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RESEARCH ARTICLE

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THE INFLUENCE OF TEACHERS' EXPECTATIONS ON INSTRUCTIONAL PRACTICES AND STUDENTS' ACHIEVEMENT MOTIVATION: A MODERATION ANALYSIS

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Abstract

This study aimed to examine the moderating effects of teachers' expectations on their instructional practices and students' achievement motivation. A conceptual model of these variables was developed and tested using regression analysis. The sample included 60 students aged 14-15 from a private secondary school. The results of the study did not fully confirm the moderating effects of teachers' expectations on their instructional practices and students' motivation. This study proposes that teachers, as the central point in the teaching-learning process, need to be aware that both personal and contextual factors can affect students' perceptions of classroom teaching. In doing so, they might help students develop achievement motivation, cognition, and learning, especially for those who were considered incapable of completing a particular task or test.

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Introduction

Motivation is often understood as an internal state of mind that encourages, guides, and determines an individual's behavior. In the academic context, many researchers have focused on students' motivation and its effects on academic engagement and learning. Studies found that students with equal ability respond differently in the same situation, especially in the face of failure, indicating that teacher factors affect teaching and learning (Dweck & Elliot, 2005). Besides, Butler (2007) underscored that goal orientation theory is also suitable for teachers, as the learning context includes both teachers and students (Nitsche et al., 2013).

In a classroom context, the teacher plays the most significant role; as such, they have great responsibilities not only in teaching but also in their relationships with students. To make one's teaching effective, the teacher needs to improve one's teaching strategies to develop students' will and motivation to learn. One can argue that the basic requirement for students is not necessarily what is being taught, but how it is taught by teachers and the environment they create, as these factors strongly determine students' learning and outcomes.

Theoretical Framework

To understand students' achievement behavior, many theories have been developed; among them, Dweck's Achievement Goal Theory has been widely accepted and used, as it is the best-articulated model (Leondari & Gialamas, 2002). It is a psychological construct developed to provide a framework for students' achievement motivation, involving a mastery goal, which is adaptive, and a performance goal, which is considered maladaptive. Many studies conducted based on Dweck's theory reveals the impact of teachers, parents and peers, implicit beliefs, teaching practices, socio-economic status on the achievement motivation of the students, for example; Ames, 1992; Ames & Archer, 1988; Alkharusi, 2010; Bieg et al., 2011; Dan et al., 2015; Rissanen et al., 2018; Sirin., 2005; Archer & Berger, 2016 etc. In addition, Deci & Ryan's (1985) self-determination theory holds that both intrinsic and extrinsic motivation are significant, as the classroom context includes both students and teachers. Ryan & Deci (2000) emphasized that both are essential to students' psychological needs, including their sense of belonging.

Although prior studies on motivation focused on students' goal orientation (like (Ames & Archer, 1988; Dweck & Leggett, 1988; Ryan & Deci, 2000), perception of teachers'

classroom goal structure (e.g. Patrick & Ryan, 2008; Radovan & Makovec, 2015; Shim et al., 2013; Raufelder & Lazarides, 2017 etc.), students' perception of expectation of the teachers (see Roskamp et al., 2018; Timmermans et al., 2018), etc. on students' achievement motivation, yet relationships between teachers' expectation influencing their instructional practices remains unexplored. Hence, it would be enriching to examine the relationship between teacher factors, especially their expectations of students, affecting their teaching practices and their impact on students' achievement motivation (Wang et al., 2018).

Prior Research

Several studies conducted by Dweck revealed that children with the same talents and capacities to accomplish certain tasks respond differently after experiencing failure. It can be argued that relying solely on intrinsic motivation cannot promote effective learning; as such, it would be imperative for teachers and higher authorities to value various external factors and their distinct impacts and implications on students' achievement motivation. Also, teachers need to know how to design their work to motivate their students, since motivation determines students' interest and turns it into important learning activities (Zyngier & Saeed, 2012).

Past researchers like Ames & Archer (1988) and Dweck & Leggett (1988 found that mastery goals have a positive effect and performance goals have a negative impact. Others, such as Elliot et al. (1998), Barron et al. (1997), Hong et al. (1999), and Heslin et al. (2005), reported positive effects of performance goals and implicit beliefs on learning outcomes. Furthermore, some studies have demonstrated a positive link between teachers' motivational support and students' achievement motivation (Blackwell et al., 2007; Guvenc, 2015; Jonsson & Beach, 2017). Others, like Leondari & Gialamas (2002) and Dupeyrat & Marine (2005), found no relation between implicit beliefs and achievement goals, while some researchers showed teachers' implicit beliefs affecting their own teaching practices (e.g., Turner & Patrick, 2004; Leroy et al., 2007; McCoach & Cepero, 2009; Nitsche et al., 2013; Park et al., 2016).

Gbollie & Keamu's (2017) study provides evidence that extrinsic factors, such as the desire for rewards and the fear of punishment, primarily drive students. Researchers such as Wigfield & Wentzel (1998) argued that students' social motivation, including the bonds they

have with their friends and classmates, the teachers they have, and the teachers' instructional practices, is critical to students' academic performance. Thus, teachers play a major role in motivating students and ensuring their class participation, depending on how they devise and implement teaching methods in the classroom (Guvenc, 2015).

Some studies (for reviews see Wentzel, 1998; Wigfield & Wentzel, 1998; Furrer & Skinner, 2003; Nitsche et al., 2013; Klassen & Chiu's study, 2010; Tastan et al., 2018; Van Der Want et al., 2019 etc.) found that the goal orientation of the teachers, their self-efficacy, student-teacher relationship, work experiences of the teachers etc. is highly significant in influencing their teaching and this further affects students' motivation. The findings from the study by Hardre et al. (2006) demonstrate that the classroom environment influences students' perception of classroom goal structure and its effect on their motivation. Similar research conducted by Radovan & Makovec (2015), Mensah & Atta (2015), and Raufelder & Lazarides (2017) reveals that students' perceptions of the learning environment strongly affect their intrinsic motivation. Hence, Gbollie & Keamu (2017) posited that teachers' emphasis on grades and students' learning strategies, such as memorizing without understanding the concepts, could be other factors that significantly affect students' learning outcomes.

The research paper (Wentzel, 1998; Wigfield & Wentzel, 1998) provides evidence that interpersonal relationships characterize contexts that can determine whether students engage with or alienate themselves from classroom activities. Additionally, characteristics such as supportive teachers, which lead to students' engagement, are found to be related to students' academic motivation. In fact, various models of achievement motivation unequivocally indicate that every human needs to feel connected to others (Baumister and Leary, 1995; as cited in Furrer & Skinner, 2003). Some studies (such as (Sirin, 2005; Archer & Berger, 2016) have revealed a strong relationship between socioeconomic status and students' academic achievement at school.

This study is also corroborated by Timmermans et al. (2018), who examined the association between socioeconomic status and students' achievement motivation. Additionally, Kim et al. (2019) reported a strong association between teachers' personality traits, such as openness, emotional stability, and agreeableness, and their teaching practices. The research conducted by Vibulphol (2016) found that although students had high

motivation, it did not affect their learning. Moreover, some students in almost every class exhibited amotivation (lack of motivation to engage in classroom activities/tasks). In other words, autonomy support was associated with high motivation and high performance, whereas autonomy control was associated with amotivation. Other researchers found that when teachers adopt supportive teaching practices, students orient towards mastery goals, but for autonomy-control practices, students tend to orient towards performance goals (for reviews, see Ryan & Patrick, 2001; Nenthien & Loima, 2016; Roeser et al., 1996; Wang et al., 2018; Furrer et al., 2014). Also, a study by Roeser et al. (1996) demonstrated that teachers' instructional practices, particularly their autonomy-control orientation, orient students towards performance goals.

