

THE RELATIONSHIP BETWEEN SCHOOL BURNOUT AND PERCEIVED TEACHER
SUPPORT IN HIGH SCHOOL MALE STUDENTS

by

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Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

The purpose of this quantitative correlational research study is to determine if perceived teacher support predicts school burnout in male high school students. High school males from four private high schools in eastern North Carolina and southeast Virginia participated in the study. The predictor variables were overall perceived teacher support, as well as four subcategories (i.e., invested, positive regard, expectations, and accessible) of perceived teacher support. Data was collected by utilizing student surveys to measure each of the variables. The Teacher Support Scale measured perceived teacher support, and the School Burnout Inventory measured school burnout among the high school males. A multiple regression was conducted, and the analysis determined that a statistically significant predictive relationship exists between the predictor variable (perceived teacher support) and the criterion variable (school burnout). The results also indicate that school burnout can be predicted by male students' perception of the level of closeness between them and their teachers.

Keywords: teacher support, school burnout, gender achievement gap, male students

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List of Abbreviations

School Burnout Inventory (SBI)

Self-Determination Theory (SDT)

Teacher Support Scale (TSS)

Variance Inflation Factor (VIF)

CHAPTER ONE: INTRODUCTION

Overview

Male students can be the most challenging group of students for teachers to engage academically and manage behaviorally. The academic challenge with teaching boys is evidenced by a persistent gender achievement gap that extends world-wide (Stoet & Geary, 2015; Voyer & Voyer, 2014). Research in teacher perceptions indicate the behavioral challenges that abound as teachers work with their male students (Frawley, McCoy, Banks, & Thornton, 2014; Marcenaro–Gutierrez, Lopez–Agudo, & Ropero–García, 2018; Vecchione, Alessandri, & Marsicano, 2014). Educators have explored various strategies for engaging boys in school and promoting academically beneficial behaviors, and the most consistent interventions for improving male students have involved strengthening teacher-student relationships (Katz, 2017). Teachers can provide the type of social support that males students need to stay motivated in school and persevere when learning challenges emerge. Social supports exist as a critical component for helping students avoid acquiring the school burnout syndrome – overwhelming exhaustion and feelings of inadequacy (Kurtz, Bui, & Tangari, 2007; Robins, Roberts, & Sarris, 2015).

School burnout is a relatively new concept being studied in educational research, and studies about high school student burnout are especially rare (Kim, Jee, Lee, Lee, & An, 2018; Parker & Salmela-Aro, 2011). Adding gender effects to the topic is even more infrequent. The body of research about teacher-student relationships is extensive, and researchers have considered many variables on the topic, but the body of research concerning the relationship between school burnout and teacher support leaves unexplored variables for future research. *School burnout* refers to the tendency for students to become less motivated as a result of feeling

emotionally exhausted with their school work, cynical about the importance of their academics, and a sense of inadequacy about their abilities (Fiorilli, De Stasio, Di Chiacchio, Pepe, & Salmela-Aro, 2017; Mehdinezhad, 2015). *Teacher support* refers to the measures taken to meet students' innate psychological needs as they are explained in self-determination theory (Deci & Ryan, 2004). In the modified Teacher Support Scale (one of the instruments used in this study), teacher support has been framed by four categories: the invested factor, the positive regard factor, the expectations factor, and the accessibility factor (McWhirter, Rasheed, & Crothers, 2000). This chapter provides an overview of the historical, social, and theoretical background in the literature about engaging boys academically and addressing school burnout. The problem statement and purpose statement will be defined as related to preventing school burnout among male students by improving teacher support. This chapter includes the significance of the study, the research question, and the defining of key terms.

