



# DOES THE RELATIONSHIP BETWEEN TEACHERS' MOTIVATION AND THEIR INSTRUCTIONAL PRACTICES HAVE AN IMPACT ON STUDENTS' ACHIEVEMENT MOTIVATION? AN EMPIRICAL STUDY

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Article DOI: <https://doi.org/10.36713/epra17852>

DOI No: 10.36713/epra17852

## ABSTRACT

Based on different motivation theories a study was conducted to examine the relationship between teachers' motivation and their instructional practices and its effect on students' achievement motivation. The sample size included 45 teachers and 55 students of a private school. Separate questionnaires measuring teachers and students variables were used. The current study used correlation method and regression was run to analyze the data. The results from the current study do not support the findings of the previous researchers as it reported negative correlations for teachers' motivation and their instructional practices. Also the relationship between teachers' instructional practices and students' achievement motivation was partially confirmed. This indicates that the teaching practices of the teachers are not always guided by their goal orientation or their implicit beliefs. Besides, it also implies that the goal orientation of the teachers is not the only determining factor for teachers to evaluate students' abilities.

**KEYWORDS:** Teachers' goal orientation, implicit beliefs, instructional practices, students' motivation

## INTRODUCTION

Motivation has been a topic of research and discussions in the field of educational and psychological research for many years. In the words of Wang et al., (2010) "One of the most critical influences on students' level of cognitive engagement in school work or their choice of cognitive strategies is their motivation to learn". The study on achievement motivation is massive with many researchers emphasizing on the importance of students' motivation and how this affects their academic performances and learning. In an attempt to comprehend the cause and effects on the achievement motivation of the students, it was pointed by Butler in 2007 that the achievement goal theory is suitable for both students and teachers as teachers play a central role at academic institutions. Consequently, many studies were conducted on teachers' goal orientation, self-efficacy, teachers' instructional practices and its impact on students' motivation etc. (see Patrick & Ryan, 2008; Klassen & Chiu, 2010; Shim, Cho & Cassady, 2013; Nitsche et., 2013; Raufelder, & Lazarides, 2017 etc.). However, understanding these relationships as a whole would be useful as this might give more insights on research concerning teachers and students' motivation and learning.

## THEORETICAL FRAMEWORK

The concept of achievement motivation which was present with the initiation of James' (1890) proposition about the link between achievement strivings and self-evaluation took concrete shape after a decade through McClelland, Atkinson, and colleagues'

(Atkinson, 1957; McClelland, Atkinson, Clark, & Lowell, 1953; McClelland et al., 1949) work on need for achievement. It was since been referred as 'the achievement motivation literature' (Dweck & Elliot, 2005). According to Elliot "Achievement motivation is the energizing and direction of competence-based affect, cognition, and behaviour" (Elliot, 1999).

### Achievement Goal Theory

Among many models developed by goal theorists, Dweck's model has been found as the best articulated model (Leondari & Gialamas, 2002). The Achievement goal theory developed by Dweck and her colleagues in the late 70s and early 80s focuses on the perception and purposes that students pursue in the academic settings. Subsequently, these goal theorists identified two types of goals which they termed as mastery goals and performance goals. Here, mastery goals are considered adaptive as it focuses on developing competence, where as performance goals are regarded as maladaptive as it focuses on demonstrating competence and withdrawal of effort after a setback (Ames, 1992a; Dweck, 1986; as cited in Kaplan & Maehr, 2007).

### Implicit theory

In the words of Dweck & Leggett (1988), a consistent predictor of children's goal orientation is their "theory of intelligence". According to this theory, an individual respond to a particular situation according to the implicit beliefs; such as entity view and an incremental view that they hold about their intelligence. Entity



theory of intelligence is a fixed trait, a personal quality that cannot be changed. On a contrary, an incremental theory of intelligence conceives of intelligence as malleable and cultivable, which indicates that individuals may become more intelligent through their efforts. This often determines the achievement behaviour of the individuals in the academic settings. According to Dweck, those individuals who have a fixed mindset often attribute their failure to the lack of ability and those who hold growth mindset often attribute their failure to the lack of effort (Dweck 2006).