When students perceive the classroom environment as supportive and welcoming, they orient towards mastery goals. However, when they see teachers as controlling, making comparisons, or giving preferences only to some students in the classroom, they tend to orient towards performance goals. Therefore, one can argue that teachers' instructional practices (regarding the classroom environment) strongly affect students' motivation, both positively (high motivation) and negatively (amotivation), depending on the type of classroom environment and their behavioral engagement with students, which further affects students' learning outcomes as pointed out by some past researchers (like (Kunter, M., Baumert, J., Voss, T., Klusmann, U., Richter, D., & Hachfeld, A., 2013), the qualities of teachers are considered important determinants of students' academic achievement based on their performance on a given set of tests or exams. They further argued that this kind of assumption only shows that the cognitive skills acquired during teacher education, as well as their selection into the teaching profession, remain critical.

Teachers' expectations and instructional practices

Although previous researchers have studied teachers' instructional practices, such as autonomy support and control, they have emphasized only how these affect students' achievement behavior. Some studies (e.g., Patrick & Ryan, 2008; Shim et al., 2013; Nenthien & Loima, 2016; Raufelder & Lazarides, 2017) suggest that teacher autonomy support is vital in establishing students' achievement goals. The limited research on teachers' motivation and instructional practices has provided evidence that not only the implicit beliefs and the types of goals that teachers bring into the classroom, but also other factors, impact students'

achievement motivation. One such factor could be teachers' expectations regarding students' academic achievement.

Here, it may be noted that teachers' expectations often determine their teaching practices, which in turn strongly influence students' achievement motivation in the classroom. In addition, researchers such as Kariuki & Mbugua (2018), Rubie-Davies et al. (2010), and Roskamp et al. (2018) have provided evidence that teachers' expectations of students strongly influence teachers' instructional practices and students' motivation. In other words, teachers with high expectations favor supportive teaching practices, while those with low expectations emphasize more controlling practices in the classroom. However, the relationship among these variables has not been examined. As such, conducting a study on the relationship between teachers' instructional practices and students' motivation, and on how teachers' expectations moderate this relationship, is considered important (Wang et al., 2018).

Radovan & Makovec (2015) argued that most of the researchers focused mainly on the instructional practices of the teachers and how they affect students' motivation. However, exploring how students perceive the learning environment and its impact on them is significant. Some researchers found that negative behavior by teachers towards students, including humiliation, punishment, and criticism, is detrimental to students' motivation in classroom settings. Therefore, teachers should create a favorable environment for students by providing encouragement and positive reinforcement to help them remain highly motivated (Yilmaz, Sahin, & Turgut, 2017).

Previous researchers have demonstrated that the higher the teacher's expectations, the more encouraged and motivated students feel, and this, in turn, has a strong impact on their academic performance (Kariuki & Mbugua, 2018; Rubie-Davies et al., 2010; Roskamp et al., 2018). It could mean that praise and rewards for correct answers, or positive responses from teachers with high expectations, strongly motivate students to perform better in class (Kariuki & Mbugua, 2018). This indicates that teachers' classroom teaching is driven by their expectations.

Besides, some studies found that teachers' expectations are highly influenced by factors like gender, teaching experience, etc. (for reviews, see Wang et al., 2018; Berekashvili, 2012; Timmermans et al., 2015; Berger et al., 2018), and this further has an impact on the academic

achievement of the students. Nevertheless, it is not clear whether teachers' high or low expectations for students influence their teaching (which includes supportive and controlling). Moreover, differential treatment of students in the same classroom has significant impacts, given their different experiences with the same teachers. For instance, teachers paid more attention and gave positive feedback when they asked questions of students whom they had high expectations for. By contrast, students for whom they have low expectations receive no such support, are not allowed, are considered incompetent, and are ignored. This kind of varying behavior by teachers towards students, based on their level of expectation, has a strong effect on students' achievement behavior and learning outcomes (Toksoy & Acar, 2019).

Conceptual model:

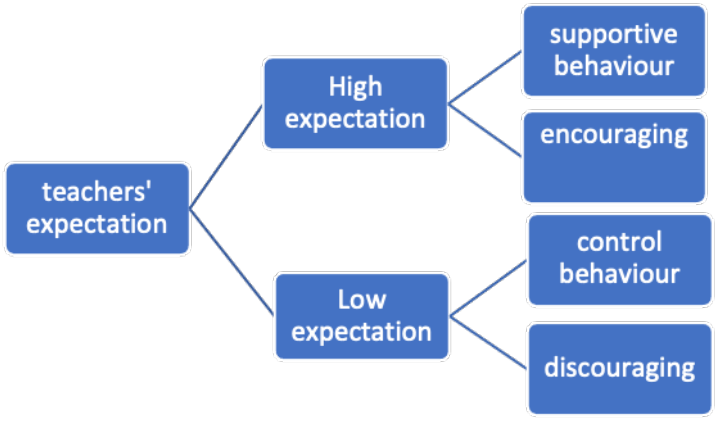


Fig. 1. A conceptual model displaying the influence of teachers' expectations on their instructional practices.

Here, autonomy support is a situation in which teachers exhibit behaviors that involve identifying and understanding students' needs and nurturing and fostering their intrinsic motivation. Control refers to the type of behavior teachers display while teaching, in which students are expected to think or behave in a particular way. Roskamp et al. (2018) argued that teachers' behavior towards students changes based on their expectations of them, which can negatively affect students' motivation and academic achievement. Moreover, Bieg et al. (2011) contend that students' perceptions of both teachers' care and autonomy support are significant factors in students' intrinsic motivation. Their finding suggests that students'

intrinsic motivation is affected more by teachers' behavior rather than their motivation to teach.

Teachers' behaviors and attitudes are shaped by their expectations, which in turn determine students' achievement behavior. In the review paper by Wang et al. (2018), they pointed out that teachers ' evaluations of students' abilities are highly affected by their socioeconomic status (SES) and ethnicity (Agirdag et al., 2013), and this further influences their behavior towards the students, which ultimately has a great impact on the achievement behavior of the students. It is clear from prior studies that teachers' expectations play a vital role in shaping their beliefs about students' intellectual abilities. However, the relationship between these variables remains unclear, as no study to date has examined how teachers' expectations influence their instructional practices and students' academic performance in the classroom. Therefore, an empirical study examining these relationships is warranted.

The present study

The present research aimed to examine the association between teachers' instructional practices and students' achievement motivation, moderated by teachers' expectations. In doing so, this study included both teacher and student variables in the context of secondary school. Although existing literature has provided a wealth of research on students' achievement motivation, little has focused on teachers' expectations, which influence their instructional practices and, in turn, their impact on students' motivation. Besides, it is essential to understand the different dynamics of the classroom context and how they influence the development of the motivational framework. Reeve & Lee (2014) argued that an important area of research is understanding how motivational changes occur.

