

## Modernization of Higher Secondary School Students with Respect To Science and Social Science Background

Dr. M.Y Ganaie<sup>1,\*</sup>, Hafiz Mudasir<sup>2</sup>

<sup>1</sup>Associate Professor, Deptt. of Education, University of Kashmir.

<sup>2</sup>Ph.D Research Scholar, Deptt. of Education, Dr. C.V Raman University, Chhattisgarh.

[hafizmudasir@rediffmail.com](mailto:hafizmudasir@rediffmail.com)

**Abstract:** The present study aims to measure the modernization among two groups of Adolescents one belonging to science stream and belongs to Social Science stream. The study revealed that Science higher secondary school students do not differ significantly from their social science counterparts on the scores obtained as far as their education is concerned. However, the study revealed that Science higher secondary school students differ significantly from their social science counterparts on modernization level, as the science students were found to be higher on the level of modernization and other components viz, Socio-religious, Marriage and Status of women.

[M.Y Ganaie, Hafiz Mudasir. **Modernization of Higher Secondary School Students with Respect To Science and Social Science Background.** *Researcher* 2013;5(12):97-101]. (ISSN: 1553-9865). <http://www.sciencepub.net/researcher>. 13

**Key words:** Modernization, Organic Solidarity, Culture, Realism, Higher Secondary Students

### Introduction

The most important function of education is modernization. In the words of Yogendra Singh, "...education has been one of the most influential instruments of modernization in India. It has led to the mobilization of people's aspiration for nationalism, liberalism and freedom. It alone has been responsible for the growth of an enlightened intelligentsia which carried forward not only a movement for freedom but also a relentless struggle for social and cultural reforms."

The origin of modernization can be traced back to fifteenth and sixteenth century Europe. Early in the twentieth century Japan, the first Asian country to do so, joined the race for modernization. Later the USSR as well as some other countries achieved modernization in varying degrees. Many other aspirants have also succeeded, at least partially in acquiring different levels of modernization; some of them are pushing forward for more of it. Historically the process of modernization was set into motion during the British regime, it strengthened further after India gained Independence, is still continuing and having its impact on all aspects of life in the country, urban as well as rural.

Black, (1966) views that, modernization is a process by which historically evolved institutions are adapted to the rapidly changing functions that reflect the unprecedented increase in man's knowledge, permitting control over his environment that accompanied the scientific revolution. Modernization, according to David, E. Apter (1966) involves a diffusion of world culture based on advanced technology and the spirit of science, a rational view of life, a secular approach to social relations, and a feeling for justice in public affairs and on the acceptance that to be modern means to see life as alternatives, preferences and choices.

Modernization is a comprehensive concept aimed at capturing, describing and evaluating profound qualitative and quantitative changes in society. It describes the transition of a society from medieval to modern culture. It stands for progress beyond tradition. It is a process of movement from traditional and quasi-traditional to certain desired type of technology and the resultant changes in the social structure, value orientations, motivations, achievement and aspirations". It means a "value change", significant institutional modifications and improvement of standards of performance and achievement. It involves the substitution of old images and forms with new ones. It is not a mechanical imitation of some modernized country. One must retain a distinct identity and be not a carbon copy of some other country".

Modernization according to some sociologists is based upon European and American models. As compared to urbanization, industrialization, westernization and Europeanization, modernization presents a more complex process and a more complex result. In the intellectual sphere, it is awareness that it is possible to see a rational explanation of physical and social phenomena. Thus it is represented by positivism and empiricism and rationalism. In the field of religion, it is expressed in secularism. In philosophy, it is expressed in humanistic thought. It includes social mobilization and differentiation and specialization in individual and institutional activities. In political field, it stands for democratization. In ecology, it is characterized by advanced degree of urbanization. But the most important feature of modernization as related to education is cultural.

Education is the most important instrument

of modernization since and modernization includes:

1. Directed change in the system of attitudes, beliefs and values, and also in the institutional complex, to enhance the acceptability of modern technology and its organizational and operational framework.
2. Growth of the infrastructure essential to the adaptation to technology of foreign origin to specific national needs; and
3. Laying the foundations of institutions and organizations which could, in time, assume responsibility for independent innovation and technological growth to the country's needs and problems.

