom, means of sum of squares and the F- ratio have been presented in Table-2.

TABLE 2

GENDER, STREAM AND NON PRINT MEDIA USE WISE SUMMARY TABLE OF ANALYSIS OF VARIANCE OF MODERNIZATION OF STUDENTS

Source of Variation	Sum of Squares	df	Mean Squares	F-Value
Gender	281.667	1	281.667	0.733
Stream	6728.808	2	3364.404	8.755**
Non Print Media use	1179.267	1	1179.267	3.069
Gender and Stream	544.308	2	272.154	0.708
Gender and Non Print Media use	1972.267	1	1972.267	5.133*
Stream and Non Print Media use	1056.158	2	528.079	1.374
Gender, Stream and Non Print Media use	2549.758	2	1274.879	3.318*
Error Variance	87613.500	228	384.270	---
Total sum of Squares	7163610.00	240	---	---

*Significant at 0.05 level of significance, ** Significant at 0.01 level of significance

Main Effect of Gender: In the above Table, the calculated value of 'F' ratio for the main effect of gender of senior secondary school students' on the modernization came out to be 0.733 for df 1 and 228, which is even less than the 'F' Table value 3.89 at 0.05 level of significance. Hence, the hypothesis number 1(a), "There will be significant difference in the modernization of senior secondary school students with respect to gender," was not retained. Thus, it is concluded that male and female senior secondary school student do not differ on the modernization.

Further, from the Table 1, it is evident that female students irrespective of their stream and non print media use exhibited slightly more combined mean score (172.61) than their counterpart (170.45). Thus, it is concluded that gender of the students has no significant effect on the modernization of senior secondary school students.

(a) **Main Effect of Stream:** In the Table 2, the calculated value of 'F' ratio for the main effect of stream of senior secondary school students' on the modernization came out 8.755 for df 2 and 228, which is higher than 'F' Table value 4.71 at 0.01 level of significance. Hence, the hypothesis number 1(b), "There will be significant difference in the modernization of senior secondary school students with respect to stream", was retained. Thus, it is concluded that

science, arts and commerce stream senior secondary school students differ significantly on the modernization.

Further, it is also evident (Table 2), that students of science stream exhibited slightly more combined mean (176.36) on the modernization than arts stream (164.16) and commerce stream (174.07) students.

Furthermore, 't' values are also computed for the comparison of modernization of science, arts and commerce stream students. The results are summarized in the Table 3 as follows:

TABLE 3

't' VALUE SHOWING SIGNIFICANCE OF DIFFERENCE IN THE MEANS OF MODERNIZATION OF STUDENTS

Pair of Comparison	N	Mean Difference	SED	't'-value
Science and Arts	160	12.2	2.95	4.13**
Science and Commerce	160	2.29	1.78	1.28
Arts and Commerce	160	9.91	2.85	3.47**

**Significant at 0.01 level of significance

The Table-3 reveals that the computed 't' value for the views of modernization of science and arts stream of senior secondary school students' came out 4.13 for df 158 which is significantly greater than the 't' value 2.61 at 0.01 level of significance. Hence, it is concluded that students of science group and arts group differ significantly on the modernization.

The calculated 't' value for science and commerce students came out 1.28 for df 158, which is even less than the 't' Table value 1.98 at 0.05 level of significance. Hence, it is concluded that students of science group and commerce group do not differ on the modernization.

Further for arts and commerce students 't' value came out 3.47 for df 158 which is significantly greater than the 't' Table value 2.61 at 0.01 level of significance. Hence, it is concluded that students of arts group and commerce group differ significantly on the modernization.

(b) Main Effect of Non Print Media use: The Table, 2 reveals that the calculated value of 'F' ratio for the main effects of non print media use of senior secondary school students' on the modernization came out 3.06 for df 1 and 228, which is even less than the 'F' Table value 3.89 at

0.05 level of significance. Hence, the hypothesis number 1(c), “There will be significant difference in the modernization of senior secondary school students with respect to non print media use,” was not retained. Thus, it is concluded that students making more and less use of non print media, do not differ significantly on the views of modernization.

(c)

Further, it is evident from the Table, 1, that students making more use of non print media exhibited slightly more combined mean score (173.74) as compared to the mean (169.31) of students making less use of Non print media. Thus, it is concluded that use of non print media has no significant effect on the views of modernization.

INTERACTIONAL EFFECTS

The two factor and three factor interaction effects of gender, stream and non print media use are studied and dealt in detail as follows:

Interaction Effect of Gender and Stream: The Table-2, reveals that the calculated value of ‘F’ ratio for the interaction effect of type of gender and stream of senior secondary school students’ on the modernization came out 0.708, for df 2 and 228, which is even less than the ‘F’ Table value 3.04 at 0.05 level of significance. Hence, the hypothesis number 2(a), “There will be significant two factor interaction effect of gender and stream on the modernization of senior secondary school students,” was not retained. Thus, it is concluded that the male and female students of science, arts and commerce stream students do not interact significantly on the modernization.