Most of the studies conducted by previous researchers focused mostly on the factors affecting teachers' expectation such as socio-economic status, ethnicity (Zhang et al., 2005; Shepherd, 2011; Paino & Renzull, 2013; Timmermans et al., 2015; Whitely, 2015, etc. as cited in Wang et al., 2018), gender (e.g. Holder & Kessels, 2017; Ready & Chu, 2015; Berekashvili, 2012, etc.), teaching experiences of the teachers (Klassen & Chiu, 2010; Berger et. al., 2018) and how it affects the academic achievement of the students. Also, some researchers have focused on the classroom environment and its influence on students' achievement motivation (e.g., Radovan & Makovec, 2015; Patrick & Ryan, 2008; Raufelder

& Lazarides, 2017; Malik & Rizvi, 2018; Kariuki & Mbugua, 2018). However, most previous researchers have not considered whether teachers' expectations can influence their instructional practices regarding the classroom environment and its subsequent impact on students' achievement motivation and learning. Therefore, this study examined these relationships, which remain unexplored.

Hypothesis 1: teachers' expectations are positively associated with their instructional practices

Based on previous studies, one can argue that teachers' high or low expectations influence their instructional practices in the classroom. Therefore, it was predicted that (a) teachers' high expectations will determine their supportive instructional practices; (b) low expectations will determine their control instructional practices. Some researchers, such as Bieg, Backes & Mittag (2011), define teachers' care as behavior arising from the need for relatedness, which determines the quality of interpersonal relationships among teachers and students. It can be argued that students' learning is influenced by both internal (individual) and external (environmental) factors. As such, the classroom context can be seen as an influential predictor of students' achievement behaviors and learning outcomes, given that they spend their time at school every day (Ohtani et al., 2013).

Hypothesis 2: Teachers' instructional practices predict students' motivation.

Existing studies have revealed that the classroom environment and school contexts significantly influence students' motivation and achievement. Nevertheless, it is not easy to understand students' motivation without understanding their contexts and experiences (Eccles & Wigfield, 2002). Moreover, goal theorists have emphasized students' intrinsic motivation and its influence on academic achievement, but more attention should be given to extrinsic motivation. Furthermore, Roskamp et al. (2018) argue that a better understanding of teachers' teaching strategies and their effects on students' achievement motivation is crucial. Taking a cue from the previous researchers, it was anticipated that (a) the teachers' instructional practices will have a direct strong association with the achievement motivation of the students. (b) teachers' supportive instructional practices will have a direct relationship with students' mastery goal orientation; (c) teachers' control instructional practices will have a strong association with performance goal.

Hypothesis 3: Teachers' expectations moderate the relationship between their instructional practices and students' motivation

Jussim's (1989) study provided evidence that teachers with high expectations give positive feedback and support to students, which strongly influences students' achievement behavior. In addition, Roeser et al.'s (1996) study provides evidence that in supportive teaching practices, students often orient towards mastery goals. However, in a classroom environment where controlling behavior is practiced, students tend to orient towards performance goals. Some researchers, such as Rubie-Davies et al. (2010), Archer and Berger (2016), and Timmermans et al. (2018), have argued that teachers' expectations strongly determine their classroom behavior. Hence, it was predicted that (a) there will be a moderation effect of teachers' supportive instructional practices and students' mastery goal orientation by teachers' high expectations; (b) the relationship between teachers' control instructional practices and students' performance goal orientation will be moderated by teachers' low expectations. The study focused on how students perceive teachers' expectations as influencing their instructional practices and, in turn, their motivation. The relationship among these variables can be explained through a given research design.

Design

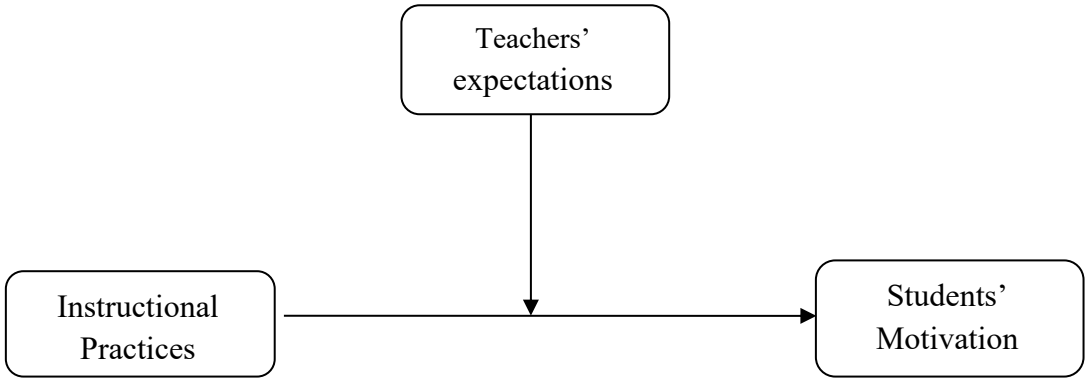


Fig. 2. Moderating effects of teachers' expectations between their instructional practices and students' motivation

Method

Participants and procedures

The study sample comprised 60 9th-standard students from a private secondary school in Nagaland, aged 14-15 years, and was not domain-specific. Separate questionnaires measuring

all these variables were used. This study included only students, as it aimed to explore the relationship between teachers' expectations and instructional practices, as perceived by students, and their effect on students' achievement motivation.

Measures

Separate questionnaires measuring these variables were employed. These variables include teachers' expectations (as perceived by students), instructional practices, and students' motivation, that is, their goal orientation. To assess teachers' expectations, questionnaires adapted from Tim Gallahar's Teacher Expectations Survey (Williams, A.R., 2012) were used; For measuring classroom environment as created by teachers when they teach, questionnaires adapted from Ryan & Patrick (2003) were employed; To examine students' motivation (mastery and performance goal orientation), questionnaires adapted from the Learning Strategies Questionnaire (LSQ) were employed; and a 5-point Likert scale, which ranges from 1 (strongly disagree) to 5 (strongly agree), was used for this study.

Results

Moderation and inter-correlations:

The relationships among the three variables were analyzed, and the results were interpreted accordingly. Regression was run in order to examine the associations among these variables. The analysis found that teachers' expectations were significant for their instructional practices ($p = .015$), as predicted. Also, teachers' instructional practice was highly significant for students' motivation ($p = .004$). Furthermore, a positive correlation (.02) was found between teachers' expectations and students' achievement motivation. The table presents the results of the final explanatory model for the correlations among these variables.

Table 1

Unstandardized regression coefficients from the regression equation of three variables

Variables	N	1	2	3
Teachers' Expectations	60	-	.01	.02

Teachers' Instr. Practices	60	.01	-	.004
Students' Motivation	60	.02	.004	-

Table 1 presents the correlation coefficient of the three variables. As shown in the table, teachers' expectations predict both their instructional practices and students' achievement motivation. Similarly, it reveals that teachers' instructional practices predict students' motivation. The analysis found that both teachers' expectations and their instructional practices predict students' achievement motivation. It is also observed that teachers' expectations predict their instructional practices. The analysis of the calculated data can be explained by the values generated. For teachers' expectations and their instructional practices, the values were beta (B=0.313), F=6.29, and t=2.50. In addition, the value of beta was (B=0.36), F=9.13, and t=3.02 for teachers' instructional practices and students' motivation. Also, regarding teachers' and students' motivation, the beta value was B=0.30, F=5.73, and t=2.39.

The hypothesized notion that teachers' expectations shape their classroom teaching and strongly influence students' motivation was confirmed. The results clearly indicate that teachers' expectations moderate the relationship between their instructional practices and students' motivation. Thus, the relationships among these three variables were fully confirmed as hypothesized. However, further analysis was conducted to gain greater clarity about these relationships. Accordingly, each part was measured, and results were interpreted. The correlation and moderation were tested for all these variables to understand their inter-correlations.

