

## Department of Applied Psychology

# Applied Psychology OPUS

## **The Effects of Teacher-Student Relationships: Social and Academic Outcomes of Low-Income Middle and High School Students**

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Teachers play an important role in the trajectory of students throughout the formal schooling experience (Baker, Grant, & Morlock, 2008). Although most research regarding teacher-student relationships investigate the elementary years of schooling, teachers have the unique opportunity to support students' academic and social development at all levels of schooling (Baker et al., 2008; Bronfenbrenner, 1979; Bronfenbrenner & Morris, 1998; McCormick, Cappella, O'Connor, & McClowry, in press). Aligned with attachment theory (Ainsworth, 1982; Bowlby, 1969), positive teacher-student relationships enable students to feel safe and secure in their learning environments and provide scaffolding for important social and academic skills (Baker et al., 2008; O'Connor, Dearing, & Collins, 2011; Silver, Measelle, Armstron, & Essex, 2005). Teachers who support students in the learning environment can positively impact their social and academic outcomes, which is important for the long-term trajectory of school and eventually employment (Baker et al., 2008; O'Connor et al., 2011; Silver et al., 2005).

When teachers form positive bonds with students, classrooms become supportive spaces in which students can engage in academically and socially productive ways (Hamre & Pianta, 2001). Positive teacher-student relationships are classified as having the presence of closeness, warmth, and positivity (Hamre & Pianta, 2001). Students who have positive relationships with their teachers use them as a secure base from which they can explore the classroom and school setting both academically and socially, to take on academic challenges and work on social-emotional development (Hamre & Pianta, 2001). This includes, relationships with peers, and developing self-esteem and self-concept (Hamre & Pianta, 2001). Through this secure relationship, students learn about socially appropriate behaviors as

well as academic expectations and how to achieve these expectations (Hamre & Pianta, 2001). Students in low-income schools can especially benefit from positive relationships with teachers (Murray & Malmgren, 2005).

Students in high-poverty urban schools may benefit from positive teacher-student relationships even more than students in high-income schools, because of the risks associated with poverty (Murray & Malmgren, 2005). Risk outcomes associated with poverty include high rates of high school dropout, lower rates of college applications, low self-efficacy, and low self-confidence (Murray & Malmgren, 2005). There are several factors that can protect against the negative outcomes often associated with low-income schooling, one of which is a positive and supportive relationship with an adult, most often a teacher (Murray & Malmgren, 2005). Low-income students who have strong teacher-student relationships have higher academic achievement and have more positive social-emotional adjustment than their peers who do not have a positive relationship with a teacher (Murray & Malmgren, 2005).

There is substantial research on the importance of teacher-student relationships in the early elementary years (Pianta, 1992; Hamre & Pianta 2001). However, little is known about the effects of teacher-student relationships on high school students. Studies show that early teacher-student relationships affect early academic and social outcomes as well as future academic outcomes (Pianta 1992; Hamre & Pianta 2001), but few researchers have looked at the effects of teacher-student relationships in later years of schooling. Researchers who have investigated teacher-student relationships for older students have found that positive teacher-student relationships are associated with positive academic and social outcomes for high school students (Alexander, Entwisle, & Horset, 1997; Cataldi & KewallRamani, 2009).

### **Academic Outcomes**

Although many studies focus on the importance of early teacher-student relationships, some studies have found that teacher-student relationships are important in transition years; the years when students transition from elementary to middle school or middle to high school (Alexander et al., 1997; Cataldi & KewallRamani, 2009; Midgley, Feldlaufer, & Eccles, 1989). Studies of math competence in students transitioning from elementary to middle school have found that students who move from having positive relationships with teachers at the end of elementary school to less positive relationships with teachers in middle school significantly decreased in math skills (Midgley et al., 1989). For students who are considered at high risk for dropping out of high school, math achievement is significantly impacted by the perception of having a caring teacher (Midgley et al., 1989). Furthermore, students who went from low teacher closeness to high teacher closeness significantly increased in math skills over the transition year, from elementary to middle school (Midgley et al., 1989). These studies show that relationships with teachers in the later years of schooling can still significantly impact the academic achievement trajectories of students (Midgley et al., 1989).

Another example of the importance of teacher-student relationships in high school students stems from intervention studies aimed at improving academic outcomes for low-income students (Murray & Malmgren, 2005). In one intervention study that aimed to increase positive relationships between low-income high school students and their teachers, results showed that students who participated in the intervention significantly improved their GPA over the course of five months (Murray & Malmgren, 2005). Such research shows that positive teacher-student relationships can improve academic skills in students as early as middle school and as late as high school (Midgley et al., 1989; Murray & Malmgren, 2005). In addition to positive teacher-student relationships, students' motivation to learn is another factor that influences social and academic outcomes.

A possible reason for the association between academic improvement and positive teacher-student relationships is students' motivation and desire to learn (Wentzel, 1998). Motivation may play a key role in the relationship between teacher-student relationships and academic outcomes (Bandura, 1997; Fan & Willams, 2010; Pajares & Graham, 1996; Ryan, Stiller, & Lynch, 1994; Wentzel, 2003; Zimmerman, Bandura, & Martinez-Pons, 1992). Motivational theorists suggest that students' perception of their relationship with their teacher is essential in motivating students to perform well (Bandura, 1997; Fan & Willams, 2010; Pajares & Graham, 1996; Ryan, Stiller, & Lynch, 1994; Wentzel, 2003; Zimmerman, Bandura, & Martinez-Pons, 1992). Students who perceive their relationship with their teacher as positive, warm and close are motivated to be more engaged in school and to improve their academic achievement (Hughes, Cavell, & Jackson, 1999). Students' motivation to learn is impacted positively by having a caring and supportive relationship with a teacher (Wentzel, 1998).

