

# The Influence of Grit and Self-Efficacy on Teacher's Teaching Motivation on School Teachers

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**Abstract-** *Grit is a combination of passion and perseverance which makes a new wave in the field of psychological research in individuals' achievement and success. The purpose of the study was to determine the relation between teacher's motivation with grit and self-efficacy and to understand the predictive ability of grit and self-efficacy of school teachers on their teaching motivation. A sample size of 67 school teachers was considered for the research. Teacher self-efficacy scale, Short grit scale and ULN's teacher motivation scale were the tools used to collect data. The data were statistically analysed using the Pearson correlation test, simple linear regression and multiple linear regression. The research has concluded that there exists a relationship between teaching motivation with grit and self-efficacy. It has also revealed that even though self-efficacy is a strong predictor of motivation than grit, the combined effect of both variables has the highest predictivity in school teachers.*

**Keywords-** Grit, Teacher's teaching self-efficacy, Teacher's teaching motivation

## I. INTRODUCTION

Motivation acts like fuel to make the human processes run smoothly. "Motivation is an energy change within the person characterized by affective arousal and anticipatory goal reactions" (Donald 1972). A person with a high level of motivation will be highly involved in their work because of the feel of pride and satisfaction in their job. Motivated people use cognitive and affective abilities to reach their goals. Motivation plays a major role in the areas of learning and teaching. When a teacher is highly motivated maximum effort is contributed towards the success of the students. The intensity of motivation varies from person to person. It can also vary in different situations and time within an individual. The field of psychology provides us with numerous theories regarding motivation. Through the analysis of these theories, it is evident that 'self' dominates these theories of motivation. Self-belief and self-efficacy have a major role in generating motivation. People motivate themselves by contemplating the outcome and planning for the future extensively. They prepare their goals and strategies pragmatic approaches to reach the goal. Motivation can be

classified into two forms: intrinsic motivation and extrinsic motivation. Intrinsic motivation is generated from within. Such people are internally motivated to act specifically. A teacher takes up a task without expecting any particular outcomes; they are motivated intrinsically. When external factors influence a person to work harder and be energised, such motivation is called extrinsic motivation. Some external factors which can influence a person's motivation are hike in salary, an expectation of a career promotion, optimistic feedback from authority. There exists research associating teacher's internal motivation and their teaching efficacy. (Woolfolk et al., 1990).

"The character strength of perseverance described in Positive Psychology" (Duckworth, 2007). Grit is the diligent, persistent work towards achieving long term goals despite any obstacles, and is the amalgam of passion and perseverance. Passion is described as internal arousal that enhances enthusiasm and an intense desire to satisfy the objective and subjective needs. A person with a high level of passion tends to be zealous and zestful while doing an intended task. Perseverance is the resoluteness to achieve a goal despite facing immense difficulties or obstacles. An individual with a high level of perseverance will be diligent and tend to work hard until their goal is achieved. Gritty persons tend to be resilient, do not accept defeat or lose hope despite months or years of hardship, turmoil or setbacks in achieving their goal. People who are gritty are observed to be more focused and exhibit greater stamina in contrast to their non-gritty peers. People who score higher in the grit scale experience lower intensity of boredom since they are driven by passion. According to Duckworth(2016b) interest, purpose, practice and hope are the four common traits that can be observed in gritty individuals. Interest is a desire which motivates the person to do something because of their genuine curiosity. People perform better when they do something that they enjoy and feel more satisfied. The purpose is that which motivates a person to work harder and go an extra mile to accomplish their desired goals. People with purpose tend to find meaning in their actions and are motivated to pursue their goal. "Deliberate practice is carefully planned and requires working where challenges exceed skill" (Duckworth, 2016b). Such individuals are open to suggestions, criticisms, feedback and

understand their flaws based on self-reflection, work towards its betterment and refinement. Hope is the fourth psychological aspect of grit. It is an optimistic expectation that the future can be improved by a person's effort. There exists contemporary research relating grit with well-being and achievement.

