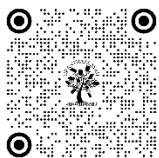


## A STUDY OF EFFECT OF GENDER AND AGE ON TEACHERS' ATTITUDE, COMPETENCIES AND SELF-EFFICACY BELIEFS

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### ABSTRACT

The purpose of this study was to explore the effect of Gender and Age on TAS, TCS, and TSEBS Factors perceived by secondary school teachers'. The sample (N=367) of the study were selected from teachers working in Southern region of Rayat Shikshan Sanstha. Seven points Likert type Teachers' Attitude Scale (TAS), Teachers' Competencies Scale (TCS), Teachers' Self-efficacy Beliefs Scale (TSEBS) were developed with Demographic information to collect the data. The collected data has been analyzed by applying One - way MANOVA and Pearson 'r' and 'F' test.

The overall MANOVA of effect of Gender and Age factors summary on TAS, TCS, TSEBS and the value of Wilks Lambda of Gender is 0.919 with 3 and 355 degrees of freedom is equivalent to an F ratio of 10.368 with P= 0.000 and the value of Wilks Lambda of Age is 0.972 with 12 and 940 degrees of freedom is equivalent to an F ratio of 0.838 with P= 0.611 and the value of Wilks Lambda of Gender\*Age is 0.967 with 12 and 940 degrees of freedom is equivalent to an F ratio of 1.005 with P= 0.442. Thus, the null hypothesis is rejected. The difference for F (9, 357) ratio is found significant on TAFT, TSEBFT and not significant difference found on TCFT at 0.05 levels.

The significant effect of Gender for F (1, 4) ratio is found on TAFT, TSEBFT and not significant effect found on TCFT at 0.05 levels. Not significant effect of Age for F (1, 4) ratio is found on TAFT, TSEBFT at 0.05 levels and Not significant effect of Gender\*Age for F (1, 4) ratio is found TAFT, TSEBFT at 0.05 levels.

**Keywords:** Teachers' Attitude, Teachers' Competencies, Teachers' Self-Efficacy Beliefs, Factors, Relation

## 1. INTRODUCTION

Education is a vitally important aspect in learner's life (*Government of India, 1968*). The major objective of every school system irrespective of the level of education is to provide high quality education for learners (*Whawo, D. D. 1993*) and for this the teacher can help to improve the system. Ultimate purpose of teacher is to help student to learn, often in a school. Teacher's importance in modern era has acquired new dimensions. They not only have to impart subject matter to the pupil but also help him in use of knowledge for developing the abilities and talents with which he is born. Teachers' beliefs affect not only their teaching, but also filter new input. (*Naashia Mohamed, 2006*). It is generally agreed that teaching is greatly affected by the belief systems of its practitioners (*Liao, Posen, 2007*).

Previous researches say student's achievement is influenced by efficacy and indicates that teachers' beliefs based on their educational backgrounds and personal experiences. Teachers' beliefs influence their consciousness, teaching

attitude, teaching methods and teaching policies, and finally, learners' development. (*Shinde, Mahesh B., Karkkatti Tripti K., 2012*) It is the way in which life attempts to realize the noblest form of existence and a flourishing humanity. It is the process through which individuals, groups and nations endeavor to achieve their ideals and aspirations.

## 2. THEORETICAL BACKGROUND

This study has theoretical foundation from Bandura's (1986) Social Cognitive Theory.

### Defining the terms:

**Relationship (relations):** The relationship (relations) connotes the association of variables. In present study the association of scores of variables is termed as relationship.

**In-service Teacher:** An in-service teacher (also called Assistant teacher) is a teacher who is working in the field of teaching, assists to students in learning in school permitted by State Government.

**Teachers Attitude:** "An attitude is a more or less stable set or disposition of opinion, interest or purpose, involving expectancy of a certain kind of experience and readiness with an appropriate response"- (Trivedi, Tripta, not mentioned year).