Background

Motivating male students to stay academically engaged presents certain gender-specific challenges for teachers. Engaging male students in the adolescent stage presents an especially specific set of challenges (Consuegra & Engels, 2016; Koomen & Jellesma, 2015; Marcenaro–Gutierrez et al., 2018). Teachers generally consider males to be the more difficult gender to instruct academically and manage behaviorally (Bugler, McGeown, & Clair-Thompson, 2016; Frawley et al., 2014; Heyder & Kessels, 2015; Vecchione et al., 2014). As educators have sought to engage boys and employ male-friendly practices, achievement gaps have stubbornly persisted over the past decade. The National Center for Education Statistics (2017) reports little improvement in the gender achievement gaps among fourth, eighth, and twelfth grade students in all six subjects assessed – mathematics, reading, civics, science, geography, and economics. The

consequences of low school engagement extend beyond a mere loss of academic learning; outcomes are connected to deleterious behavior that can affect students' emotional and physical health (Dagnew, 2017; Frawley et al., 2014; Walburg, Moncla, & Mialhes, 2015). In addition, students who experience school burnout in high school are likely to possess the same traits in early adulthood (Tuominen-Soini & Salmela-Aro, 2014). These detrimental effects highlight the need for educators to explore interventions for preventing school burnout.

Historical Background

The history of burnout research began in the workplace with the intention of exploring how interpersonal dynamics contribute to burnout, influence its causes, and indicate possible interventions for those trying to handle overwhelming stress (Maslach, 2003). Burnout in the workplace has been widely associated with emotional exhaustion, depersonalization, and inefficacy (Ates, 2016; B. Kim et al., 2018; R. T. Lee & Ashforth, 1990). When stress from the demands of work becomes emotionally insurmountable and one becomes unable to properly cope with the stress, burnout syndrome emerges (Durmuş, Aypay, & Aybek, 2017). Just as professionals face challenges at work and become vulnerable to burnout, students may also face the same emotional obstacles as they approach the demands of their "work." Shin, Puig, Lee, Lee, and Lee (2011) equated the demands that employees face in the workforce to the demands of school, such as going to class, completing assignments, and studying for tests. Other researchers have discovered that burnout exists as a legitimate problem for students, not just those in the professional sector (Y. Chang & Chan, 2015; Noh, Shin, & Lee, 2013; Salmela-Aro, Kiuru, & Leskinen, 2009). School burnout was previously believed by some to be synonymous with depression or strain, rather than a valid syndrome (R. T. Lee & Ashforth, 1990).

Over the past few decades, researchers have come to understand the issue of school burnout as a multifaceted issue with clearly defined factors that contribute to the syndrome (B. Kim et al., 2018; Maslach, 2003; Parker & Salmela-Aro, 2011; Taris, Blanc, Schaufeli, & Schreurs, 2005). School burnout factors explored by researchers mostly concern reasons why students experience burnout and social supports that can potentially diminish or prevent burnout (B. Kim et al., 2018; Walburg, 2014). Emotional exhaustion from the demands of school (Noh et al., 2013; Taris et al., 2005) and an inability to properly cope with the emotional stress is considered a starting point for school burnout (Gan, Shang, & Zhang, 2007). Cynicism about school and feelings of inefficacy significantly relate to emotional exhaustion, leading researchers to define school burnout as a three-dimensional phenomenon (Bask & Salmela-Aro, 2013; Salmela-Aro et al., 2009). Repeated failure, whether valid or incorrectly perceived, and the lack of personal accomplishment have also been explored as a cause (Taris et al., 2005). As students experience a lack of progress over a long period of time, cynicism and inefficacy increase with emotional exhaustion (Parker & Salmela-Aro, 2011; Taris et al., 2005).

Social supports are resources (Wilkerson & Bellini, 2006) that can be utilized to mitigate the effects of school burnout or prevent it altogether. Researchers have approached social supports from two different perspectives – a buffering effect and a direct effect. Cohen and Wills (1985) presented the buffering hypothesis, in which social supports protect one from the harmful effects of stressors. For example, support from teachers, parents, and peers significantly relates to school attendance and achievement; and those social supports have a negative association with school burnout (Virtanen, Lerkkanen, Poikkeus, & Kuorelahti, 2018). Cohen and Wills (1985) explored a direct-effect model in which social supports benefit students when there is no occurrence of an elevated stress level. For example, this effect applies to the way

parents can support or undermine students' emotional well-being. Caring parents with an overprotective approach can bring stress upon their children that results in exhaustion, thereby causing exhaustion even when no prior stress was present (Shih, 2014).