### Self-determination Theory

According to self-determination theory, both intrinsic and extrinsic motivation needs to be given equal importance as they play a significant role in influencing each other. Deci and Ryan's (1985; Ryan & Deci, 2000a, 2000b) Self-determination theory suggests that motivation involves numerous factors and is not limited to only two existing concepts, such as; mastery and performance goal. Ryan & Deci's research on motivation has found that intrinsic motivation determines more interest and develops persistence and increase the level of performance among the students in comparison to the extrinsic one. The SDT theory proposed by Deci & Ryan (1985) also concerns the external conditions (which include teachers) that elicit and maintain, versus suppress and reduce the inherent tendency within the individuals (Ryan & Deci, 2000).

### Teachers' and Students' motivation

Leroy et al., (2007), mentions in their study that motivation is represented by its intrapersonal nature and it reflects inter-personal processes. They further supported the study conducted by Turner & Patrick (2004) by arguing that the quality of students' motivation depends partly on their relationship with the teachers and the classroom environment that teacher creates. From their study, it was reported that teachers' implicit belief influences their own teaching behavior. Here, teachers' implicit belief is in regard to the abilities of the students in the classroom. Teachers will see students' intellectual abilities as fixed if they are performance oriented, but if they are mastery oriented teachers' will see students' abilities as malleable. Patrick and Ryan's (2008) study on how students perceive mastery goal structure in the classroom when the teachers teach in the classroom presents a broad understanding of identifying what type of instructional practices teachers bring in the classroom. The study conducted by Guvenc, (2015) demonstrated positive relationship between teachers' motivational support and students' motivation orientation, and their active participation in the class. The findings from the study of Hamid et al., (2010) illustrates that the intrinsically motivated students perform much better in academics in comparison to those who are extrinsically motivated.

The study conducted by Naz et al., (2011) on students' achievement motivation and self-concept displayed the existence of link among self-concept, achievement motivation and academic achievement of the students. On 2017, Jonsson & Beach conducted a study which reported that mathematics

teachers hold entity beliefs while social science teachers favoured incremental beliefs. Likewise, students hold entity beliefs for mathematics but developed incremental beliefs for other subjects such as social science. Their study also underscored that teachers with entity beliefs provide a classroom goal structure that demotivate the students in comparison to those holding incremental beliefs where students get highly motivated.

Teachers' motivation highly affect students' motivation and that is the reason why some students were found to have either high motivation but low achievement outcomes or get demotivated and disengage themselves from academic activities thus affecting their learning outcomes. Though study reveals the existing link between teachers and students' implicit beliefs and the achievement goals of the students, yet the association between teachers' implicit beliefs and their achievement goals has not been examined. Therefore, developing additional field-oriented research to explicate the nature of relationship between goal orientations and implicit theories is significant (McCoach & Cepero., 2009).

### Teachers' Goal Orientation

Butler (2007) has correctly pointed out that the goal orientation theory rightly explains the motivation of the teachers and explain its consequences and this was found on the impression that academic context comprises both students and teachers (Nitsche et. al.; 2013). In fact, the motivational model provides teachers with a framework for creating solutions to common motivational problems (Furrer et al., 2014). Mascret et al., (2017) also argues that teachers' achievement goals are equally as important field of study as students' achievement goals. However, not much study has been conducted on teachers' achievement goals and how they personally endorse achievement goals in the classroom.