"Self-efficacy is the belief in one's self and capabilities to accomplish a specific task and achieve thought out goals" (Schwarzer 1999). It is the ability to attain goals even though facing immense difficulties. This kind of thoughts system is obtained by analysing and shaping a person's past experiences. The concept of self-efficacy was developed by the influence of Rotter (1966) and Bandura (1977). There are two dimensions for self-efficacy 'outcome expectancy' and 'efficacy expectancy'. Outcome expectancy determines an individual's expectation on a particular behaviour will result in specific outcomes. Efficacy expectancy are the behaviour shape towards expected outcomes (Bandura, 1977). Teacher efficacy can be described as the teacher's belief in their own skill and ability to shape their students to their absolute potential. In general, "teacher self-efficacy is a teacher's belief that he or she can influence how well students learn; even those students considered to be difficult or appear to lack motivation" (Guskey and Passaro, 1994). Teachers' efficacy has the power to predict the action of a particular teacher. Teachers with high self-efficacy believe that they have the potential to make a drastic difference in children's lives and their every action project this belief. Personal teaching efficacy (PTE) and General teaching efficacy (GTE) are the two dimensions of teacher's efficacy (Gibson 1984). Personal teaching efficacy is a person's ability to influence students' learning and general teaching efficacy means even with the influence of external factors and relatively independent factors a person's belief in their ability to effectively influence students' learning. Researchers have been contacted for decades to determine the relationship between students' achievement and teachers' efficacy. Researchers have concluded that teachers with high self-efficacy will be much better in planning, more acceptable to failure, much supportive and open-minded (Lee 2014; Yeh 2006).

### **Aim**

The aim of the study was to determine the relation between teacher's motivation with grit and self-efficacy and to understand the predictive ability of grit and self-efficacy of school teachers on their teaching motivation.

### **Hypothesis**

H0: There exists no statistically significant relation between teacher's teaching motivation and grit.

H0: There exists no statistically significant relation between teacher's teaching motivation and self-efficacy.

H0: There exists no predictability between teacher's teaching motivation and grit.

H0: There exists no predictability between teacher's teaching motivation and self-efficacy.

H0: There exists no predictability between teacher's teaching motivation with the combined effect of grit and self-efficacy.

## **II. NEED AND SIGNIFICANCE OF THE STUDY**

Grit, Self-efficacy and motivation can be the key to attain success and growth in a teacher's life. The research will be beneficial to the teachers to understand the factors which could influence their success and growth and be able to give sufficient training in the areas to attain excellence. Instruct educational authorities about the unique aspects that are to be given importance. This study helps to conduct students and teacher's welfare programs. This research can enlighten teachers with the factors that influence their success.

### **Procedure**

Teachers were considered as the sample population for the study. Teachers from educational institutions in Thrissur district were selected at random to collect samples. They were asked to respond to the short grit scale, Teacher Self-efficacy scale and Teacher motivation scale. The data was analysed using Pearson correlation and simple linear regression to test the stated hypothesis.

### **Samples and Tools**

Randomised sampling was used to collect a sample size of 67 school teachers. Short grit scale (2009) developed by Angelina Duckworth had been used to calculate students' grit. It has an internal consistency of .73 to .83, consistency of interest alphas ranged from .73 to .79 and perseverance of effort alphas ranged from .60 to .78.

The Teacher Motivation Scale (1986) constructed by U.L. Narayan and standardized by Satya Rao (2008), Cronbach's Alpha was found to be  $\alpha = 0.76$ . The reliability coefficient was found to be  $r = 0.71$ .

The Teacher's self-efficacy scale developed by Gerdamarié. S. Schmitz, Ralf Schwarzer and Gray. T. Daytner (1999). Cronbach's alpha the coefficient for the overall scale was  $\alpha = 0.89$ . The reliability coefficient was found to be 0.86

### III. RESULT AND DISCUSSION

The aim of the study was to determine the relation between teacher's motivation with grit and self-efficacy and to understand the predictive ability of teacher's teaching motivation on grit and self-efficacy of school teachers.

