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# The influence of teachers' self-efficacy on perceptions: Perceived teacher competence and respect and student effort and achievement

Angela D. Miller [a, *], Erin M. Ramirez [a, 1], Tamera B. Murdock [b]

[a] George Mason University, United States
[b] University of Missouri-Kansas City, United States

## HIGHLIGHTS

- Teacher and student perceptions are crucial to understanding classroom processes.
- Teacher self-reported efficacy is related to student perceptions of teacher traits.
- Teacher efficacy interacts with class difficulty to predict teachers' perceptions.
- Higher efficacy teachers rate remedial students as increasing in effort.

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## ABSTRACT

In the current study the authors examine how teachers' self-reported level of self-efficacy influences students' perceptions of two aspects of the instructional environment, perceived teaching competence and perceived teacher respect. The relationship of teacher self-efficacy to teachers' perceptions of their students' achievement and effort is also considered. Data were collected at two time points from 51 teachers and 427 students in high school mathematics and science classrooms. A series of multi-level models found that teaching self-efficacy and course level were significantly associated with students' perceived teacher competence and perceived teacher respect as well as teachers' ratings of student characteristics.



Teacher sense of efficacy is a critical component to successful classrooms and ranks as a significant teacher characteristic associated with instructional quality and student achievement (Guo, Connor, Yang, Roehrig, & Morrison, 2012; Tucker et al., 2005). Accordingly, it is one of the most studied aspects of the classroom context. Teacher self-efficacy has been shown to positively affect teachers' beliefs about teaching and behaviors (Cho & Shim, 2013; Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfok-Hoy, 2001); thereby influencing the classroom instruction and ultimately affecting student outcomes (Zee & Koomen, 2016). More specifically, high teacher self-efficacy has been found to be related to higher end of the year goals for students, positive teacher practices and policies used in the classroom, and innovative classroom methods (Caprara, Barbaranelli, Steca, & Malone, 2006; Evers, Brouwers, & Tomic, 2002).

The first aim of this paper is to better understand how variations in teachers' reported level of self-efficacy influence students' perceptions of two aspects of the instructional environment, perceived teaching competence, and perceived respect. Teacher self-efficacy has an additional potential impact on classrooms as the lens through which teachers view their students. Teachers' views of student motivation will influence the expectations that they have for their students and influence a teacher's interactions with her students. The second goal of the present study is therefore to examine teachers' self-efficacy in relationship to their perceptions of their students' achievement and effort.

## 1. Theoretical framework

The primary conceptual framework of this study is Bandura's social cognitive theory (1986) which defines teacher self-efficacy as

* Corresponding author. George Mason University, West Building 2007, 4400 University Drive MS 6D2, Fairfax, VA 22030, United States.
*E-mail address:* amille35@gmu.edu (A.D. Miller).
[1] Present Address: California State University-Monterey Bay.

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a teacher's belief to execute a specific task and achieve a specific outcome (Tschannen-Moran, Woolfolk-Hoy, & Hoy, 1998). Furthermore, social cognitive theory also encompasses one of the major theories of student achievement motivation, achievement goal theory (Ames & Archer, 1988; Dweck, 1986) from which we also draw for this study. Bandura's (1986) social cognitive theory explains one's actions through triadic reciprocal determinism, or the idea that personal factors (e.g., cognitive, affective), behavior, and the environment influence one another in a shared manner. According to social cognitive theory, what people think, believe, and feel, impacts how they behave, and these behaviors both influence and are influenced by an individual's personal factors and the environment. In the classroom learning environment, it is these reciprocal interactions that are key to understanding the complex relationship between teacher and students.

Achievement goal theory which posits that goals are regulators of behavior (Ames, 1992; Dweck, 1986), considers both student personal factors (e.g., achievement goals) and the environment (e.g., perceived goal structures) in a social cognitive explanation of student motivation. These two sets of concepts within achievement goal theory, *classroom goal structures* and *personal goal orientations*, are defined in terms of mastery (e.g., increasing ability) and performance (e.g., demonstrating ability) goals. Personal goal orientations are preferred or adopted behavior patterns used by students in learning situations, whereas classroom goal structures are those structures within the classroom that make different goals salient to the student (Ames, 1992; Ames & Archer, 1988). Achievement goal structure measures can be assessed via students' perceptions of teachers' instructional behaviors conveying the reciprocal determinism of social cognitive theory by examining these perceptions in relationship to behavior outcomes. For example, perceived mastery goals have been found to predict achievement (Roeser & Eccles, 1998), help-seeking (Ryan, Gheen, & Midgley, 1998), and cognitive strategy use (Anderman & Young, 1994). Perceived performance goals have been linked to academic cheating (Anderman & Midgley, 2004) and self-handicapping (Urdan, 2004). This emphasis on perceptions of the classroom environment in making goals more salient for students reinforces the importance of the teacher and teachers' beliefs and behaviors in the learning process.