At present context, teacher motivation is an important field of research (Mansfield et al., 2012). Research on the teacher goal orientations indicates that the mastery/ performance goal conceptualization is also suitable for the teachers (Nitsche et al., 2013). Here, teachers' mastery goal orientation may refer to the aim of intensifying their own professional competences; performance/avoidance goal orientation refers to the aim of demonstrating own superior teaching competencies or to avoid inferior teaching competencies. Prior research (Nitsche et al., 2013) has provided evidence that this conceptualization is more suitable to describe the teachers' goal orientations and that different facet of teachers' mastery and performance goal orientations envisage approach towards help-seeking.

The study conducted by Blackwell (2007) revealed that emphasizing more on the incremental view elicits positive effects and learning outcomes, thus maintaining the argument that the implicit beliefs of the students directly affect their achievement motivation. In a review of literature by Alkharusi (2010), he argues that the learning environment should be considered as an effective mediator between students' achievement goals and academic performance. His review on achievement goals and



classroom goal structure indicates that students' achievement goals need to be fostered in the learning environments which include the classroom. It may be mentioned that the type of classroom environment created by the teachers and their goal orientation highly effects the motivation of the students.

#### Teachers' goal orientation and their instructional practices:

Research on motivation has revealed that mastery goal structures lead to adaptive where as performance goal structures lead to maladaptive outcomes among the students in the academic settings. It is assumed that the relationship between classroom goal structure and students' goal orientation have strong affect on their adaptive and maladaptive learning patterns and is thus crucial at present context (see Meece et al., 2006). When students perceive the classroom as emphasizing mastery goal they tend to use effective learning strategies and feel good about themselves than when they perceive it as emphasizing on comparison of student abilities (Ames & Archer, 1988).

Anderman, E.M., & Patrick, H. (2012) found from their reviews that the students' perception of the classroom goal structure is connected to the quality of their engagement in the classroom. The review paper by Zhang et al., (2017) outlines the connection between mindset and academic achievement among the teachers as well as the students in the academic context based on the studies conducted on mindsets in learning. The study conducted by Leroy et al., (2007) revealed that teachers' implicit beliefs influences their instructional practices and the study conducted by Nitsche et al., (2013) exhibited positive association between teachers' goal orientation and students' achievement motivation. The study conducted by Nitsche et al. (2013), provided support for the assumption that teacher's goal orientations affect the motivation and learning behaviour of the students. Nevertheless, what kind of instructional practices (i.e., mastery or performance goal structure) realized by the teachers will have a strong impact on students' motivation is still not clear. In a study conducted by Park et al., (2016), they found that the self-reported teacher instructional practices predicted children's motivational frameworks at the end of the school year. However, the connection between their goal orientation and implicit beliefs

(regarding the malleability of students' ability) remains unexplored.

Previous research conducted on the academic achievement of the students has focussed mostly on students' motivation (e.g. Dweck & Leggett, 1988; Dweck & Grant, 2003; Hong et al., 1999). However, exploring the influence of teachers' motivation, namely; their goal orientation, as suggested by some researchers, would enrich our understanding of the relationship between students' motivation and their academic achievement. It is the teachers' goal orientations that determine their instructional practices and this further effect students' motivation.

Some researchers like Patrick & Ryan (2008), Radovan & Makovec (2015), Shim et al., (2013), Raufelder & Lazarides, (2017) conducted study on students' perception of the classroom environment. Others focused on teachers' goal orientation and its relationship with their teaching practices and its further impact on students' achievement motivation (Wigfield & Wentzel, 1998; Furrer & Skinner, 2003; Retelsdorf et al., 2010; Nitsche et al., 2013 etc.). On the basis of the existing research (see Nitsche et al., 2013), it was predicted (Hypothesis 1) that teachers' instructional practices will have a direct positive impact on students' motivation. Taking a cue from prior researchers, such as, Nitsche et al., (2013), Park et al., (2016), it was hypothesized that there is a direct relationship between teachers' instructional practices and students' motivation, which includes their goal orientation and implicit beliefs. In contrast to numerous research conducted on students' motivation (Ames & Archer, 1988; Dweck & Leggett, 1988; Midgley et al., 1996; Dweck & Grant, 2003; Covington, 2000 etc.), there is very little research on teachers' motivation for teaching (Retelsdorf et al., 2010). Based on prior researches it was predicted (Hypothesis 2) that teachers' motivation will have a direct influence on their instructional practices. (a) Teachers' implicit beliefs (regarding students' abilities) will have a direct effect on their instructional practices. (b) teachers' implicit beliefs will be influenced by their goal orientation. The current research can be explained through a conceptual model (figure 1).

