



# SCIENTIFIC TEMPER AND THE ACADEMIC ACHIVEMENTS OF CHILDREN OF WORKING AND NON-WORKING MOTHERS OF MADHYA PRADASH INDIA

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## ABSTRACT

This study was undertaken to study the scientific temper and academic achievement of children of working and non-working mothers of two district Madhya Pradesh (India). The sample for the study was 200 including 100 children of working mothers and 100 children of non-working mothers by using random sampling technique. N.A Nadeem's and Showket Rashid's scientific temper scale were administered for the collection of data. The result of the study highlights that the children of working mothers and non-working mothers have high scientific temper and children of working mothers and non-working mothers were having excellent academic achievement.

**Key words:** scientific temper, academic achievement, children of working and non-working mothers.

## I. INTRODUCTION

Well has been said that modern age is the age of information and technology. It is on account of the tremendous endeavors and relentless efforts of the individual that has made him to touch the luminous pedestal. The basis of this belief is the great scientific achievements of the present age. Man has landed on the moon. Several satellites are orbiting around the earth. Man has in fact become a tourist in space. Great strides have been made in the field of science. One may justifiably be proud that India has the third largest number of scientists in the world today. Yet in my opinion it is a mistake to call this age or for that matter any age as a scientific age. Only on the basis of the mass of scientific knowledge an age does not deserve to be called a scientific age. Probably when it is said that we live in a scientific age, it is meant that in our age there has been an intensification of inquiry and an acceleration of discoveries and inventions. One can also say that the present age is an age of high technology. Scientific temper is a way of life of an individual and social process of thinking and acting-which uses a scientific method, which may include questioning, observing, physical reality, testing, hypothesizing, analysis and communicating(not necessary in that order). Pt. Jawaharlal Nehru was one of the first whose use the term scientific temper and advocate the promotion of scientific temper. What is needed is the scientific temper approach, the adventurous and yet critical temper



of science, the research of truth and new knowledge, they refused to accept anything without testing and trait, the capacity to change previous conclusions in the face of new evidence, the reliance on observed fact and not on pre-conceived theory, the hot discipline of the mind-all this is necessary, not merely from the application of science but for life itself and the solution of its many problems”.

Academic achievement has been variously defined: as level of proficiency attained in academic work or as formally acquired knowledge in school subjects which is often represented by percentage of marks obtained by students in examinations Kohli (1975).

Academic achievement of students refers to the knowledge attained and skills developed in the school subjects. So, academic achievement means the achievement of students in the academic subjects in relation to their knowledge attaining ability or degree of competence in school tasks usually measured by standardized tests and expressed in grades or units based on pupil's performance. Sinha (1970) explains it as “students whose academic performance is superior in character in the form of high percentage of marks are taken as successful candidates. On the other hand, students who fails in the previous examination and obtained low divisions in their examination are considered as individuals who are failed in their attainments.

Working mother in the present study shall refer to educated and uneducated women and are self-earned or engaged in any Government or Semi-Government or Private Salaried job.

Non-working mother in the present study shall refer to educated and uneducated but not engaged in any Government, Semi Government or Private Job.

## **I. OBJECTIVE**

1. To study scientific temper and academic achievement of children of working and non-working mothers.
2. To compare children of working and non-working mothers on various dimensions of scientific temper.
3. To compare children of working and non-working mothers on academic achievement.

## **II. Hypotheses**

1. There is no significance between scientific temper of children of working and non-working mothers.
2. There is no significance between academic achievements of children of Working and non-working mothers.

## **3. STATEMENT OF THE PROBLEM**

The purpose of the study was to examine the academic achievement and the scientific temper of the children of working and non-working mothers.

## **4. Method and Procedure OF The Study**

This study was designed to study scientific temper and academic achievements of children of working and non-working mothers. As such, descriptive method of research was employed. The sample consisted of 200 students of High and Hr. secondary schools in district Bandipora. Nadeem's and Showket Rashid's Scientific Temper Scale was used to measure their scientific temper. The collected data were analyzed by using Average



S.NO	Dimensions	Group	N	Mean	S.D	t.value	Level of Significance
1	Curiosity	CWM	100	6.85	1.63	0.83	Non-Significance
		CNWM	100	6.00	1.64		
2	Open mindedness	CWM	100	5.00	1.59	0.13	Non-Significance
		CNWM	100	4.65	1.62		
3	Objectivity	CWM	100	6.47	1.60	0.88	Non-Significance
		CNWM	100	6.43	2.02		
4	Rationality	CWM	100	5.17	1.67	0.30	Non-Significance
		CNWM	100	5.44	1.92		
5	Aversion to Superstitions	CWM	100	3.26	1.48	0.96	Non-Significance
		CNWM	100	3.27	1.57		
6	Total	CWM	100	28.23	4.80	0.50	Non-Significance
		CNWM	100	28.86	5.53		

mean S.D and t.test method. To measure the academic achievement, aggregate marks obtained by the subjects in classes were taken as their academic achievement.

#### Analysis and interpretation of data:

In order to achieve the objectives formulated for the study, the data was statically analyzed by employing mean S.D and t.test.

**Table No. 1:** Mean comparison of children of working and non-working mothers on various dimensions of Scientific Temper.

**Table No.1** shows the mean comparison of children of working and non-working mothers on various dimensions of scientific temper. It is evident from the table that on the dimensions of Curiosity, Open mindedness, Objectivity, Rationality, Aversion to Superstitions, there is no significance difference between children of working and non-working of Curiosity dimension. There is no significance difference between children of working and non-working of Open mindedness dimension. There is no significance difference between children of working and non-working of Objectivity dimension. There is no significance difference between children of working and non-working of Rationality dimension. There is no significance difference between children of working and non-working of Aversion to Superstitions dimension.



The table further indicates that children of working and non-mothers have been found curious, open minded, and have good rationality, whereas children of working and non-working mothers have been found to be more patient, cooperative. On the composite score it has been found that the two group's viz. children of working and non-working mothers have no significantly different. It indicates that children of working and non-working mothers have high scientific temper. Therefore, hypothesis No.1 and 2, which reads as "children of working and non-working mothers have no significance on various dimensions of scientific temper", stands accepted.

**Table No. 2:** Children of working and non-working mothers on Academic Achievement.

Variables	N	Mean	S.D	t-value	Level of Significance
CWM	100	70.39	4.28	0.50	Non-Significant
CNWM	100	71.22	4.17		

**Table No. 2** shows the mean comparison of children of working and non-working mothers on academic achievement. It is evident from the table that on academic achievement, the two group's viz. children of working and non-working mothers. The table further reveals that there is no significant difference between children of working and non-working mothers. They have better academic achievement. Therefore, hypothesis which reads as "there is no significance difference between children of working and non-working mothers on academic achievement", stands accepted.

### Conclusion

In this study, it was found that children of working and non-working mothers have better scientific temper. Children of working mothers and children of non-working mothers have been found to have better academic achievement.

### SUGGESTIONS

1. The further study may be replicated on large sample.
2. In educational institutions the individuality of the students should be respected and their opinions should be given due importance so that they can develop various qualities like curiosity, open mindedness, objectivity, rationality etc. among themselves and can stand on their own efforts.
3. Teachers working in institutions should be properly trained through various orientation and refresher courses to develop uniformity of thoughts and experience among themselves so that the dimensions like rationality, and aversion to superstitions and social environment will be enhanced and used for academic betterment of the students.
4. Group project work should be introduced at Higher and Higher Secondary level to bridge the gap between the educational institutions and society.



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