The role of teachers as a social support has been explored as a potent means for decreasing school burnout. Chu, Saucier, and Hafner (2010) found teacher and school support to be a greater support than parental support. Establishing a positive classroom environment alone offers students a supportive network for coping with school stress to deter burnout (Shih, 2014). When Salmela-Aro, Kiuru, Pietikäinen, and Jokela (2008) measured students' perceptions of teacher motivation and overall school climate, they found that students' positive perceptions related to lower school burnout levels.

Social Background

On a social level, burnout applies broadly to the workplace, including school-related professions. This topic of study originated as researchers explored causes and possible interventions for burnout in the workplace (R. T. Lee & Ashforth, 1990). As burnout syndrome has been applied in recent years to the school setting, research has centered on the pressures of schoolwork and the ways students react to school stress.

Becoming a high school dropout is potentially the worst consequence of school burnout, given the long-term effects vocationally and socially (Bask & Salmela-Aro, 2013). High school dropouts are more likely to be unemployed or make lower salaries than their contemporaries with a high school degree (Freeman & Simonsen, 2015). In the social context, dropout rates need to be minimized because high school graduates contribute to making local communities better. Communities with high graduation rates enjoy less income inequality, greater family stability, and higher levels of social-community involvement (Chetty, Hendren, Kline, & Saez, 2014).

Understanding the cause for dropping out of high school begins by examining emotional weaknesses that lead to disengagement (Bask & Salmela-Aro, 2013). The more students disengage emotionally and demonstrate problematic behavior at school, the more likely they are to become high school dropouts (Wang & Fredricks, 2014). Emotional disengagement exhibits itself throughout a lack of motivation to work, thereby increasing the dropout rates (Fiorilli et al., 2017).

Researchers have identified other factors, beyond decreasing dropout rates, that provide impetus for making efforts to decrease student burnout. Specifically, improper reactions to school stress and ineffective coping strategies to stress include alcohol use (Shippee & Owens, 2011), truancy (Virtanen et al., 2018), and substance abuse (Walburg et al., 2015). Student burnout has also been significantly related to mental health conditions (Walburg, 2014) and overall poor life-satisfaction (Mehdinezhad, 2015).

The social-emotional aspect of school burnout has been explored as research uncovers the pivotal role teachers play in raising engagement and improving achievement (Katz, 2017; Pietarinen, Soini, & Pyhältö, 2014; Tennant et al., 2015). When students are emotionally engaged at school, their achievement is more likely to be high due to the fact that they are more cognitively engaged (Pietarinen et al., 2014). Preventing school burnout and promoting achievement greatly depends upon the level of emotional support teachers provide students and how well they cultivate a close, personal connection with their students (Pietarinen et al., 2014; Tennant et al., 2015). The tendency for boys to perceive less teacher support than female students illustrates the significant role teacher-student relationships play in improving males' achievement (Katz, 2017). Due to the crucial need for teachers to connect with their male students, researchers have emphasized the need to explore gender-specific strategies that teachers

can use to support male students (Cortright, Lujan, Blumberg, Cox, & DiCarlo, 2013; Tennant et al., 2015; Kim & Kim, 2018) and prevent school burnout.

Theoretical Background

Research into male engagement and burnout prevention is guided by social cognitive theory (Bandura & McDonald, 1963) and self-determination theory (Deci & Ryan, 2004). In social cognitive theory, perceived self-efficacy beliefs determine the level of engagement students will exert. Students will make judgments about their knowledge, skills, and ability to manage stress; these judgments form beliefs about self-efficacy (Zimmerman, 1995).

Observational learning is an important component for developing self-efficacy. Outcomes resulting from one's own performance, as well as the performance of others, provide an observable model that affects the formation of self-efficacy beliefs (Glanz, Behar-Horenstein, & Starratt, 2000).