**Teachers' competencies:** "...appropriate prior knowledge, skills, attitudes, and abilities in a given context that adjust and develop with time and needs in order to effectively and efficiently accomplish a task and that are measured against a minimum standard is called teachers competencies of a teacher"

**Teachers Self-efficacy Beliefs:** Self-efficacy is "beliefs in one's capabilities to organize and execute the courses of action required producing given attainments" (Bandura, 1986,). According to Bandura, human behavior is based on the factors that people develop an expectancy based upon life experiences (outcome expectancy) and they develop beliefs concerning their own coping abilities (self-efficacy) and behavior can be observed when they expect desirable outcomes and when they believe their ability to perform the essential behaviors (Riggs, 1991). Self-efficacy is one of the basic concepts of social cognitive theory (Bandura, 1997). Bandura (1997) defines concept as an individual's judgments of his capacity to organize and fulfill activities necessary for demonstrating a certain level of performance. In Demirel's word self-efficacy is the individual's judgment or belief concerning how successful he will be in handling difficult cases he is likely to face in the future.

Self-efficacy refers to perceptions of self-competence, a sense of autonomy and a belief is once academic capabilities. It is perceived ability to succeed at a specific task and an integral component of motivation (Demirel, 2009).

## 3. PURPOSE OF THE STUDY

The purpose of the study was to examine the effect of Gender and Age on TAS, TCS, and TSEBS Factors perceived by secondary school teachers'. The research questions for the study were as follows: (1) how the Gender and Age effects on TAS, TCS, and TSEBS Factors? (2) Which factor is effective as per perception of secondary school teachers?

The prime interest of this study was in the testing of following null hypothesis:

- **H<sub>0</sub> 1:** There is no significant effect of Gender and Age on TAS, TCS, and TSEBS Factors perceived by secondary school teachers'.
- **H<sub>0</sub> 2:** There would be no significant effect of Gender on TAS, TCS, and TSEBS and also there would be no significant effect of Age on TAS, TCS, and TSEBS Factors perceived by secondary school teachers'.

## 4. SIGNIFICANCE OF THE STUDY

In the present study researcher made an attempt to explore the effect of Gender and Age on TAS, TCS, and TSEBS Factors. Thus, the study had realized the institutes about; how Gender and Age effects on TAS, TCS, and TSEBS Factors?

The study is helpful to the personals working in the field of Teacher Education and in-service training to comprehend the relationships amongst the factors of variables selected for present study and their role in making of prospective teachers. The findings of this study have implication value for designing the curriculum for Teacher Education Programs and in-service training modules. It has potential to provide the guidelines to in-service training modules for institutes,

researches and Projects in this area. The findings are helpful to Government, Semi-government institutes to keep healthy and well teaching and learning environment in campus and its relates.

## 5. METHOD AND PROCEDURE

The survey method was adopted based on scale (e.g., Yager, 1991) in the present study to explore the effect of Gender and Age on TAS, TCS, and TSEBS Factors. The participants included 367 (females= 146, males=221) were selected from teachers working in Southern region of Rayat Shikshan Sanstha. Actual sample for this study was 45% secondary school teachers' working in Southern Region of Rayat Shikshan Sanstha selected with the help of Purposive sampling technique but in them only 85.10 % teachers' responded with returning the scales. Teachers' Attitude Scale (TAS), Teachers' Competencies Scale (TCS), Teachers' Self-efficacy Beliefs Scale (TSEBS) were developed with Demographic information to collect the data. The collected data has been analyzed by applying One -way MANOVA and Pearson 'r' and 'F' test.

## 6. RESULTS

- **The Profile of the effect of Gender and Age on TAS, TCS, and TSEBS Factors**

The value of the data related to the effect of Gender and Age on TAS, TCS, and TSEBS Factors is shown in the given below:

- **The comparison of the effect of Gender and Age on TAS, TCS, and TSEBS Factors**

For the purpose of compare the effect of Gender and Age on TAS, TCS, and TSEBS factors researcher has proposed following null hypothesis-

**H<sub>0</sub> 1:** There is no significant effect of Gender and Age on TAS, TCS, and TSEBS.

The score of effect of Gender and Age on TAS, TCS, and TSEBS is compared by One -Way MANOVA to verify the above mentioned null hypothesis as following:

**The summary of One-way MANOVA of effect of Gender and Age factor**

**TABLE NO. 01**

Multivariate Analysis						
Effect	Wilks Lambda	Df	Ho Df	Error	F	Prob.
Gender	0.919	3	355		10.368*	0.000
Age	0.972	12	940		0.838	0.611
Gender*Age	0.967	12	940		1.005	0.442

