

Techno-Pedagogical Competency of High School Teachers in Relation to their Work Motivation in Chengalpattu District

Dr. R. Suhirtha Rani

Assistant Professor

School of Education, Vels Institute of Science, Technology & Advanced Studies (VISTAS), Chennai, Tamilnadu
julietsuhirtharani@gmail.com

Abstract: *This study is an effort to find out the Techno-pedagogical competency of high school teachers in relation to their Work motivation in Chengalpattu District. This study consists a sample of 240 high school teachers, Techno pedagogical competency questionnaire was constructed and standardized by Dr. S. Rajasekar and K. Sathiya Raj (2013) and work motivation questionnaire by Dr. K.G. Agarwal (2016) was used to collect data. Results revealed that there is significant relationship between work motivation and techno-pedagogical competency of teachers. Also, it is found that female teachers have more work motivation and techno-pedagogical competencies than their male counterparts. It is evident that Arts teachers have more work motivation than Science high teachers but subject taught by the high teachers did not manifest any difference in techno-pedagogical competency.*

Keywords: Techno-pedagogical competency, Work motivation, Technology, Competency, Pedagogy, Motivation

I. INTRODUCTION

Techno pedagogical Competency is the capacity to create and use a particular field of technology effectively, comfortably using technology tools, collaborating online, problem- solving, and exploring new advancement in instructional technology. Technology holds great promise to advance teaching and learning.

- Technology can help encourage active participation in classroom
- Using devices like a computer, tablet, or other type of technology in the classroom can help turn traditionally dull subjects into interactive and fun activities.

The term Motivation originates from the Latin word movere which means ‘to move’. Taken literally, motivation is the process of arousing movement but the term ordinarily applies to the arousal of one kind of movement – behavior.

Work motivation is concerned with factors that energize, channel, sustain and amplify work performance toward organizational goals. Gaps between motivation and performance exist whenever people avoid starting something new, resist doing something familiar, stop doing something important and switch their attention to a less valued task, or refuse to “work smart” on a new challenge and in its place use old, familiar but inadequate solutions to solve a new problem (Clark, 1998).

II. NEED AND SIGNIFICANCE OF THE STUDY

Technology in the classroom brings teachers with more tools to support students. In addition to resources like textbooks and worksheets, technology equips educators with various tools to help students develop a better understanding of the material.

Technology offers students with access to countless online resources, encouraging them to carry out research and therefore become more independent. It also simplifies learning by making concepts more digestible, for example through an instructional video. It is important to recognize that there are numerous learning styles and traditional education may not be catering to them all.



Employee motivation is important to the success of any organization, big or small. In the modern workplace, human resources are valued above all others. Motivated employees are productive, happy and committed. The spin-off of this contains reduced employee turnover, results-driven employees, company loyalty and workplace harmony.

Motivation is very significant for an organization because it provides,

- 1) Increased productivity and improved employee performance
- 2) Stability of workforce
- 3) Positive workplace culture
- 4) Better teamwork
- 5) Workplace harmony

OBJECTIVES OF THE STUDY

1. To find out whether any relationship between work motivation and techno-pedagogical competency among high school teachers.
2. To find out whether any difference between male and female high school teachers in work motivation and techno-pedagogical competency.
3. To find out whether any difference in work motivation and techno-pedagogical competency based on the subject taught by high school teachers.

HYPOTHESES OF THE STUDY

1. There is no significant relationship between work motivation and techno-pedagogical competency among high school teachers.
2. There is no significant difference between male and female high school teachers
3. There is no significant difference in work motivation and techno-pedagogical competency based on the subject taught by high school teachers.

III. METHODOLOGY

In the present study normative survey method is employed. The sample comprised of 240 high school teachers in Chengalpattu district. The sample is drawn by random sampling technique.

TOOLS USED IN THE STUDY

Techno pedagogical competency of high school teacher's questionnaire constructed and standardized by Dr.S. Rajasekar and K. Sathiya Raj (2013) and Work Motivation of high school teacher's questionnaire constructed and standardized by Dr. K.G. Agarwal (2016) was used in this study.

IV. DATA ANALYSIS AND INTERPRETATION

HYPOTHESIS 1: There is no significant relationship between work motivation and techno- pedagogical competency among high school teachers.