(a) **Interaction Effect of Gender and Non Print Media use:** In the Table-2, the calculated value of ‘F’ ratio for the interaction effect of type of gender and non print media use of senior secondary school students’ on the modernization came out 5.133 for df 1 and 228, which is more than the ‘F’ table value 3.89, at 0.05 level of significance. Hence, the hypothesis number 2(b), “There will be significant two factor interaction effect of gender and non print media use on the modernization of senior secondary school students,” was retained. Thus, it is concluded that the gender and non print media use interact significantly on the modernization. The interaction effect is shown in Fig-1, as follows:

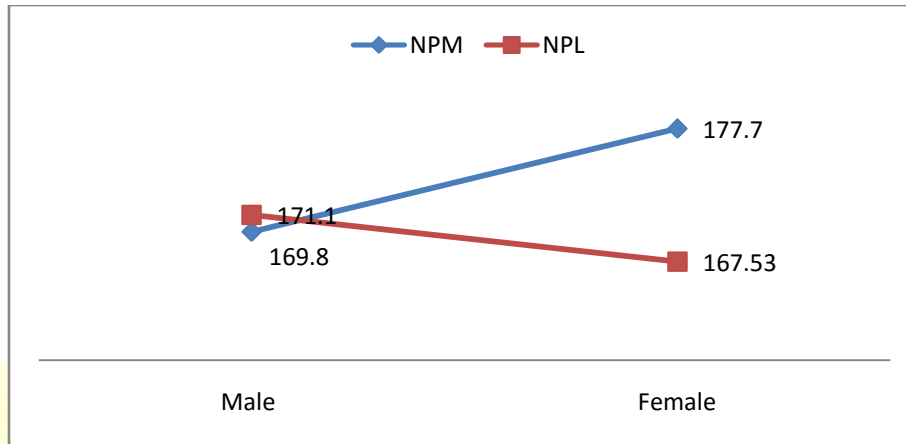


Fig. 1 Interaction Effect of Gender, and Non-Print Media use of Students.

Interaction Effect of Stream and Non Print Media use: In the Table-2, the calculated value of ‘F’ ratio for the interaction effect of type of stream and print media use of senior secondary school students’ on the modernization came out 1.374, for df 2 and 228, which is even less than the ‘F’ table value 3.04, at 0.05 level of significance. Hence, the hypothesis number 5(c), “There will be significant two factor interaction effect of stream and non print media use on the views of modernization of senior secondary school students” was not retained. Thus, it is concluded that the stream and non print media use do not interact significantly on the views of modernization.

Interaction Effect of Gender, Stream and Non Print Media use: In the Table-2, the calculated value of ‘F’ ratio for the interaction effect of type of gender, stream and print media use of senior secondary school students’ on the modernization came out 3.318 for df 2 and 228, which is more than the ‘F’ table value 3.04 at 0.05 level of significance. Hence, the hypothesis number 6 “There will be significant three factor interaction effect of gender, stream and non print media use on the modernization of senior secondary school students”, was retained. Thus, the gender, stream and non print media use of senior secondary school students interacts significantly on the modernization. The interaction effect is shown in Fig. 2 , as follows:

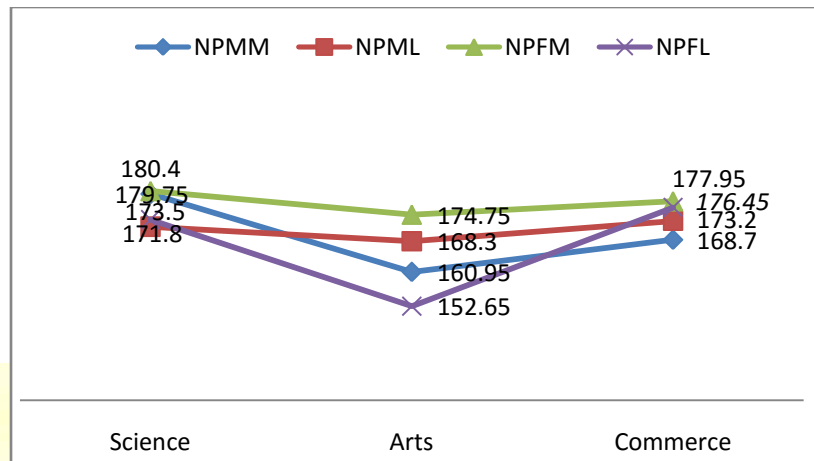


Fig. 2 Interaction Effect of Gender, Stream and Non Print Media use of Students.

FINDINGS OF THE STUDY

- (i) Science stream students are more modernized as compared to Arts and Commerce stream students
- (ii) Students making more and less use of non print media do not differ significantly on the modernization.
- (iii) Significant interaction was found between Non print media use and Gender
- (iv) Gender, stream and Non print media use interact significantly in Modernization.

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