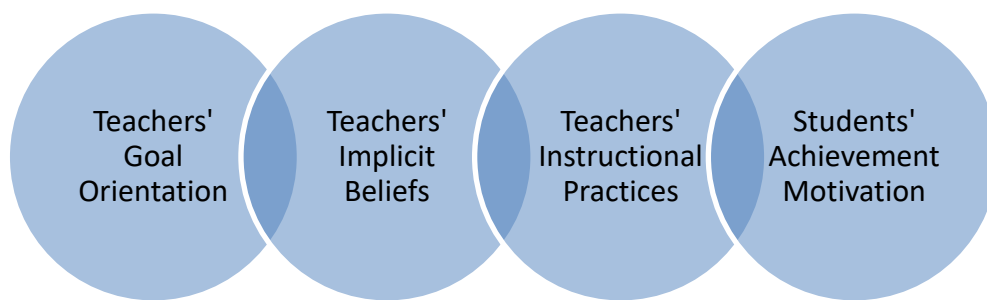


Fig.1. Linear relationships among these variables which includes teachers and students' achievement motivation  
Method



**Participants and Procedure**

The sample for the study consisted of teachers teaching classes 8,9 and 10 in a private school in Nagaland. The age group of the students for the study ranged from 14-15 years of 9<sup>th</sup> standard. For this study 55 students were included, out of which there were 31 females and 24 males and 45 teachers. The participants were assured that their identities will not be revealed and that it will remain completely confidential. The variables of the present study were not specific to any subject.. Separate questionnaires measuring these teachers and student variables were employed and data was analyzed accordingly.

**Measures**

**Teachers’ goal orientation:** For measuring teachers’ goal orientation, 8 items adapted from Elliot et al., (2017), were employed.

**Teachers’ implicit beliefs:** For the assessment of teachers’ implicit beliefs, 8 questionnaires from Dweck et al., (1995) were used.

**Teachers’ instructional practices:** To examine teachers’ instructional practices, and assessment of students’ goal orientation, questionnaires adapted from (PALS, Midgley., 2006) were employed.

**Students’ implicit beliefs:** For the assessment of students’ motivation, 5 items adapted from (Park et al., 2016) were used.

**RESULT**

**Mean, SD and Inter-Correlations**

The correlation between teachers’ motivation (their achievement goal and implicit beliefs) and their instructional practices and its further impact on students’ achievement motivation were examined. Pearson’s correlation method was used and regression was run to test the effects of teachers’ goal orientation on their implicit beliefs. Also, the direct effect of teachers’ implicit beliefs on their instructional practices was tested.

**Preliminary Analysis**

The correlation was tested for teachers and students’ variables using Pearson’s correlation method. From the results of the study, it was found that teachers’ incremental beliefs were not positively significant to their mastery goal orientation and their entity beliefs were not determined by their performance goal orientation as predicted. The result obtained from this study showed a negative correlation (.59) between teachers’ mastery goal orientation and their entity beliefs. Also, for their incremental beliefs it did not show a positive correlation (.41). Furthermore, a positive correlation (.18) was found between performance goal orientation and the incremental beliefs of the teachers but no positive correlation was found for their entity beliefs (.96). The result obtained from this study shows that the implicit beliefs of the teachers do not determine their instructional practices although it demonstrated positive correlation (.17) for their entity beliefs, yet the level of significance were .49 for teachers’ mastery goal structure and their incremental beliefs. Besides, the level of significance was .55 for their performance goal structure and their incremental beliefs and .70 for their entity beliefs.