Positive outcome expectancies can contribute to the development of self-efficacy and promote engagement, but that alone is not enough. Students must believe in their abilities to perform and achieve a positive outcome (Bandura, 1995). When encountering difficulties, self-regulation becomes a factor because it involves the human capacity to press beyond a temporary failure and continue striving for a long-term goal (Glanz et al., 2000; Zimmerman, 1995). Self-regulation in the face of a setback involves coping with failure, deciding on a response strategy, and continuing with persistency. A primary component for achieving self-regulation is social support because the social persuasion others exert can advance the cultivation of self-efficacy (Bandura, 1995; Glanz et al., 2000; Zimmerman, 1995).

The social support that teachers provide makes considerable efforts to prevent burnout (Kurtz, Bui, & Tangari, 2007; Robins, Roberts, & Sarris, 2015; Kim & Kim, 2018). Teacher

influence transpires in the face-to-face relationship, as well as in the way teachers shape the classroom environment; by producing the right type of environment, teachers can contribute to self-efficacy (Bandura, 1995). Not only can teachers promote persistency, but also healthy gender development through social persuasion and promote academic engagement as a masculine construct (Miller, 2011). Reducing the gender achievement gap will require educators to confront stereotypes that may negatively influence teachers' expectations of male students and consequently lower male students' motivation to stay engaged (Duckworth et al., 2015; Heyder & Kessels, 2017; Huyge, Maele, & Houtte, 2015; King, 2016). Huyge et al. (2015) reported that boys show less belonging in school due to students' mainstream view that school is feminine. The existence of this harmful stereotype emphasizes the need for teachers to intervene and help boys identify school engagement as a masculine construct. Once students have observed social outcomes that are gender-linked, self-regulation will be practiced in a manner that is aligned with students' gender beliefs (Bandura & Bussey, 2004). Teachers can reinforce those acquired gender beliefs through modeling (Miller, 2011) and by providing rewarding outcomes (Bandura & Bussey, 2004).

Self-determination theory (SDT) approaches motivation by centering on the internal resources that control self-regulation and human behavior (Deci & Ryan, 2004; Richard M. Ryan & Deci, 2000). According to SDT, human nature possesses a tendency toward psychological growth and human development, and to achieve that end, human behavior focusses on meeting one's innate needs (Deci & Ryan, 2004). Natural functioning includes self-motivation to develop one's well-being through social integration and interaction with the physical world (Richard M. Ryan & Deci, 2000). The pursuit for psychological needs-fulfillment drives human

behavior, and satisfactory fulfillment of those needs is required before one attains self-determined motivation (Deci & Ryan, 2004; Richard M. Ryan & Deci, 2000).

Ryan and Deci (2000) proposed three psychological needs that drive human agency – competency, autonomy, and relatedness, each of which are crucial for understanding motivation. *Competence* is a feeling of confidence in one's own abilities to perform a particular activity. Feelings of competence parallel with Bandura's construct of self-efficacy – belief in one's own ability to perform despite challenges (Bandura, 1995). Students are intrinsically motivated to engage in activities in which they feel competent, and their engagement cultivates their competence further (R. M. Ryan & Deci, 2009). *Autonomy* concerns students' free will to make choices about their activities; it involves self-regulation and initiative. When students experience a sense of freedom to engage in activities of their own choosing, their intrinsic motivation increases (Deci & Ryan, 2004; R. M. Ryan & Deci, 2009). *Relatedness* concerns a sense of belonging with one's community that increases motivation to be engaged in that community. In the school setting, students who sense a connection with their school and their teachers are more motivated to engage in learning (Kiefer, Alley, & Ellerbrock, 2015; Kiefer & Pennington, 2016). Self-determination theory provides a framework for engaging boys through teacher support (Vantieghem & Van Houtte, 2018). When teachers initiate intrinsic motivation and foster a supportive school climate, their support intervenes to lower burnout rates (Salmela-Aro et al., 2008). Deci and Ryan (2004) emphasized the effectiveness of supporting students by developing autonomy, the support needed to activate intrinsic motivation. Teachers who learn to adapt male-friendly strategies to their lessons and provide autonomy support for boys make beneficial strides at cultivating intrinsic motivation (Akhtar, Iqbal, & Tatlah, 2017; Lietaert, Roorda, Laevers, Verschueren, & De Fraine, 2015). These teachers effectively motivate academic

engagement by designing instruction that helps male students fulfill their innate need for autonomy (Vantieghem & Van Houtte, 2018).