Modernization is a total transformation of society a movement in consciously chosen direction. Sushila Jain (1986), in her operational definition of the concept of modernization points out that the term denotes change not only in the sacred and non-sacred existing components of social organization but also the new form of social, economic, cultural and political values, means and relationship based on rationality. Modernization can be described as the process of development, in almost every aspect of human life i.e. scientific, technological, economic, environmental educational, cultural and social fields. Modernization has two major aspects, firstly, there is a system of thought and values with reference to which an individual directs or orients his activities and secondly, a system of institutions through which he carries out his activities. Both the aspects influence the behavior of an individual with respect to his self-esteem and social system.

#### **Need and Importance of the Study**

It is a well known fact that we are in the era of modernization. The process of modernization has a great impact on individual and society. Modernization includes "a temper of science, reason and rationalism, secularism, high aspiration and achievement orientation, overall transformation of attitudes, norms and values, creation of new functional institutions, investment in human resources, a growth oriented economy, a national interest rather than kin, caste religion, region or language oriented interests, an open society and a mobile person," (Ram Ahuja in his "Indian social system"). According to B. Kuppuswamy, "The main feature of modernization is the building of an "open society" in which individuals of talent, enterprise and training can find places in the society appropriate to their achievement. The process of modernization involves an increase in social unrest till the social system is responsive to the new aspirations built up by the modernization process." The process of modernization involves appropriate change in the social system to meet the rising expectation of the

people.

Modernization entails social change; which leads to progress in many fields. It involves a transformation of social, political and economic organizations. "This includes the transformation indicated by Durkheim from "mechanical solidarity" to "organic solidarity"; that indicated by Beckner, the transformation from the "change-resistant sacred outlook" to the change-ready secular outlook"; the transformation indicated by Weber from "personal bonds" to "impersonal relations" with bureaucracy; and the transformation from "status based" relations to "contract based relation as indicated by Maine, long ago. It applies to the individualist forms of organization of the western model, the communist form of organization of the Russian or Chinese model as well as to the socialistic pattern of the Indian model" (Ref. B. Kuppuswamy in his "Social Change in Modern India"- (1972) page 54-55. In modernized society people get aware about serious consequences of social evils like casteism, regionalism and exploitation. It is due to modernization that various students' organizations are in vogue in various degree colleges. Thus modernization is a way to democratization. It is due to modernization that old social and psychological elements are transformed and new values of human conduct are set up. With the acceleration in the speed of social change the status of individuals and families undergo change. In spite of this great importance of modernization, only a few studies have been conducted at state and regional level on undergraduate students.

Realizing the importance of modernization in the society and the role which young generation is supposed to play in strengthening social order, the investigator felt interested in undertaking a study of modernization of higher secondary school students with respect to the science and social science background.

#### **Statement of the problem**

The problem selected for the purpose of the present study reads as under:

*"Modernization of Higher Secondary School Students with Respect To Science and Social Science background"*

#### **Operational Definition of Terms and Variables**

**Modernization**  
For the purpose of present investigation modernization refers to the scores obtained by the subjects on R.S. Singh's Modernization Scale (1999) on various dimensions i.e. socio-religious, marriage, position of women and education.

#### **Science and Social Science Students:**

For the purpose of present study science and social science students refers to students pursuing

their studies in Science (botany, zoology and chemistry) and social science (economics, political science and education) in various higher secondary school of district kulgam.

### Objectives of the Study

1. To study the modernization of higher secondary school students of science background.
2. To study the modernization of higher secondary school students of social science background.
3. To compare the higher secondary school students of science and social science background on total scores of modernization
4. To compare the science and social science students on the first dimensions (socio-religious) of the R. S. Singh's modernization scale.
5. To compare the science and social science students on the second dimension (marriage) of R. S. Singh's Modernization Scale.
6. To compare the science and social science students on the third dimension (position of women) of R. S. Singh's Modernization Scale.
7. To compare the science and social science students on the fourth dimension (education) of R. S. Singh's Modernization Scale.

### Hypothesis

Based on the objectives of the study the following hypothesis was formulated:

1. There is no significant difference between higher secondary school students of science and social science background in terms of total scores on modernization.
2. There is no significant difference between science and social science students in terms of scores obtained on first dimension of modernization scale.
3. There is no significant difference between science and social science students in terms of scores obtained on second dimension of modernization scale.
4. There is no significant difference between science and social science students in terms of scores obtained on third dimension of modernization scale.
5. There is no significant difference between

science and social science students in terms of scores obtained on fourth dimension of modernization scale.

### Methodology and Procedure

The details of methodology, viz. sampling, tools, scoring and procedure are given as under:

### Sample

The sample for the present study comprised of 60 higher secondary school students reading in various higher secondary schools of Kulgam. The procedure adapted for drawing the sample is reported below:

A total number of 60 higher secondary school students were selected through stratified random sampling technique. Out of these 60 higher secondary school students 30 were from science background and the other 30 from social science background.