Consequently, in the classroom environment there are many facets of social cognitive theory at work. Teachers' self-efficacy beliefs influence their behaviors; students' perceptions of these behaviors will in turn influence their behaviors according to social cognitive theory. Moreover, teachers' views of their own students may influence and be influenced by their personal beliefs which also contributes to the learning environment.

### 1.1. Teacher self-efficacy and teacher behaviors

Teacher self-efficacy has been associated with instructional quality and student support (Guo, Dynia, Pelatti, & Justice, 2014; Holzberger, Philipp, & Kunter, 2013). For example, teachers with higher self-efficacy beliefs are more likely to develop challenging lessons, and teach in a variety of ways to promote student learning (Deemer, 2004; Tschannen-Moran et al., 1998). Teaching self-efficacy beliefs also alter how much effort a teacher puts forth, how long they will persevere when confronting obstacles, and how resilient they are in the face of challenges (Pajares, 1996; Tschannen-Moran et al., 1998; Woolfolk-Hoy & Burke-Spero, 2005). Additionally, teachers with high self-efficacy beliefs are more likely to: (a) implement curriculum innovations, (b) use classroom management and instructional methods that encourage student autonomy, (c) manage classroom problems effectively, (d) keep students on task, and (e) have fruitful collaborative relationships with colleagues and parents that contribute to sustained work satisfaction and higher teacher retention (Betoret, 2006; Caprara et al., 2006; Chan, 2006).

Further, increased levels of teaching self-efficacy have been associated with more mastery-oriented approaches to instruction and higher expectations for students (Cho & Shim, 2013; Midgley, Anderman, & Hicks, 1995; Wolters & Daugherty, 2007). More specifically, Deemer (2004) found a significant positive influence of teacher self-efficacy on mastery instructional practices; suggesting that teachers with more confidence in their teaching create classrooms that focus on student learning and effort. Most importantly, this relationship between teacher self-efficacy and classroom behaviors means that teachers with higher sense of efficacy provide more effective classroom instruction resulting in higher student motivation and achievement.

Teachers' self-efficacy has also been shown to predict the quality of the relationships teachers have with their students and the type of classroom environment they provide; both of which can influence student outcomes. Teachers with higher self-reported self-efficacy are more positive and responsive to students (Gibson & Dembo, 1984) and promote positive classroom environments as measured by student perceptions of instructional behaviors (Holzberger, Philipp, & Kunter, 2014). The provision of emotional support can influence students' behaviors, leading to a better learning environment for all (Bru, Stephens, & Torsheim, 2002; Sakiz, Pape, & Woolfolk-Hoy, 2012). Studies have shown that classroom practices promoting warm teacher-student relationships have been associated with positive student outcomes (Connor, Son, Hindman, & Morrison, 2005; Hamre & Pianta, 2005). In particular, students' perceptions of their teachers' warmth, responsiveness, and sensitivity predicted gains in children's early language and literacy skills (Connor et al., 2005; Pianta, La Paro, Payne, Cox, & Bradley, 2002). Thus, teacher self-efficacy impacts the type of learning environment a teacher provides which influences student achievement.

#### 1.1.1. Student perceptions

Although prior literature has linked teacher self-efficacy to both teachers' behaviors and their relationships with students which in turn influence students' behaviors and achievement, little has been examined about the effects of teachers' efficacy from the perspective of the student. Delineating this link is important to understanding how teachers' self-assessment influence students' experience of the classroom. The current study examines the relationship between teacher self-efficacy and student perceptions of competence and respect. Given the documented associations between higher teacher self-efficacy and more effective instructional and relationship-building behaviors, we anticipate that teachers with higher self-efficacy will be identified by students as more competent and more respectful.

Perceived teacher respect, although rarely directly investigated is frequently included within a broader definition of pedagogical caring. This includes a teacher's social support for students evident through democratic interactions, recognizing individual differences in the context of student expectations, and constructive feedback (Wentzel, 1997). In her study, Wentzel qualitatively examined the students' definitions of caring teachers and concluded that there were both interpersonal and instructional interaction differences between caring and non-caring teachers as defined by students. She found that higher levels of supportive behaviors of teachers resulted in more student effort and greater interest in school. Caring teachers were more democratic, more willing and able to help student learn, and were better models of good teaching while being more fair, honest, and equitable in classroom interactions with students. Respectful environments have also been associated with student engagement and self-regulation strategies (Patrick,