\* Significant at 0.05 level

The above table no. 01 reveals the overall MANOVA of effect of Gender and Age factors summary on TAS, TCS, TSEBS and the value of Wilks Lambda of Gender 0.919 with 3 and 355 degrees of freedom is equivalent to an F ratio of 10.368 with P= 0.000 and the value of Wilks Lambda of Age 0.972 with 12 and 940 degrees of freedom is equivalent to an F ratio of 0.838 with P= 0.611 and the value of Wilks Lambda of Gender\*Age 0.967 with 12 and 940 degrees of freedom is equivalent to an F ratio of 1.005 with P= 0.442. Thus, the null hypothesis is rejected and the Overall tests of univariate model examined in following table no. 02

**The summary of Overall tests of univariate modelOne-way MANOVA of TAS, TCS, TSEBS factor**

**TABLE NO. 02**

Overall tests of univariate model						
Factor	Source of variation	Type III SS	Df	Mean Sq.	F	Prob.
TAFT	Between Groups	7262.436	9	806.937	2.946*	0.002
	Within Groups	97777.623	357	273.887		

	<b>Total</b>	105040.059	366			
TCFT	<b>Between Groups</b>	2093.392	9	232.599	0.601	0.797
	<b>Within Groups</b>	138280.303	357	387.340		
	<b>Total</b>	140373.695	366			
TSEBFT	<b>Between Groups</b>	7315.801	9	812.867	1.885*	0.053
	<b>Within Groups</b>	153941.278	357	431.208		
	<b>Total</b>	161257.079	366			

\* Significant at 0.05 level

The above table no. 02 reveals the univariate MANOVA test for TAFT has an  $F_{(9, 357)}$  ratio of 2.946 and a P of 0.002 is significant, TCFT has an  $F_{(9, 357)}$  ratio of 0.601 and a P of 0.797 is not significant, TSEBFT has an  $F_{(9, 357)}$  ratio of 1.885 and a P of 0.053 significant.

The difference is found significant in TAFT, TSEBFT and not significant difference found in TCFT at 0.05 levels.

For the purpose of compare the effect of Gender, Age and, Gender & Age on TAS, TCS, and TSEBS factors researcher has proposed and tested following null hypothesis-

**H<sub>0</sub> 2:** There would be no significant effect of Gender on TAS, TCS, and TSEBS and also there would be no significant effect of Age on TAS, TCS, and TSEBS Factors perceived by secondary school teachers'.

The score of effect of Gender and Age on TAS, TCS, and TSEBS is compared by One -Way MANOVA of Tests of univariate effects of Gender, Age on TAS, TCS, and TSEBS factor to verify the above mentioned null hypothesis as following:

**The summary of One-way MANOVA of Tests of univariate effects of Gender, Age on TAS, TCS, TSEBS factor**

TABLE NO. 03

Tests of univariate effects						
Factor	Source of variation	Type III SS	Df	Mean Sq.	F	Prob.
TAFT	<b>Gender</b>	3187.799	1	3187.799	11.639*	0.001
	<b>Age</b>	1085.648	4	271.412	0.991	0.412
	<b>Gender*Age</b>	1337.506	4	334.377	1.221	0.302
TCFT	<b>Gender</b>	236.861	1	236.861	0.612	0.435
	<b>Age</b>	1248.611	4	312.153	0.806	0.522
	<b>Gender*Age</b>	1090.007	4	272.502	0.704	0.590
TSEBFT	<b>Gender</b>	5174.583	1	5174.583	12.000*	0.001
	<b>Age</b>	1526.253	4	381.563	0.885	0.473
	<b>Gender*Age</b>	272.535	4	68.134	0.158	0.959

\* Significant at 0.05 level

The above table no. 03 reveals the univariate MANOVA test has an  $F_{(1, 4)}$  ratio TAFT for Gender is 11.639 and P = 0.001; for Age is 0.991 and P = 0.412; for Gender\*Age is 1.221 and P = 0.302, an  $F_{(1, 4)}$  ratio TCFT for Gender is 0.612 and P = 0.435; for Age is 0.806 and P = 0.522; for Gender\*Age is 0.704 and P = 0.590, an  $F_{(1, 4)}$  ratio TSEBFT for Gender is 12.000 and P = 0.001; for Age is 0.885 and P = 0.473; for Gender\*Age is 0.158 and P = 0.959.