**Regression coefficients from regression equations**

The result obtained from the analysis reported a negative correlation between teachers’ mastery goal structure and students’ motivation but for performance goal structure it revealed a positive effect on students’ motivation. The correlation between the classroom goal structure and students’ motivation was not fully confirmed as hypothesized. The significance shown in table 1 provides initial support only for the effect of teachers’ performance goal structure on students’ motivation. From this analysis, it can be observed that the performance goal structure of the teachers is a strong predictor of students’ motivation but it exhibited no direct effect for mastery goal structure on students’ motivation which indicates that there is no direct effect of mastery goal structure on students’ motivation (see table 1).

**Table 1 Mean, SD of all the variables and Unstandardized regression coefficients from the regression equations**

Variables	N	M	SD	1	2	3
1.Mastery Goal Structure	55	16.50	2.17	-	-	.86
2.Performance Goal Structure	55	19.78	3.60	-	-	.01
3.Students’ Motivation	55	35.30	4.90	.86	.01	-

\*p< .05

The correlation was tested for teachers’ instructional practices and students’ implicit belief using Pearson’s correlation method and regression was run separately for both male and female students. The result obtained from this study showed a negative correlations (.72) between teachers’ instructional practices and

students’ implicit beliefs for male and (.32) for female. The table given below explicates results of the correlations of these variables (see table 2).



Table 2 Correlation of the variables using Pearson correlation method

Variables	N	Female	Mean	SD	1	2
1. Teachers' instrctnl prtctics	55	31	35.8	4.44	-	.32
2. Students' implicit beliefs	55	31	15.9	3.04	.32	-

Variables	N	Male	Mean	SD	1	2
1. Teachers' instrctnl prtctics	55	24	37.3	4.54	-	.72
2. Students' implicit beliefs	55	24	16.0	3.06	.72	-

The given table presents the values of the variables that were evaluated. As shown on the table, the teachers' instructional practices do not predict the motivational framework development of the students as the level of significance for male students was (.72). It is observed from the results of the analysis that there is positive correlation between the two variables only for female students which indicates that the achievement motivation of the students is not always influenced by the instructional practices of the teachers. The formulated hypothesis that the teaching practices of the teachers in the classroom will have an impact on the students' implicit beliefs (mindset) was not confirmed.

## DISCUSSION

The present research proposed a conceptual model of different teachers and students variables and tested in the context of academic setting, that is classroom. It was designed to further the work on teachers' instructional practices and students' motivation based on the studies conducted by previous researchers (Nitsche et al., 2013; Park et al., 2016; Mensah & Atta., 2015; & Meece et al., 2006). Contrary to the findings and suggestions of the previous researchers (see Leroy et al., 2007; Rissanen et al., 2018) the present study found a negative correlation between the teachers and student variables. Additionally, the hypothesis that there is a direct association between teachers' instructional practices and motivational framework development of the students could not be validated. The study also showed that the goal orientation of the teachers is not the only determining factor for teachers to evaluate students' abilities. There may be other factors contributing towards the belief that teachers hold about the intellectual abilities of the students, such as the expectations teachers have on students (Wang et al., 2018). This is supported by the studies conducted by previous researchers like Timmermans, Boer, & Van Der Werf, (2018); Roskamp, Goudsblom, Eijden, Stroet, & Hornstra, (2018) etc.