Table 1: Pearson's correlation between teachers' motivation with grit and self- efficacy.

		Mean	SD	1	2	3
1	Motivation	31.93	6.68	-		
2	Grit	3.575	0.575	.273*	-	
3	Self-efficacy	128.58	18.95	.388**	0.159	-

N=67. \*p<.05; \*\*p<.01

Table 2: Simple linear regression between the teacher's motivation with grit and self-efficacy.

Variables	R	R <sup>2</sup>	Change R <sup>2</sup>	$\beta$	F value	Sig.
X = Motivation Y = Grit	0.273	0.074	0.06	0.273	5.224	0.026
X = Motivation Y = Self-efficacy	0.388	0.15	0.137	0.388	11.485	0.01

Table 3: Multiple linear regression between the teacher's motivation with grit and self-efficacy.

Predictors Variables	$\beta$	R	R <sup>2</sup>	Change R <sup>2</sup>	F value	Sig.
Grit	0.353					
Self-efficacy	0.217	0.443*	0.196	0.171	7.798	0.01

Pearson correlation analysis was used to determine the relation between teachers teaching motivation and grit. Table 1 has concluded that there exists a relation between grit and teaching motivation in teachers ( $r(67) = .273^*$ ,  $p = .026$ ), such that the higher teaching motivation (Mean=31.93, SD= 6.68) reported higher the grit (Mean= 4.29, SD=.69) and vice-versa. The correlation result can be concluded that there is a significant but weak relation between grit and teaching motivation. Further, teacher's self-efficacy is significantly correlated with their teaching motivation ( $r(67) = .388^{**}$ ,  $p = .001$ ), such that higher teaching motivation reported higher self-efficacy. There exists a highly significant moderately strong correlation between teachers teaching motivation and teachers self-efficacy.

To determine the ability to predict teachers teaching motivation based on their grit and self-efficacy simple linear regression was calculated. A significant regression equation was found ( $F(1,66) = 5.224$ ,  $p = .026$ ), with an  $R^2$  of .074 between teachers teaching motivation and grit. Teacher's predicted motivation is equal to  $3.396 + .028$  when grit is measured. Teachers average motivation increased .028 for each unit of grit. Teachers, motivation and self-efficacy found a significant regression equation ( $F(1,66) = 11.485$ ,  $p = .001$ ), with an  $R^2$  of .150 between teachers teaching motivation and self-efficacy. Teacher's predicted motivation is equal to  $93.462 + 1.10$  when self-efficacy is measured. Teachers average motivation increased by 1.10 for each unit of self-efficacy. From results its clear that a teacher's teaching self-efficacy is a much better predictive factor of teaching motivation with a predictability percentage of 15% than their grit with a predictability percentage of 7%. This could be due to the fact that grit is much more generalised trait than teaching efficacy. Previous studies also have shown similar results (Schieb,2011).

To determine the combined predictive ability of grit and self-efficacy on teachers teaching motivation multiple linear regression was calculated. A significant regression equation was found ( $F(2,65) = 7.798$ ,  $p = .01$ ), with an  $R^2$  of .196 between teachers teaching motivation with grit and self-efficacy. Teacher's predicted motivation is equal to  $6.840 + .124$  (grit) +  $2.121$  (self-efficacy). Teachers average motivation increased .124 for each point of grit and 2.121 for each point of self-efficacy. The combination of grit and self-efficacy has much stronger predictability ability on teacher's motivation with a predictability percentage of 19% than the individual effect of grit and self-efficacy.

### IV. CONCLUSION

The research has concluded that there exists a relationship between teaching motivation with grit and self-efficacy. It has also revealed that even though self-efficacy is a strong predictor of motivation than grit, the combined effect of both variables has the highest predictivity in school teachers.

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