Motivation is closely linked to student's perceptions of teacher expectations. Studies of middle and high school students have shown that students shape their own educational expectations from their perceptions of their teachers' expectations (Muller, Katz, & Dance, 1999). Students who perceive that their teachers have high expectations of their academic achievement are more motivated to try to meet those expectations and perform better academically than their peers who perceive low expectations from their teachers (Muller et al., 1999). Due to the influence of expectations on motivation, expectations can be an important factor on a students' academic achievement.

Furthermore, teacher-student relationships have an impact on the academic self-esteem of students (Ryan et al., 1994). High-poverty students often have low academic self-esteem and low confidence in their academic and vocational futures (Wentzel, 2003). Thus, positive relationships with teachers are important in supporting higher levels of self-esteem, higher academic self-efficacy, and more confidence in future employment outcomes (Ryan et al., 1994; Wentzel, 2003). Self-confidence and future aspirations have a significant impact on students' interest in school, their academic self-efficacy and in turn, their academic achievement (Wentzel, 2003). In addition to academic achievement, positive teacher-student relationships provide important social outcomes for students.

### **Social Outcomes**

Although there is more research regarding the academic effects of positive teacher-student relationships for older students, there are notable social outcomes as well. Teachers are an important source of social capital for students (Muller, 2001). Social capital in a classroom setting is defined as caring teacher-student relationships where students feel that they are both cared for and expected to succeed (Muller, 2001). Social capital from positive teacher-student relationships can manifest itself in many different ways. For high school students, positive teacher-student relationships can reduce rates of dropping out by nearly half, help explore options for college, and provide support for further academic or vocational aspirations (Dika & Singh, 2002). Common reasons for dropping out include low levels of family support, low academic achievement, poor relationships with peers and adults, and low interest in academics (Henry, Knigh, & Thornberry, 2012). Positive teacher-student relationships can impact students social and academic outcomes, and thus reduce drop-out rates (Dika & Singh, 2002; Wentzel, 2003). Low-income students often have neither the support they need to complete high school nor access to the information they need to pursue education beyond high school (Dika & Singh, 2002). It is important for low-income students who experience academic difficulties and negative social outcomes to gain social capital from their teachers, because research shows they can benefit from the guidance and support (Croninger & Lee, 2001). Further, teacher-student relationships can impact peer relationships in schools.

Teacher-student relationships can have a significant effect on the peer acceptance of students. Teachers' interactions with students can affect classmates' perceptions of individual students, in turn affecting which students classmates choose to interact with and accept (Hughes et al., 1999). Conflicting interactions between teachers and students may convey a lack of acceptance, causing other students to also reject the student involved in the conflict with the teacher (Hughes et al., 1999). Peer rejection significantly impacts self-esteem of students leading to several negative social outcomes (Hughes et al., 1999).

As mentioned earlier, students with high self-esteem are more likely to be self-efficacious and set higher goals (Ryan et al., 1994; Wentzel, 2003). Self-esteem also affects students socially (Orth, Robins, & Widaman, 2012). Students with high self-esteem are more likely to have positive relationships with peers as well as with adults (Orth et al., 2012). Self-esteem also affects students' mental health outcomes including reducing anxiety and symptoms of depression (Orth et al., 2012). Self-esteem is especially important during adolescence and helps students develop a positive sense of self (Orth et al., 2012). A positive sense of self in adolescence leads to future outcomes including relationship satisfaction, job satisfaction, occupational status, emotional regulation, and physical health (Orth et al., 2012). The support of positive teacher-student relationships for self-esteem and related social outcomes affects students during schooling as well as in their future educational and occupational outcomes (Orth et al., 2012).

## Conclusion and Limitations

Although there is extensive research on the positive effects of teacher-student relationships on elementary school students, there is little research on middle and high school students. Middle and high school is when students begin to think about their academic futures, which are informed by academic achievement and social capital in elementary years (Alexander et al., 1997; Cataldi & KewallRamani, 2009; Dika & Singh, 2002; Muller, 2001). Early high school is usually when students dedicate themselves to graduating or decide to drop out (Henry et al., 2012). Currently, high school dropout rates are high, and improving teacher-student relationships for students at this stage may decrease dropout rates (Henry et al., 2012). Similarly, high school is when students decide if they plan to attend college or stop their education (Alexander et al., 1997; Cataldi et al., 2009; Henry et al., 2012). Therefore, it is important to develop positive teacher-student relationships during this time.

Empirical evidence does show that teacher-student relationships are very important for high school students (Alexander et al., 1997; Cataldi et al., 2009; Dika & Singh, 2002; Hughes et al., 1999; Midgley et al., 1989; Ryan et al., 1994; Wentzel, 2003). Studies that have investigated older students' relationships with teachers have found that students improve both academically and socially from positive teacher-student relationships (Alexander et al., 1997; Cataldi et al., 2009; Dika & Singh, 2002; Hughes et al., 1999; Midgley et al., 1989; Ryan et al., 1994; Wentzel, 2003). However, much of this research is dated. Due to the ever-changing nature of the American educational system and the increasingly diverse student body, more current studies are needed to look at the effects of teacher-student relationships for this changing population. It is important to learn more about teacher-student relationships for low-income students to decrease high school dropout, and improve students' social-emotional development. Conducting research on the relationship between high school students and teachers may be essential in improving the outcomes of low-income middle and high school students, and can potentially inform future interventions to help older students perform better both academically and socially.

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