The findings from the current study do not lend empirical support to the findings of prior research of Nitsche et al., (2013) and Park et al., (2016). The result from the direct effect model indicated that teachers' goal orientation was not a direct positive predictor of their implicit beliefs as both mastery goal and performance goal was found as a negative predictor of incremental belief and entity belief. It may be argued that contrary to Dweck's theory

(Dweck & Leggett, 1988) which suggested that those individuals who hold entity view orient more towards performance goals and those who hold incremental view often orient towards mastery goals, the current study does not support this theory as findings from the present research revealed no positive relationship between the two variables. Conversely, the current study supports the findings of some researchers, for e.g. Leondari & Gialamas, (2002); Dupeyrat, & Marine, (2005) demonstrated from their study that no relationship exists between students' goal orientation and their implicit beliefs. The result from this study corroborates the findings of past researchers (Naz, & Dr. Awan, 2011) where it was found that female students were more highly motivated than male students. Additionally, performance goal structure was found as a direct positive predictor of students' motivation which indicates that teachers' performance goal structure has strong impact on the motivation of the students than the mastery goal structure. The research conducted by Ohtani et al., (2013) revealed mastery goal structure as a positive predictor for students' motivation and a negative predictor of the motivation of the students. Nevertheless, the present study does not support the findings of the previous researchers as the obtained result showed no direct effect of these variables. This shows that the instructional approaches and the behavior of the teachers (see Furrer et al., 2014, Mensah & Atta., 2015, Reeve & Lee, 2014) etc. highly effects the achievement behavior of the students. However, the classroom structure presented by teachers in the classroom is not the only factor that influences students' motivation.

## Suggestions for future research

The current study aimed to contribute to the existing literature by conducting an empirical study on teachers' instructional practices affecting students' motivation. From this study, only the reason why students and teachers orient to certain type of goals and how this affects their classroom engagement can be speculated. However, future researchers can take this into account as it is essential to recognize the existing link between these variables. It is also significant to look at the association between teachers' goal orientation and their implicit beliefs as it still lacks clarity. Besides, this study does not support the findings and suggestions of the previous researchers which illustrate the fact that the instructional practices of the teachers are not always influenced



by their goal orientation. One can argue that it's the self-efficacy of the teachers that might determine their teaching in the achievement settings. As such, further research is required if one need to understand the complex relationships among these variables by looking at self-efficacy as a moderating variable (Bandura, 1994).

Furthermore, studies focusing on teachers' instructional practices affecting students' motivation based on gender would enhance the understanding of teachers and students' motivation and learning as it still remain unclear. As some researchers (see Naz & Dr. Awan, 2011; Berekashvili, 2012), argued that some form of gender biasness exists when teachers teach in the class and this have great impact on the achievement motivation and learning outcomes of the students. On the basis of the findings from the current study it can be argued that the goal orientations of the teachers do not have a direct influence on how teachers assess students' intellectual abilities. This could be because the teachers might hold multiple goals and this might be expressed differently towards different students in the classroom. Studies on students holding multiple goals and how these effect their academic achievement have been conducted by previous researchers (for e.g. Mattern, 2005). Likewise, teachers might also pursue multiple goals when they teach in the class which may determine their instructional practices. However, the influence of multiple goals teachers hold and how these effects their instructional practices remains unexplored. Thus, future researchers can take this into consideration.

## CONCLUSION

In a classroom context, teachers' play a vital role in influencing students' behavior and academic performances. One can argue that teachers' personality such as, emotional stability and openness is critical to their teaching practices and this further have an impact on students' academic performance. Wood, (2019) opined that the ability to understand and engage with students in the classroom is regarded as very critical towards the achievement outcome of the students. Moreover, promoting quality instructions that cultivate not only cognitive development but also the social and emotional development of the students greatly influence their academic performances. In a classroom situation where teachers focus more on their teaching either to improve themselves (mastery goals) or to prove themselves better than others (performance goals) as argued by many goal theorists and researchers (e.g. Wigfield & Wentzel, 1998; Ames & Archer, 1988; Dweck & Leggett, 1988; Roeser et al., 1996), greatly influences their teaching in the classroom and it further influence the achievement motivation of the students. Hence, it is critical for the teacher in the class to be aware of various classroom factors that might have an effect on how students perceive their classroom teaching and behaviors as this may have a strong influence on the achievement motivation of the students and academic performances.

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