Preliminary Analysis

The correlation between high and low teacher expectations and their instructional practices (support and control) and students' motivation, that is, mastery and performance goal orientation, was investigated. The results demonstrated a positive correlation between teachers' high expectations and their supportive instructional practices, whereas the correlation with control instructional practices was not very significant. Also, for teachers' supportive instructional practices and students' mastery goal orientation, the results were

highly significant, whereas for performance goal orientation, they were not. Furthermore, it was found that while low teacher expectations were almost significant for supportive instructional practices, they were not statistically significant for control instructional practices.

The value of high expectations for mastery and performance goals was not significant, whereas low expectations and mastery- and performance-goal orientations were highly significant. However, the correlations for control instructional practices for both mastery and performance goal orientation were not statistically significant; thus, the reliability of the teachers' control instructional practices in a classroom setting was not fully confirmed. The analysis indicates a positive correlation between teachers' expectations and their instructional practices, as hypothesized. The given table explicates the explanatory model of the correlations of all these variables.

Table 2

Correlation coefficient from the regression equation of all the variables

variables	N	1	2	3	4	5	6
high exp.	60	-	-	.007	.33	.30	.32
Low exp.	60	-	-	.17	.35	.05	.003
Supprtv	60	.007	.17	-	-	.003	.32
Control	60	.33	.35	-	-	.92	.93
Mastery	60	.30	.05	.003	.92	-	-
perfrmnc	60	.32	.003	.32	.93	-	-

Table 2 presents the correlation coefficients for all variables assessed. The analysis reported a positive correlation between teachers' expectations and their instructional practices, but not between teachers' expectations and students' motivation. As shown in the table, the

relationship between teachers' high expectations and their supportive instructional practices was confirmed. The results also indicate a positive correlation between teachers' supportive instructional practices and students' mastery and performance goal orientations. However, the correlation between teachers' control-oriented instructional practices and students' motivation was not significant for either mastery- or performance-goal orientation (see Table 2). As such, the correlation between teachers' instructional practices and students' achievement motivation was not fully confirmed.

Moderation analysis

To test the moderation effect, regression was run on all the variables. The values for these variables are listed in the table below. The association between teachers' instructional practices and students' motivation partially confirmed the proposed hypothesis: supportive instructional practices showed a significant correlation, whereas control teaching practices showed no positive correlation.

Table 3

Unstandardized regression coefficients from regression equations

Variables	N	R	f	t	variables
High expect.	60	.343	7.716	2.276	Supportive
		.127	0.950	-.975	Control
Low expect.	60	-.177	1.885	-1.373	Supportive
		.121	.865	.930	Control
Supportive	60	.376	9.521	3.086	Mastery
		-.130	.994	-.997	Performance
Control	60	.012	.009	.095	mastery
		-.011	.007	-.85	Performance
Mastery	60	.135	1.074	1.036	High expectation.
		.252	3.933	-1.983	

					Low expectation.
performance	60	.130	.998	-.999	High expectations.
		.378	9.657	3.108	Low expectations.

For moderation analysis, the scores of each variable were calculated. The result revealed a highly significant moderator effect of teachers' high expectations on their supportive instructional practices (R=.343, f=7.716, p<.01). Additionally, a significant positive main effect of teachers' high expectations and control instructional practices (R=.127, f=.950) and low expectations (R=.121, f=.865) for control instructional practices was found. This indicates that the associations among these variables are partially confirmed, as the significance values support the hypothesized relationships. Contrary to this, teachers' control instructional practices did not predict direct effects on either mastery goal orientation or performance goal orientation, as the regression results were (R=.012, f=.009) and (R=-.011, f=.007).

The regression coefficient for teachers' expectations revealed that high expectations of teachers are strong predictors of supportive instructional practices, whereas low expectations predict control instructional practices to some extent. The zero-order significant correlation between teachers' supportive instructional practices and students' mastery goal orientation provides initial support for this effect. Nonetheless, the significance values for teachers' controlling teaching practices showed no direct effect on students' motivation. On the contrary, the direct effect of teachers' high expectations on students' mastery goal orientation was not very significant, whereas low expectations predicted students' performance goal orientation.

As predicted, a moderator effect associated with teachers' expectations was observed for one of the hypotheses. As shown in Table 2, teachers' high expectations predict supportive instructional practices, which in turn predict students' mastery and performance goal

orientations. It also predicts students' mastery goal orientation. Similarly, low expectations of teachers predict their control-oriented instructional practices, which further demonstrated negative correlations with both mastery and performance goal orientation. Moreover, it showed a strong effect on students' performance goals. The regression results clearly support the moderation effect of teachers' high expectations on the relationship between their supportive teaching practices and students' mastery goal orientation, as hypothesized. It also provides support for the direct effect of teachers' high expectations on students' mastery goals and low expectations as a strong predictor of students' performance goal orientation. Nevertheless, there is no support for the moderating effect of teachers' low expectations on the relationship between control teaching practices and performance goal orientation.

Discussion

The purpose of this study was to examine the moderating effect of teachers' expectations on the relationship between their instructional practices and students' achievement motivation in academic settings. The hypothesis of a moderating effect of teachers' expectations on the relationship between teachers' instructional practices and students' achievement motivation was confirmed only for high expectations. The result of the analysis indicates that teachers' high expectations often determine teachers' supportive behavior when they teach in class, and this leads to students' mastery goal orientation. However, the moderating effect of low expectations between teachers' controlling teaching practices and students' performance goals was not fully confirmed as hypothesized, as it showed a negative association between teachers' controlling behavior and students' goal orientation. This could mean that teachers' low expectations might determine teachers' controlling behavior (weak association) when they teach, but it does not always orient students towards certain goals.

The findings from this study demonstrate that teachers' expectations do not always moderate the relationship between teachers' instructional practices and students' achievement motivation. Although it supports the findings of prior researchers such as Rubie-Davies et al. (2010), Karuiki and Mbugua (2018), etc., that higher expectations of teachers motivate students and further improve their academic performance, teachers' lower expectations did not provide any support for students' motivation as hypothesized. It does not support the findings of prior researchers who found that autonomy control was strongly associated with students' performance goals (Roeser et al., 1996). However, it cannot be denied that teachers'

classroom practices are highly determined by their expectations of students, as the findings indicate that teachers are very supportive when they have high expectations. In contrast, they practice controlling kinds of behavior when they have low expectations (hypothesis 1). Therefore, it can be argued that teachers' expectations have a great impact on their instructional practices.

The present study confirms a positive association between teachers' supportive behavior and students' mastery goal orientation. However, it did not confirm any link between teachers' controlling behavior and performance goal orientation (hypothesis 2). This implies that teachers who display supportive behavior in the classroom are often encouraging and focus on students' improvement, and this has a positive impact on students' achievement goals. However, in a controlling classroom environment, students often feel demotivated, and as a result, they do not perform well academically. Furthermore, the findings indicate a direct influence of teachers' expectations on their instructional practices, but not a moderating effect on their teaching behavior and students' motivation (hypothesis 3). These relationships can be explained through a given research design.