Problem Statement

The findings in previous studies have identified the relationship between teacher support and students' grade point averages (Kiefer & Pennington, 2016; Vecchione et al., 2014). There is, however, a gap in the literature surrounding burnout among high school students and teacher support. Kiefer and Pennington (2016) studied the relationship between perceived teacher support and school performance (grades and behavior), but such an outcome-oriented study focuses on the outcomes (i.e., grades and disciplinary action), not necessarily the emotional causes of the outcomes. School burnout involves the emotions that students manage in reaction to school stress (Aypay, 2017; Noh et al., 2013), and the strategies they use to cope with those pressures have affective and emotional implications beyond the classroom (Salmela-Aro, 2017; Tuominen-Soini & Salmela-Aro, 2014).

In a meta-analysis conducted by Kim et al. (2018) of 19 significant studies in burnout, only four included teachers as a social support variable; three of those studies examined college-age students; and the fourth study examined middle school age students. Research in student burnout has mostly been conducted on the college level in nations other than the United States, such as Finland, Korea, and Turkey (B. Kim et al., 2018; Walburg, 2014). As such, Robins, et al. (2015) studied college students' burnout and engagement levels and found a significant correlation between engagement and support students received from their supervisors. However, the supervisor-student relationship and the teaching role of those supervisors do not compare to the relationship that exists between high school teachers and their students.

Durmuş, et al. (2017) measured the linear relationship between school burnout, parental monitoring, and school climate among high school students; however, the instrument used to measure school climate encompassed multiple factors that shape the school atmosphere, not perceived teacher support specifically. Research conducted by Virtanen, et al. (2018) found an association between high levels of teacher support and students in the high-engagement/low-burnout category; however, the focus was on cognitive engagement and school burnout, not teacher support. The instrument used was designed to measure cognitive and psychological engagement, and it included student opinions about teachers as one of several school climate factors (Appleton, Christenson, Kim, & Reschly, 2006; Virtanen et al., 2018). The study did not address multiple factors of teacher support that relate to the teacher-student relationship; neither did the study address gender. The problem is the lack of research analyzing the effect of teacher support upon high school burnout among male students.

Purpose Statement

The purpose of this quantitative correlational research study was to determine if male high school students' perceived teacher support predicts school burnout. The predictor variable in this study was the male students' perceived teacher support, designed as a positive social influence capable of promoting engagement and academic performance (Perry, Liu, & Pabian, 2010). In the second research question, perceived teacher support was measured in terms of four sub-categories: invested, positive regard, expectations, and accessibility. Perceived teacher support was measured by the Teacher Support Scale (TSS; E. H. McWhirter, Rasheed, & Crothers, 2000). The criterion variable was school burnout, which is described as cynicism, exhaustion, refusal to study, and poor self-efficacy beliefs about school (Bilge, Tuzgöl Dost, & Çetin, 2014). Students' school burnout levels was measured by completing the School Burnout

Inventory test (SBI; Salmela-Aro et al., 2009). The participants for this study were high school males in four private schools in a southern Virginia and eastern North Carolina.

Significance of the Study

Stress among students in college preparatory high schools can cause a variety of behaviors related to poor well-being, such as difficulty concentrating, sleep deprivation, anxiety, and harmful coping mechanisms (Feld & Shusterman, 2015). School burnout syndrome exists in an academically demanding environment (Robins et al., 2015; Sorkkila, Aunola, & Ryba, 2017) when students respond to school stressors with poor coping mechanisms, such as depersonalization or feelings of inefficacy (B. Kim, Lee, Kim, Choi, & Lee, 2015; Noh et al., 2013). Pressure to make good grades, complete homework assignments, and prepare for college create common stressors that high school students face, especially among private schools students (Leonard et al., 2015). Parental expectations and a desire for acceptance in a top-tier college contribute profoundly to the pressures that private-school students must learn to manage (Leonard et al., 2015).