The significant effect of Gender for  $F_{(1, 4)}$  ratio is found TAFT, TSEBFT and not significant effect found on TCFT at 0.05 levels. Not significant effect of Age for  $F_{(1, 4)}$  ratio is found TAFT, TSEBFT, found at 0.05 levels. Not significant effect of Gender\*Age for  $F_{(1, 4)}$  ratio is found TAFT, TSEBFT, found at 0.05 levels. Thus, the null hypothesis is rejected.

## 7. CONCLUSIONS

The conclusions of the study are presented as following:

- 1) The prime interest of the study was to explore the effect of Gender and Age on TAS, TCS, and TSEBS Factors perceived by secondary school teachers' and the results of this study reveals that there is Gender factor has found significant on TAS, TCS, and TSEBS Factors; Age factor has found no significant on TAS, TCS, and TSEBS Factors; and found significant effect of Gender and Age on TAS, TSEBS and not significant effect on TCS. So, the null hypothesis presented by researcher is rejected.
- 2) Significant difference is found amongst TAS and Gender; no significant difference is found amongst TAS and Age; and also no significant difference is found amongst TAS and Gender & Age. No Significant difference is found amongst TCS and Gender; no significant difference is found amongst TCS and Age; and also no significant difference is found amongst TCS and Gender & Age. Significant difference is found amongst TSEBS and Gender; no significant difference is found amongst TSEBS and Age; and also no significant difference is found amongst TSEBS and Gender & Age.

## 8. DISCUSSIONS

### 1. Gender and Age Effects on TAS, TCS, and TSEBS:

#### Gender Significance:

- 1) The research strongly indicates that gender plays a significant role in how secondary school teachers perceive TAS (likely Teacher Affective Sensitivity), TCS (likely Teacher Classroom Sensitivity), and TSEBS (likely Teacher Self-Efficacy Belief Scale). This suggests that male and female teachers may experience or interpret these factors differently.
- 2) This finding necessitates further investigation into the specific nature of these differences. What underlying social, cultural, or professional factors contribute to these variations?

#### Age Insignificance:

- 3) Age, on the other hand, did not demonstrate a significant effect on teachers' perceptions of these factors. This implies that teachers' views on TAS, TCS, and TSEBS are relatively consistent across different age groups within the studied population.
- 4) This is an interesting finding, and may mean that experience within the career, is not tied to age, or that other factors over ride age.

#### Interaction Effect:

- 5) The study found a significant interaction effect of gender and age on TAS and TSEBS, but not on TCS. This means that the combined influence of gender and age impacts teachers' affective sensitivity and self-efficacy beliefs, but not their classroom sensitivity.
- 6) This point requires more research to explain why classroom sensitivity is not impacted, when the other two tested factors are.

#### Null Hypothesis Rejection:

- 7) The rejection of the null hypothesis confirms that the observed differences in teacher perceptions are statistically significant and not due to random chance.

### 2. Specific Differences between Gender, Age, and the Factors:

- 1) TAS and Gender: A significant difference exists between gender and TAS, reinforcing the earlier finding that gender influences teachers' affective sensitivity.
- 2) TAS and Age, TAS and Gender & Age: No significant differences were found, reinforcing that age alone, and the interaction of age and gender do not impact TAS.
- 3) TCS and Gender, TCS and Age, TCS and Gender & Age: No significant differences were found, indicating that neither gender, age, nor their interaction significantly affects teachers' classroom sensitivity.

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- 4) TSEBS and Gender: A significant difference exists between gender and TSEBS, confirming the impact of gender on teachers' self-efficacy beliefs.
- 5) TSEBS and Age, TSEBS and Gender & Age: No significant differences were found, reinforcing that age alone, and the interaction of age and gender do not impact TSEBS.

## 9. IMPLICATIONS

The findings highlight the importance of considering gender-specific factors in teacher training and professional development programs. Further research is needed to explore the underlying reasons for the observed gender differences and to develop strategies for addressing them. The lack of age impact, may mean that training, and professional development, can be standardized across age groups. The interaction of age and gender on TAS and TSEBS, deserves further research to define the causes of this interaction. The lack of any significant impact on TCS deserves further research to determine why it is not impacted by age or gender.

## CONFLICT OF INTERESTS

None.

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None.

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