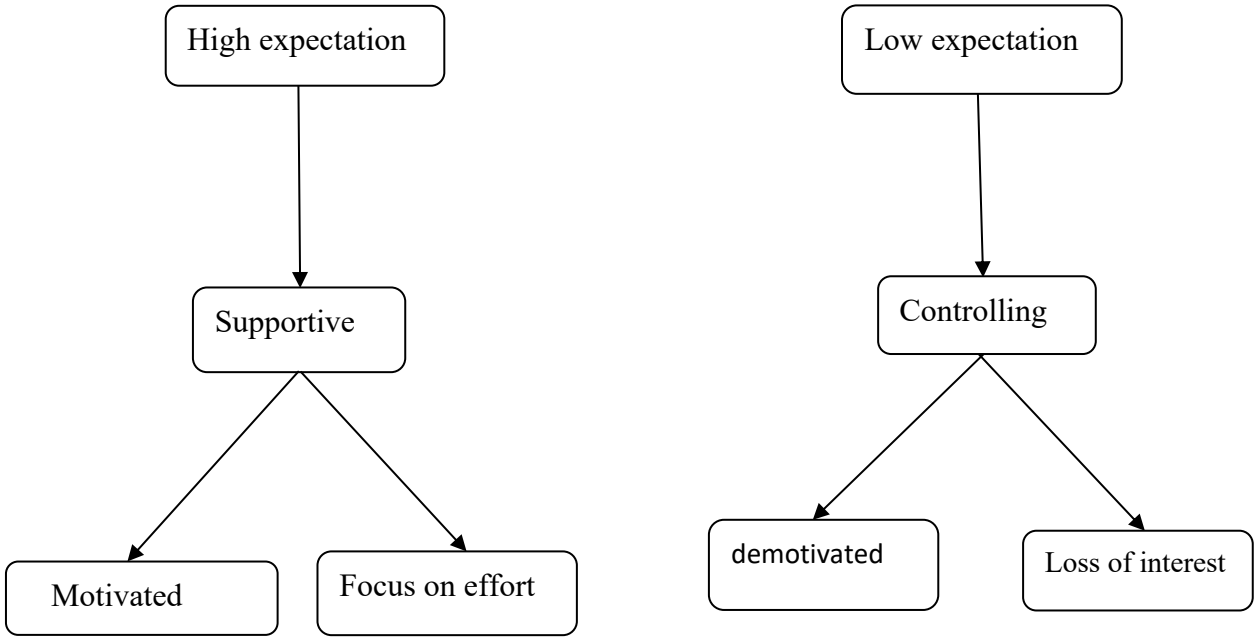


Figure 3: These figures demonstrate the influence of the expectation level of the teachers on their teaching practices, which further have an impact on students' achievement motivation

The findings from this study is consistent with high expectations emphasizing on supportive behavior of the teachers when they teach in the classroom (for eg. Roskamp et al., 2018; Rubie-Davies et al., 2010; and Kariuki & Mbugua, 2018; Wong et al., 2018) and low expectations emphasizing on controlling behavior of the teachers (for eg., Archer & Berger, 2016; Timmermans, 2018) which might lead towards demotivation of the students (see Vibulphol, 2016). It may be noted that this study lends empirical support to previous findings by these researchers regarding teachers' expectations influencing their classroom teaching. However, it does not support the findings and suggestions of previous researchers, such as Wang et al. (2018), that teachers' expectations have a direct effect on their teaching practices, which in turn affect students' motivation, as the findings revealed no moderating effect of teachers' expectations.

This study is also consistent with the findings of previous researchers (Ryan & Patrick, 2001; Nenthien & Loima, 2016), who found that teachers' behavioral aspects, especially their support, encouragement, and unbiased conduct in the classroom, could highly motivate the students. This kind of attitude and behavior of teachers in the classroom develops a sense of belonging among students, and they tend to orient towards mastery goals. Conversely, the current study does not support the findings and suggestions of past researchers (Roeser et al., 1996; Wang et al., 2018; Furrer et al., 2014), who found that, in controlled environments, students tend to develop self-doubt and orient towards performance goals. This clearly indicates that teachers' behavioral engagements, such as helping students who perform well in class and ignoring others, making comparisons, and instilling fear through coercion and punishment, do not orient students toward any goals but rather demotivate them.

The teachers' instructional practices, particularly their behavioral aspects, should allow students to express their opinions and develop a positive mindset in the teaching-learning process. They need to constantly encourage students and help them whenever they face difficulties, so that this can help them develop intellectual capacities and competence. In a classroom context, teachers are expected to play a significant role in determining students' achievement outcomes. As such, the type of classroom environment created by teachers contributes more to academic settings. Therefore, it may be noted that, as much as teachers' expectations affect students' motivation, their teaching practices (about behavioral

engagement) strongly determine the types of goals students may orient toward, such as mastery and performance goal orientations.

The present research provides empirical support for a similar study by Roth & Eyal (2011), which demonstrated that autonomy support from institutional principles or higher authority made teachers highly motivated. In contrast, in a controlling environment, they felt demotivated. Likewise, in a classroom context, teachers' behavioral engagement either motivates or demotivates students. Hence, one can agree that the instructional practices of teachers, especially their behavior and attitude towards students, play a crucial role in the classroom context, as they are directly related to students' academic achievement. As Kunter et al. (2013) argue, the teaching qualities and approachable personalities of teachers are presumed to be critical to students' academic performance; thus, one needs to reflect on important aspects such as proper teacher training and scrutiny in the process of selecting teachers for the teaching profession.

Schools can also contribute to students' all-round development by providing classroom structures that focus on knowing their students well and promote positive student-teacher relationships, where students develop a sense of belonging and feel connected to their schools. This can help not only in the development of cognitive engagement but also in the development of behavioral and emotional engagement among students. Besides teaching, other factors such as teachers' behavior, attitudes, and the relationships they maintain with students, as well as the provision of social and emotional needs, strongly facilitate their achievement motivation and learning (Hammond et al., 2019). As important as learning is, it is also imperative to address students' mental health and emotional needs to support their holistic development. Apart from this, formulating an appropriate curriculum and evaluation by implementing a sound resource policy based on students' needs could be beneficial.

Limitations and questions for future research

Although the present study has provided new findings to the literature, some limitations may be underlined. Given the small sample size, the reasons why teachers exhibit different behaviors towards students in the same classroom can only be speculated. One reason could be that teachers are influenced by many factors in the classroom, such as self-efficacy and personality. Based on the findings of the present research, teachers' expectations are found to

be partially effective in determining their teaching practices. Dweck & Leggett (1988) also argued that personality variables can influence teachers' cognitive and behavioral engagement. However, there is not much evidence to support the findings and suggestions of previous researchers. Therefore, future researchers can take other factors into account, such as teachers' personalities and their influence on instructional practices and students' achievement behavior. (Kim et al., 2019).

The current study did not consider teacher variables such as self-efficacy (which is more salient and is reflected in their teaching), even though it is widely regarded as a strong determinant of teachers' instructional practices. It is believed that teachers' self-efficacy is very critical to their professional identity and work in the classroom (Van Der Want et al., 2019; Hoang, 2018). Besides, in some studies, teachers with high self-efficacy were found to be more confident and to practice autonomy-supportive teaching practices, while those with low self-efficacy often implement controlling teaching practices (Berger et al., 2018; Leroy et al., 2007). Therefore, conducting an additional study on teachers' self-efficacy and its influence on their academic and behavioral engagement in the classroom is considered significant. In addition, many goal theorists and researchers have focused primarily on how students' and teachers' motivation is operationalized through classroom interactions and academic engagement, and on its impact on students' academic performance. However, conducting a study on how teachers' motivation moderates the relationship between teachers' instructional practices and students' achievement motivation will be highly beneficial. Future research examining motivation as a moderating variable in the academic context is highly significant (Ozen, 2017).