Academic and emotional reasons exist for researching school burnout syndrome among high school males, and exploring the influence of teachers as a social support may be equally beneficial. When students experience high school burnout, which is associated with poor emotional well-being, the likelihood of a positive academic future diminishes significantly (Aypay, 2017; Mehdinezhad, 2015). Students who demonstrate a lack of engagement possess dispositions that are likely to follow them into early adulthood (Tuominen-Soini & Salmela-Aro, 2014). Providing the interventions needed to perform academically can help predict better success in their post-high school endeavors. Acquiring more data about preventing school burnout could also provide insight about other associated factors that students endure. School

burnout is associated with depressive symptoms, delinquent behavior, and other factors related to students' well-being (Fiorilli et al., 2017). Although educators may be focused on improving academic engagement, improving students' overall emotional well-being could be a positive consequence of improving school burnout levels.

This study contributed to the addition of needed literature regarding school burnout among high school males and the influential role teachers play in promoting their academic performance. To prevent high school students from experiencing burnout, social supports become a critical intervention (B. Kim et al., 2018; Walburg, 2014). More needs to be learned about how the teacher-student relationship can intervene to motivate male students to stay engaged in school. Research in intervention programs and other resources at school has revealed the effectiveness of those programs (Freeman & Simonsen, 2015; Salmela-Aro, 2017), but the one-to-one relationship between the teacher and student may have differing effects than group-oriented interventions. Including perceived teacher support in this study about school burnout will add more knowledge about the effectiveness of the teacher-student relationship and teachers' abilities as social supports to prevent school burnout. Many male students fail to benefit from positive personal connections with their teachers (Collins, O'Connor, Supplee, & Shaw, 2017), which leads to lower levels of self-concept (McFarland, Murray, & Phillipson, 2016). This study examined four components (i.e., invested, positive regard, expectations, accessible) of perceived teacher support to offer more insight about what elements of the teacher-student relationship may be the most influential for predicting school burnout.

The body of literature concerning school burnout is limited in its scope, and it has only been explored in recent decades (B. Kim et al., 2018). More research is needed to investigate how burnout affects U.S. high school students who face the demands of high expectations. Few

studies on school burnout have been conducted in the U.S., and even fewer have targeted high school students (B. Kim et al., 2018; Walburg, 2014). In a rare study examining high school students and burnout, Bask and Salmela-Aro (2013) researched the effects of high academic expectations and poor grades among Finnish students. Because cultural differences vary from one geographical location to another, interventions designed to mitigate burnout may differ among American students who face academic pressures.

Academic demands and high expectations for high school students applies to the private school climate (LeBlanc & Slaughter, 2012). It is assumed that tuition paying parents have high expectations for their students, and many private schools present high demands to their students for completing assignments, performing academically, and maintaining a grade point average necessary for college admissions. This study examined whether school burnout among high school males in such a setting can be averted by positive teacher support.

Research Question

RQ1: How accurately can school burnout among high school males be predicted by the linear combination of four teacher support sub-categories (invested, positive regard, expectations, and accessibility)?

Definitions

1. *School burnout* – Emotional state of exhaustion from school work, cynicism about academic abilities, and withdrawal from responsibilities (Walburg, 2014).
2. *Self-efficacy* – Personal judgment about one’s ability to succeed in a particular setting (Bandura, 1995).
3. *Social support* – A relational resource to cope with work overload and burnout (Avanzi et al., 2018).

4. *Teacher support* – Showing concern for students, communicating high expectations, and developing intrinsic motivation (Zhang, Yuen, & Chen, 2018).
5. *Perceived teacher support* – Students' level of satisfaction regarding their teachers' efforts to support innate psychological needs of autonomy, competence, and relatedness (Yu, Li, & Zhang, 2015).