Science students	30
Social science students	30
Total	60

### Description of the tool

R.S. Singh's Modernization Scale was employed for the purpose of collecting relevant data from the selected subjects. The scale was administered to measure the extent of modernization among the sample subjects. The scale was administered in accordance with the instructions given in the test manual. The scoring of the inventory provided raw scores for the four sub areas of modernization and also total scores for the each individual subject. The hypothesis formulated for the present study were tested by 't' test in order to find characteristic differences, if any, between different subgroups. The sample of 60 students was sub-divided on the basis of stream (science and social science) in order to see the impact of sex and residential background on the sub-areas of modernization with respect to higher secondary students.

### Analysis and interpretation of data

The statistical treatment of the data and the results obtained there upon has been arranged in a tabular form and is presented below:

**Table 1: Comparison of and science and social science students on total scores of modernization**

Group	N	M	S.D	't' Value	Level of Significance
Science Students	30	134.73	13.45	4.15	Significant at 0.01 Level
Social Science Students	30	113.83	14.16		

Table 1 gives the mean, S.D. and 't' value of science and social science higher secondary school students with N=30 in both the cases. A quick glance at the table reveals that the two groups differ significantly at 0.01 level on total scores of modernization, the mean difference favoring the science students.

**Table 2: Comparison of science and social science higher secondary school students on the scores obtained on the first dimension of the RSSMS i.e. 'Socio-religious'.**

Group	N	M	S.D	't' Value	Level of Significance
Science Students	30	27.7	4.38	2.06	Significant at 0.05 Level
Social Science Students	30	24.4	2.55		

Table 2 gives the mean, S.D. and 't' value of the two groups of the students i.e. science and social science secondary school students with N=30 in both the cases. A perusal of above table shows that the students of the two groups differ significantly at 0.05 level on the scores obtained on the first dimension (Socio-religious) of RSSMS.

**Table 3: Comparison of science and social science higher secondary school students on scores obtained on second dimension of RSSMS i.e. 'Marriage'**

Group	N	M	S.D	't' Value	Level of Significance
Science Students	30	35.6	4.17	0.49	Not Significant
Social Science Students	30	34.6	2.6		

Table 3 gives the mean, S.D and 't' value of male and female higher secondary school students with N = 30 in both the cases. A perusal of the table shows that the two groups do not differ significantly.

**Table 4: Comparison of science and social science higher secondary school students on the scores obtained on third dimension of RSSMS i.e. 'Position of Women'**

Group	N	M	S.D	't' Value	Level of Significance
Science Students	30	32.8	2.92	2.97	Significant at 0.01 Level
Social Science Students	30	25.4	2.57		

Table 4 gives the mean, S.D and 't' value of the two groups of the students i.e. the science and social science higher secondary school students. A quick glance at the table reveals that the two groups of students differ significantly at 0.01 level on the scores obtained on the third dimension of RSSMS i.e. Position of Women, the mean difference favoring the science higher secondary school students.

**Table 5: Comparison of science and social science higher secondary school students on the scores obtained on fourth dimension of RSSMS i.e. 'Education':**

Group	N	M	S.D	't' Value	Level of Significance
Science Students	30	25.6	4.22	0.22	Not Significant
Social Science Students	30	26.4	3.92		

Table 5 gives the mean, S.D. and 't' value of the two groups of the students i.e. the science and social science higher secondary school students. A perusal of the table shows that the two groups of students do not differ significantly on the scores obtained on 4<sup>th</sup> dimension of RSSMS i.e. Education.

### Conclusions

On the basis of statistical analysis and also in the light of empirical evidence, the following conclusions have been drawn.

1. The science higher secondary school students differ significantly from their social science counterparts on modernization level, the science students being higher on the level of modernization.
2. The science higher secondary school students differ significantly from the social science higher secondary school students on the scores obtained on the first dimension of the RSSMS. The mean difference favors the group of science students which testifies that science students are higher on scores obtained on socio- religious dimension of the modernization scale.
3. The science higher secondary school students do not differ significantly from their social science counterparts on the scores obtained on the second dimension (i.e. Marriage) of the RSSMS.
4. The science higher secondary school students differ significantly from their social science counterparts on the scores obtained on the third dimension of RSSMS i.e. 'Position of Women'. The mean difference favors science higher secondary school students which testify that science higher secondary school students are higher on scores obtained on the third dimension (Position of Women) of RSSMS.
5. The science higher secondary school students do

not differ significantly from their social science counterparts on the scores obtained on the fourth dimension of RSSMS i.e. 'Education'.