Furthermore, the current research employed a quantitative approach, which is not considered very reliable. As such, future researchers can conduct qualitative research and add more insights to the existing literature on students' motivation, the whole teaching-learning process, and how it is operationalized. Although significant research has examined teachers' expectations and their behavioral engagement in class and their effects on students' motivation, it has mostly relied on quantitative methods. Therefore, qualitative research is required to understand why and how students respond differently to teachers' varied expectations and behavioral patterns that directly affect students' academic performance (Johnston et al., 2019). Moreover, qualitative research (longitudinal studies) is needed to gain

in-depth knowledge of students' perceptions of teachers' expectations, how they respond to those expectations, and their further impact on students' achievement outcomes (Roskamp et al., 2018).

While researchers like Anderson and Bourke (2000) agree that questionnaires are useful for research purposes, they also contend that lengthy questionnaires should be avoided, as they do not allow sufficient time to complete them. Another issue concerns the questionnaires not being open-ended, as they do not allow the subjects to give their opinions; therefore, it is imperative to collect their opinions and general views about certain aspects of teaching and learning, even as researchers provide them with structured questionnaires, as this could help the researchers in getting valuable information. Thus, conducting further studies using qualitative methods to examine how factors such as teachers' motivation, expectations, and students' perceptions influence teaching and, in turn, affect students' achievement motivation and learning outcomes will be useful (Roskamp et al., 2018; Ozen, 2017).

Lastly, this study did not take factors like gender into account. Some research has shown that teachers' differential treatment based on gender strongly affects student performance and academic achievement. It would be enriching to examine the moderating effect of teachers' expectations on the relationship between their instructional practices and students' motivation, by gender. In a secondary class, different teachers teach different subjects, so that students might have different experiences in the same classroom. One can argue that it may be due to biased behavior by teachers, which might have been influenced by their gendered expectations of students. Therefore, it is crucial to focus on gender bias among teachers in the classroom and its effects on students' academic achievement. Future researchers conducting a study on factors that affect teachers' expectations, such as gender, and their impact on instructional practices and students' motivation are considered essential (Naz & Dr. Awan, 2011; Berekashvili, 2012).

Additionally, this research revealed a moderating effect for high expectations, but not for low expectations. Even so, it is unclear whether students' goal orientation is affected by differences in how they perceive teachers' expectations and behaviors; this remains an important question for future research. In doing so, future researchers can conduct studies not on a collective basis but on an individual basis and focus on a specific domain. Above all, the relationship between teachers' expectations and students' motivation, and how teachers'

teaching practices mediate this relationship, is another important area of research that needs further investigation. More empirical studies on teachers' expectations (as perceived by students), achievement motivation, and students' learning outcomes are also needed (Wang et al., 2018). Hence, examining the factors influencing teachers' instructional practices, how students perceive them, and their further impact on academic settings is challenging yet central in the teaching-learning context.

Contributions

The current study provides a more complete picture of the associations among teachers' expectations, instructional practices, and students' motivation. It is the first empirical study to contribute to the existing literature on the impact of teachers' expectations on their teaching and the effects on students' goal orientation. Though there have been many studies conducted by some researchers (see Roskamp et al., 2018; Rubie-Davies et al., 2010; Kariuki & Mbugua, 2018) on teachers' expectations and its impact on their teaching and students' motivation, yet the moderating effects of teachers' expectations between their teaching practices and students' motivation remained unexplored. Hence, this study provides clear evidence that teachers' expectations create supportive or controlled environments, depending on the developed mindset regarding students, and that students self-evaluate their academic performance, which is often associated with their achievement goal.

The present study has added further insights to the ongoing research on teachers' factors, such as their expectation levels influencing their own teaching practices, and has given new directions to future researchers. The findings from the current study indicate that autonomy support leads to adaptive motivational outcomes, whereas autonomy control leads to maladaptive motivational and learning outcomes. Therefore, considering the impact of teachers' expectations on students' motivation in their training programmes and how it can be communicated effectively and in a positive way to students is considered essential (Roskampt et al., 2018).

The present study represents the first empirical demonstration of the moderating effects of teachers' expectations on the relationship between their instructional practices and students' motivation, where high expectations are found to be a strong moderating factor. It is therefore argued that teachers need to maintain a positive relationship with students and create a warm

and supportive environment where students get encouraged and motivated to learn and perform well in the academic setting. This study has also contributed to the limited body of research on the relationship between teachers' instructional practices and students' motivation. Furthermore, it has posed a challenge for future researchers to investigate the various teacher factors affecting their instructional practices by examining self-efficacy as a moderating variable. In the study by Van Der Want et al. (2019), it was shown that teachers' self-efficacy is often influenced by their interpersonal relationships with their students, which strongly affects their motivation and work engagement. Yet, some researchers, such as Tastan et al. (2018), have demonstrated that teachers' self-efficacy has a direct connection with the motivation and classroom teaching and learning of students and teachers as well.

Conclusion

In a classroom situation, many factors play a vital role in the teaching-learning process. Nevertheless, what one needs to focus more on is not what is being taught but how it is being taught. Prior research has shown that students' perceptions of the classroom environment, as represented by teachers, have a significant impact on students' achievement motivation. Some researchers, such as Roeser et al. (1996), Vibulphol (2016), etc., opined that differential treatment of students in the same class tends to demotivate them. The existence of this form of biasness, prejudice, making comparisons between students etc. could be due to different social and cultural aspects like socio-economic status, ethnicity (Zhang et al., 2005; Shepherd, 2011; Paino & Renzull, 2013; Timmermans et al., 2015), gender (e.g. Holder & Kessels, 2017; Ready & Chu, 2015; Berekashvili, 2012, etc.), teaching experiences of the teachers (Berger et. al., 2018). While regular support and encouragement from teachers lead students towards high motivation, making comparisons and giving some preference while ignoring others might demotivate them. Therefore, developing appropriate, high expectations for all students without any differences or prejudice, and providing equal support to help them achieve their goals, is deemed important (Wang et al., 2018).

Effective teachers should have high expectations and construct a classroom atmosphere where students perceive messages from teachers as positive, such as warm, understanding, and supportive, as this could highly motivate them. Teachers' expectations are reflected in their teaching behaviors, which in turn alter students' behaviors and attitudes. To conclude, in the academic context, motivating students is considered an important feature of classroom

teaching; hence, teachers need to understand the effects their expectations can have on students' motivation and how students perceive them, and this needs to be communicated positively.

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References

Alkharusi, H. (2010). Literature review on achievement goals and classroom goal structure: Implications for future research. *Electronic Journal of Research in Educational Psychology,* Vol. 8(3), pp. 1363-1386, ISSN: 1696-2095

Ames, C., & Archer, J. (1988). Achievement goals in the classroom: students' learning strategies and motivation process. *Journal of Educational Psychology, American Psychological Association,* Vol. 80, No. 3, pp. 260–267.

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology,* Vol. 84, No. 3, pp. 261–271.

Archer, J., & Berger, N. (2016). School socio-economic status and student socio-academic achievement goals in upper secondary contexts. *Soc Psychol Educ,* Vol. 19, pp. 175-194.