Table 1: Table showing Pearson's Product Moment correlation co-efficient between work motivation and techno-pedagogical competency of high school teachers

Variables	Work Motivation	Techno-Pedagogical Competency
Work Motivation	1	0.632**
Techno-Pedagogical Competency	x	1

Note: **Correlation is significant at 0.01 level

From the above table values, it is inferred that there is significant and positive relationship between work motivation and techno-pedagogical competency which is significant at 0.01 level. This implies that higher the work motivation, higher the techno-pedagogical competency of high school teachers.



HYPOTHESIS 2: There is no significant difference between male and female high school teachers in work motivation and techno-pedagogical competency.

Table 2 : Showing the mean difference between male and female high school teachers in work motivation and techno-pedagogical competency

Variables	Gender				t value	P value
	Male (N=108)		Female (N=132)			
	Mean	S. D	Mean	S. D		
Work Motivation	102.33	9.849	110.04	10.311	3.178	0.002**
Techno-Pedagogical competency	122.84	8.915	130.91	12.410	4.366	<0.001**

** Significant at 0.01 level

From the 't' values presented in the above table, it is inferred that there is significant difference in work motivation and techno-pedagogical competency of high teachers and is significant at 0.01 level. From the mean scores, it is observed that female teachers are having high work motivation and more techno-pedagogical competency when compared to male teachers. Therefore, the formulated hypothesis that there is no significant difference between male and female high teachers in work motivation and techno- pedagogical competency is rejected.

HYPOTHESIS 3: There is no significant difference in work motivation and techno- pedagogical competency based on the subject taught by high teachers.

Table 3: Showing the mean difference in work motivation and techno-pedagogical competency based on the subject taught by high school teachers

Variables	Subject Taught				t value	P value
	Science (N=130)		Arts (N=110)			
	Mean	S. D	Mean	S. D		
Work Motivation	97.68	10.911	102.55	9.119	5.011	<0.001**
Techno-Pedagogical competency	141.11	16.813	132.17	13.812	1.632	0.083

** Significant at 0.01 level

From the 't' values presented in the above table, it is inferred that there is significant difference in work motivation of high teachers based on the subject taught and is significant at 0.01 level. From the mean scores, it is evident that teachers who are teaching Science subject have high work motivation than the teachers who taught Arts subject. Therefore, the formulated hypothesis that there is no significant difference in work motivation based on the subject taught by high school teachers is rejected.

But in case of techno- pedagogical competency of high school teachers, it is observed that there is no significant difference among high school teachers based on the subject taught. Hence, it is inferred that both Arts and Science teachers have similar techno- pedagogical competency. Therefore, the framed hypothesis that there is no significant difference in techno-pedagogical competency based on the subject taught by high school teachers is accepted.

V. CONCLUSION

Technology not only provides students with access to countless online resources, but also aids them in the learning process. Teaching is now more than a lecturer in front of a blackboard and technology has been an integral part of its development. It has transformed education and the way that people learn and retain information. Therefore, its role in



the future of education is a fundamental part in maintaining the development and progression of today's economy. Technology in the Classroom provides teachers with more tools like textbooks and worksheets which can help students to progress a better understanding of the content. Although there is a vast amount of research about the effect of digital technologies on teaching and learning, the results are hardly conclusive. Work is an important activity in an individual's life that serves not only economic, but also social relation, personal fulfilment and identity functions for an individual. Motivation at work is valuable as it serves to arouse, direct, maintain and strengthen effort toward specific goals. Motivation can be understood as an inner directing force that influences people's willingness to work toward organizational goals.

REFERENCES

- [1]. The Factors Affecting Techno-Pedagogical Competencies and Critical Thinking Skills of Preservice Mathematics Teachers
- [2]. Yildiz, Avni Jeyaraj, I (2020) Techno pedagogical skills among the secondary level Teacher educators.
- [3]. Turner, N., Barling, J., & Zacharatos, A. (2002). Positive psychology at work. In C. R. Snyder & S.J.Lopez (Eds.), Handbook of positive psychology. New York: Oxford University Press.
- [4]. Robbins, S.P. (2005). Organisational behaviour (11th Ed.). New Jersey: Pearson Education.
- [5]. Leidner, R. (2006). Identity and work. In M. Korczynski, R. Hodson, and P. Edwards (Ed.), Social Theory at Work. Oxford: Oxford University Press.
- [6]. Hogg, M. A. (2006). Social Identity Theory. In P. J. Burke (Ed.), Contemporary Social Psychological Theories. Stanford, CA: Stanford University Press