### Suggestions

1. Education pertaining to the fields of science and technology provides the basis of modernization. So, we need to work for the spread of scientific and technical education among masses.
2. The development of mass communication (including newspapers, periodicals and magazines, T.V., radio, telephone, movies, etc.) is an important means of spreading modern ideas at a faster rate. The function of mass media is to open up to the large masses in society, new information, new thought, new attitude and new aspirations which lead them to new achievement. Therefore, necessary steps should be taken for the proper development of mass communication.
3. Industrialization contributes to the development of modernization. Hence the growth and expansion of industries is also needed for achieving the goals of modernization
4. Nationalism and democracy are very much linked with modernization. Nationalism is connected with national awareness and political consensus. Thus we need to work for the development of the nationalism and democratic qualities among masses
5. A high degree of participation of people in social, economic and political fields is a pre-requisite for modernization. Thus interest should be developed among people to participate in these fields.
6. Necessary steps for the spread of literacy and media participation are required for the establishment of the modernized society.

### Suggestions for Further Research

In the light of the findings of the present study and also in view of the problem faced by the investigator during the conduct of present investigation the following suggestions are put forth:

1. The present study should be replicated on a large sample including university students as well, in order to confirm the findings of the present study.
2. A comparative study should be conducted to look into the modernization patterns of the students reading in professional and academic colleges.
3. A comparative study should be conducted to look

into the modernization levels of degree college students in relation to their high and low socio-economic status.

### Bibliography

1. **A.K. Sharma, (1988-92):** Fifth Survey of Educational Research, Trend Reports Vol. I. NCERT.
2. **Agarwal, M. (1986):** "Education and Modernization" New Delhi, Education Research Publication.
3. **Ahmad, I. (1983):** "Modernization and Social Change". Among Muslims In India" New Delhi, Manohar Publication.
4. **Akhileswar, Jha. (1978):** "Modernization and the Hindu Socio-culture", B. R. Publishing Corporations, New Delhi,
5. **Anand, C. L. (1986):** Development and Modernity Attitude Scale, Indian Education Review.
6. **Anderson C.A. (1966):** Modernization of Education in Modernization; The Dynamics of Growth. Ed, Myron Weiner.
7. **Banco, Amina, (2008):** "Modernization and Social Awareness In Relation to Level of Education and Occupational status of Women -A case Study of Ladakh Region".
8. **Bhushan, Vidhya Sachdeva, D.R. (1991):** "An Introduction to Sociology" Published by Kebab Mahal at 15 Thom Hill Road Allahabad.
9. **Black, C.E. (1981):** "Dynamics of Modernization, A study of Comparative History", New York Harper and Row.
10. **Chora K. J. Sen, S. (2001):** "General Sociology" Unique Publishers Published at Lajpat Nagar, New Delhi.
11. **Desai, A.R. (1971):** Essays on Modernization of underdeveloped Societies (Ed.) Vol. I, Thaker and Co., Bombay.
12. **Eisentadt, S.N. (1969):** "Change and Modernization" John Wiley and Sons Publication.
13. **Eistenstadt, S. N. (1969):** "Modernization, Protest and change, Prentice Hall of India Pvt, Ltd. New Delhi."
14. **Garrett, H.E. (2007):** Statistics in Psychology and Education. Paragon International Publishers, 5 Ansari Road, Daryaganj, New Delhi-110002.
15. **Illich, Helem (1975):** "Competition and Modernization in South Asia," New Delhi Alhinav Publication.
16. **Jain, Sushila (1986):** "Muslims and Modernization" Rajasthan Jaipur Rawat Publication.
17. **Koui Lokesh (2007):** "Methodology of Educational Research", Vikas Publishing House Pvt. Ltd. New Delhi.
18. **Nehvi, B.A (1993):** "Attitude of Educated Muslim Women towards Modernization and Conservatism."
19. **Sharma, S.L (1979):** "Modernizing Effects of University Education," ICSSR New Delhi.
20. **Singh, Yogendra (1988):** "Modernization of Indian Tradition." Jaipur Rawat Publications.
21. **Tahseen, Rana(1993):** "Education and modernization of Muslims in India."
22. **Tarique, N. (2006):** "Modernization Modernity Fundamentalism and Rural Pakistan.
23. **Varghese, S. (1977):** Modernization and alienation, their Empirical Structure and Relationship with Education.

10/21/2013