Bandura, A. (1994). Self-efficacy. In V.S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71–81). New York: Academic Press. (Reprinted in H. Friedman (Ed.), *Encyclopedia of mental health.* San Diego: Academic Press, 1998.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, American Psychological Association,* Vol. 51, No. 6, pp. 1173–1182.

Berekashvili, N. (2012). The role of gender-biased perceptions in teacher-student interaction. *Psychology of Language and Communication,* Vol. 16, No. 1, pp. 39–52, DOI: 10.2478/v10057-012-0004-x.

Berger, J.L., Girardet, C., Vaudroz, C., & Crahay, M. (2018). Teaching experience, teachers' beliefs, and self-reported classroom management practices: A coherent network. *SAGE,* pp. 1–12, DOI: 10.1177/2158244017754119.

Bieg, S., Backes, S., & Mittag, W. (2011). The role of intrinsic motivation for teaching, teachers' care, and autonomy support in students' self-determined motivation. *Journal of Educational Research Online,* Vol.3, No.1, pp. 122–140.

Blackwell, L.S., Trzesniewski, K.L., & Dweck, C.S. (2007). Implicit theories of Intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development,* Vol. 78, No. 1, pp. 246–263.

Covington, M.V. (2000). Goal, theory, motivation, and school achievement: An integrated review. *Annual Review of Psychology,* Vol. 51, pp. 171–200.

Dan, M., Onu, V.C., Sam, O.A., & Igbo, J.N. (2015). Parent-child relationship motivation to learn and students' academic achievement in mathematics. *International Journal of Research in Applied, Natural and Social Sciences, Impact Journals,* Vol. 3, Issue 9, pp. 87-108.

Dupeyrat, C., & Marine, C. (2005). Implicit theories of Intelligence, goal orientation, cognitive engagement, and achievement: A test of Dweck's model with returning-to-school adults. *Contemporary Educational Psychology,* Vol. 30, pp. 43-59.

Dweck, C.S., & Leggett, E.L. (1988). A Social-Cognitive approach to motivation and personality. *Psychological Review, American Psychological Association,* Vol. 95, No. 2, pp. 256-273.

Dweck, C.S., & Grant, H. (2003). Clarifying achievement goals and their impact. *Journal of Personality and Social Psychology,* Vol. 85, No. 3, pp. 541–553.

Dweck, C.S., Chiu. C.Y., & Hong, Y.Y. (1995). Implicit theories and their role in judgments in reactions: A world from two perspectives. *Psychological Inquiry,* Vol. 6, No. 4, 267–285.

Eccles, J.S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology,* Vol. 53, pp. 109-32

Elliot, A.J., Harackiewicz, J.M., & Barron, K.E. (1998). Rethinking achievement goals: When are they adaptive for college students and why?. *Educational Psychologist,* Vol. 33, No. 1, pp. 1–21.

Elliot, A.J. (2005). A conceptual history of the achievement goal construct. In A.J. Elliot & C.S. Dweck (Eds.), *Handbook of competence and motivation* (pp. 52–72). New York: The Guilford Press.

Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, American Psychological Association,* Vol. 95, No. 1, pp. 148–162.

Furrer, C.J., Skinner, E.A., & Pitzer, J.R. (2014). The influence of teacher and peer relationships on students' classroom engagement and everyday motivational resilience. *National Society for the Study of Education,* Vol. 113, Issue 1, pp. 101–123.

Gbollie, C., & Keamu, H.P. (2017). Student academic performance: The role of motivation, strategies, and perceived factors hindering Liberian junior and senior high school students' learning. *Education Research International,* Article ID 1789084, pp. 1–11.
https://doi.org/10.1155/2017/1789084.

Guvenc, H. (2015). The relationship between teachers' motivational support and engagement versus disaffection. *Educational Sciences: Theory and Practice,* Vol. 15(3), pp. 647-657.
ISSN 1303-0485.

Hardre, P.L., Chen, C.H., Huang, S.H., Chiang, C.H., Jen, F.L., Warden, L. (2006). Factors affecting high school students' academic motivation in Taiwan. *Asia Pacific Journal of Education, Routledge, Taylor & Francis,* Vol. 26, No. 2, pp. 189–207.

Hamid, K., Khan, M.A., Ali, I., & Afzal, H. (2010). A study of university students' motivation and its relationship with their academic performance. *International Journal of Business and Management,* Vol. 5, No. 4, pp. 80–88.

Jonsson, A.C., & Beach, D. (2017). The influence of subject disciplinary studies on students' implicit theories of intelligence and achievement goals in one Swedish upper-secondary school. *Education Inquiry, Routledge, Taylor & Francis Group,* Vol. 8, No. 1, pp. 50–67.
http.//dx.doi.org/10.1080/20004508.2016.1275182.

Jussim, L. (1989). Teacher expectations: Self-fulfilling prophecies, perceptual biases, and accuracy. *Journal of Personality and Social Psychology, American Psychological Association,* Vol. 57, No. 3, pp. 469–480.

Kariuki, M.G., & Mbugua, Z.K. (2018). Influence of teacher-student motivation on academic performance in public secondary schools in Nyeri and Kirinyaga counties, Kenya. *Pedagogical Research,* ISSN: 2468-4929, pp. 1–6. https://doi.org/10.20897/pr/3947.

Kim, M.E., Sheridan, S.M., Kwon, K., & Koziol, N. (2013). Parent beliefs and children's social-behavioral functioning: The mediating role of parent-teacher relationships. *Journal of School Psychology,* Vol. 51, pp. 175–185.

Klassen, R.M., & Chiu, M.M. (2010). Effects of teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology, American Psychological Association,* Vol. 102, No. 3, pp. 741–756.

Kunter, M., Baumert, J., Voss, T., Klusmann, U., Richter, D., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology, American Psychological Association,* Vol. 105, No. 3, pp. 805-820. DOI: 10.1037/a0032583.

Leondari, A., & Gialamas, V. (2002). Implicit theories, goal orientations, and perceived competence: Impact on students' achievement behavior. *Psychology in the Schools, Wiley Periodicals, Inc.,* Vol. 39, No. 3, pp. 279-291. DOI: 10.1002/pits.10035.

Leroy, N., Bressoux, P., Sarrazin, P., & Trouilloud, D. (2007). Impact of teachers' implicit theories and perceived pressures on the establishment of an autonomy-supportive climate—*European Journal of Psychology of Education,* Vol. XXII, NO. 4 pp. 529-545.

Malik, R.H., & Rizvi, A. A. (2018). Effect of classroom learning environment on students' academic achievement in mathematics at secondary level. *Bulletin of Education and Research,* Vol. 40, No. 2, pp. 207–218.

McCoach, D.B., & Cepero, M.C.G. (2009). Educators' implicit theories of Intelligence and beliefs about identifying gifted students. *Univ. Psychol.,* Vol. 8, No. 2, pp. 295–310.

Mensah, E., & Atta, G. (2015). Middle-level students' goal orientations and motivation. *Journal of Education and Training Studies,* Vol. 3, No. 2, pp. 20–33.

Nenthien, S., & Loima, J. (2016). Teachers' motivational methods to support Thai ninth-grade students' motivation and learning in mathematics classrooms. *Journal of Education and Learning,* Vol. 5, No. 2, pp. 250-257. ISSN 1927-5250. E-ISSN 1927-5269.

Nitsche, S., Steuer, G., Fasching, M.S., Dresel, M., & Dickhauser, O. (2013). Relations among teachers' goal orientations, instructional practices, and students' motivation. *Psychology,* Vol. 4, No.7, pp. 572-584.

Ohtani, K., Okada, R., Ito, T., & Nakaya, M. (2013). A multilevel analysis of classroom goal structures' effects on intrinsic motivation and peer modeling: Teachers' promoting interaction as a classroom-level mediator. *Psychology,* Vol. 4, NO. 8, pp. 629–637.

Park, D., Gunderson, E.A., Tsukayama, E., Levine, S.C., & Beilock, S.L. (2016). Young children's motivational frameworks and math achievement: Relation to teacher-reported instructional practices, but not teacher theory of Intelligence. *Journal of Educational Psychology, American Psychological Association,* Vol. 108, No. 3, pp. 300–313.

Patrick, H., & Ryan, A.M. (2008). What do students think about when evaluating their classroom's mastery goal structure? An examination of young adolescents' explanations. *The Journal of Experimental Education,* Vol. 77 (2), pp. 99–123.

Radovan, M., & Makovec, D. (2015). Relations between students' motivation and perceptions of the learning environment. *Journal of C.E.P.S.,* Vol. 5, No. 2, pp. 115-138.

Raufelder, D., & Lazarides, R. (2017). Longitudinal effects of student-perceived classroom support on motivation – A latent change model. *Frontiers in Psychology,* Vol. 8 (417), pp. 1-11.
DOI: 10.3389/fpsyg.2017.00417.

Reeve, J., & Lee, W. (2014). Students' classroom engagement produces longitudinal changes in classroom motivation. *Journal of Educational Psychology, American Psychological Association,* Vol. 106, No. 2, pp. 527–540.

Rissanen, I., Kuusisto, E., Hanhimaki, E., & Tirri, K. (2018). The implications of teachers' implicit theories for moral education: A case study from Finland. *Journal of Moral Education, Routledge, Taylor & Francis Group,* Vol. 47, No.1, pp. 63-77.
https://doi.org/10.1080/03057240.2017.1374244.

Roeser, R.W., Midgely, C., & Urdan, T.C. (1996). Perceptions of the school psychological environment and early adolescents' psychological and behavioral functioning in school: The mediating role of goals and belongings. *Journal of Educational Psychology, American Psychological Association,* Vol. 88, No. 3, pp. 408–422.

Roskamp, C., Goudsblom, J., Eijden, E.V., Stroet, K., & Hornstra, L. (2018). Teacher expectation effects on need-supportive teaching, student motivation, and engagement: A self-determination perspective. *Educational Research Evaluation,* Vol. 24, Nos. 3-5, pp. 324-345.

Rubie-Davies, C.M., Peterson, E., Irving, E., Widdowson, D., Dixon, R. (2010). Expectations of achievement: Student, teacher and parent perceptions. *Research in Education,* No. 83, pp. 36–53, DOI: 10.7227/RIE.83.4.

Ryan, R.M., & Deci, E.L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, American Psychological Association,* Vol. 55, No. 1, pp. 68–78.

Ryan, R.M., & Deci, E.L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology,* Vol. 25, pp. 54–67.
Doi: 10.1006/ceps.1999.1020

Ryan, A.M., & Patrick, H. (2001). The classroom social environment and changes in adolescents' motivation and engagement during middle school. *American Educational Research Journal,* Vol. 38, No. 2, pp. 437–460.

Shim, S.S., Cho, Y., & Cassady, J. (2013). Goal structures: The role of teachers' achievement goals and theories of Intelligence. *The Journal of Experimental Education,* Vol. 81(1), pp. 84–104. ISSN: 0022-0973 print/1940-0683 online
DOI: 10.1080/00220973.2011.635168

Sirin, S.R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research,* Vol. 75, No. 3, pp. 417–453.

Taylor, G., Koestner, R., Talbot, D., Guay, D., Dube, A.R. (2015). The relations between implicit intelligence beliefs, autonomous academic motivation, and school persistence intentions: a mediation model. *Social Psychological Education,* Vol. 18, pp. 255–272. DOI 10.1007/s11218-014-9288-0.

Tastan, S.B., Davoudi, S.M.M., Masalimova, A.R., Bersanov, A.S., Kurbanov, R.A., Boiarchuk, A.V., & Pavlushin, A.A. (2018). The impact of teachers' efficacy and motivation on students' academic achievement in science education among secondary and high school students. *EURASIA Journal of Mathematics, Science and Technology Education*, Vol. 14 (6), pp. 2353–2366. ISSN: 1305–8223 (online) 1305–8215 (print).

Timmermans, A.C., Boer, H., & Van Der Werf, M.P.C. (2018). The effects of teacher expectation interventions on teachers' expectations and student achievement: A narrative review and meta-analysis. *Educational Research and Evaluation,* Vol. 24, Nos. 3-5, pp. 180–200.

Toksoy, S., & Acar, F.E. (2019). The influence of teacher expectancy improvement strategies on student attitude and achievement in English courses (An action research sample). *Education Sciences,* Vol. 9(20), pp. 1–16. DOI:10.3390/edusci9010020.

Van Der Want, A.C., Brok, P.D., Beijaard, D., Brekelmans, M., Claessens, L.C.A., & Pennings, H.J.M. (2019). The relation between teachers' interpersonal role identity and their self-efficacy, burnout, and work engagement. *Professional Development in Education, Routledge, Taylor & Francis Group,* Vol. 45, No. 3, pp. 488-504. https://doi.org/10.1080/19415257.2018.1511453.

Vibulphol, J. (2016). Students' motivation and learning and teachers' motivational strategies in English classrooms in Thailand. *English Language Teaching,* Vol. 9, No. 4, pp. 64–75.

Wang, J.C.K., Liu, C.W., & Chye, S. (2010). Achievement goals, implicit theories and behavioral regulation among polytechnic engineering students. *The International Journal of Research and Review,* Vol. 5, Issue 2, pp. 1–17.

Wang, S., Rubie-Davies, C., & Meissel, K. (2018). A systematic review of the teacher expectation literature over the past 30 years. *Educational Research and Evaluation,* Vol. 24, Nos. 3-5, pp. 124–179.

Wentzel, K.R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology, American Psychological Association,* Vol. 90, No. 2, pp. 202–209.

Wigfield, A., & Wentzel, K.R. (1998). Academic and social motivational influences on students' academic performance. *Educational Psychology Review,* Vol. 10, No. 2, pp. 155–175.

Wong, T.K.Y., Tao, X., & Konishi, C. (2018). Teacher support in learning: Instrumental and appraisal support in relation to math achievement. *Issues in Educational Research,* 28(1), pp. 202–219.

Yilmaz, E., Sahin, M., & Turgut, M. (2017). Variables affecting student motivation based on academic publications. *Journal of Education and Practice*, Vol. 8, No. 12, pp. 112-120.

ISSN 2222-1735. ISSN 2222-288X.

Zhang, J., Kuusisto, E., & Tirri, K. (2017). How teachers' and students' mindsets in learning have been studied: Research findings on mindset and academic achievement. *Psychology,* Vol. 8, No. 3, pp. 1363-1377. ISSN Online: 2152-7199, ISSN Print: 7152-7180.

Zyngier, D., & Saeed, S. (2012). How motivation influences student engagement: A qualitative study. *Journal of Education and Learning,* Vol. 1, No. 2, pp. 252-267. ISSN 1927-5250.

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