CHAPTER TWO: LITERATURE REVIEW

Overview

The literature cited here concerns the gender achievement gap, contributing factors, and the challenge teachers face of when engaging male students. For several decades, boys have lagged behind girls in achievement, and the problem exists as an international phenomenon (Stoet & Geary, 2015; Voyer & Voyer, 2014). The theoretical framework for this study includes social cognitive theory presented by Bandura and McDonald (1963), as well as self-determination theory presented by Deci and Ryan (2004). Social cognitive theory addresses the power of influence teachers have in the formation of students' perceptions, beliefs about cognitive and non-cognitive ideals, and connections that positively engage them. Self-determination theory describes the processes of student motivation and the role of teachers for engaging male students. The included literature will pertain to studies that define the achievement gap, present teacher-student relationship variables, and describe elements of the masculine stereotype. In addition, the literature will cover school burnout syndrome, which is detrimental to achievement, and solutions for improving male students' intrinsic motivation.

Theoretical Framework

Social Cognitive Theory

Social cognitive theory attributes a person with the human agency to engage in the formation of one's beliefs and self-regulation of one's actions (Bandura, 2001). Rather than merely experience their environments, people act as agents who shape their own experiences and contribute to their own growth (Bandura, 2001). As people seek satisfaction in their lives, they take deliberate actions to create meaning rather than react as bystanders of their environment (Bandura, 1995, 2006). Social cognitive theory, however, avoids attributing total autonomy to a

person in the formation of moral judgments and resultant self-determined behaviors (Bandura, 2002). An interaction of social, cognitive, and affective factors influence the exercise of moral agency – moral reasoning connected with human conduct. Social cognitive theory recognizes the dual nature of moral agency; it is both inhibitive and proactive – people choose to do good things as well as bad things (Bandura, 2002). Decisions about moral conduct result from a process of developing values, avoiding self-condemnation, and exercising self-regulation. An individual cognitively judges how behaviors in specific circumstances will result by weighing the consequences and determining what types of behaviors are beneficial; this process of self-regulation conveys the power of self-sanctioning as one chooses to avoid behavior that contradicts personal values (Bandura, 2002). People are not mere spectators in human agency or in the formation of social conditions; they aide in the creation of social conditions that, in turn, influence others affectively, socially, and cognitively (Bandura, 1995, 2006).

Social cognitive theory, described by Bandura (2006), outlines human agency with four key properties: (1) *intentionality* – in individual and group endeavors, people deliberately strategize to oblige their own interests; (2) *forethought* – efforts are motivated by goal setting to advance desired outcomes rather than chance experiences; (3) *self-reactiveness* – people form action plans to initiate their forethinking rather than assume their goals will form without action; (4) *self-reflectiveness* – people are self-aware agents who reflect on their actions and evaluate the need to revise their thinking. The critical nature of the role peers and teachers play in the formation of students' personal values becomes evident in light of social learning theory.

In a foundational study conducted by Bandura and McDonald (1963), social cognitive learning surfaced as a more plausible system than theories of formal developmental stages. In contrast to social cognitive theory, Piaget's stages of moral development postulate that social

influences, such as peers and teachers, transmit knowledge after the development of a cognitive structure (Lourenco, 2016). Bandura and McDonald (1963) diverged from Piaget in observing that children possessed objective and subjective moral judgements concurrently throughout all ages and stages of development. Bandura and McDonald (1963) determined that the modeling-imitation process served as the most potent means for solidifying behaviors; imitation was observed to be more powerful than reinforcing children with praise. Other competing theories emphasized reward and punishment while ignoring social modeling as a superior means for stimulating learning (Bandura & Bussey, 2004). Children's moral judgements are malleable in all stages of growth, and judgment formation remain susceptible to the influences of a model. Children learn new social behaviors by observing a model, even when those behaviors have never been observed before (Bandura & McDonald, 1963).

Social cognitive theory offers answers to questions about how children form gender stereotypes and why stereotypes stimulate specific behaviors. Gender development is a multifaceted process; it is a network of peer, environmental, and other social influences (Bandura & Bussey, 2004). Gender differentiation begins in the toddler stage with a child's parents, and gendered functioning ensues as children interact with peers and adults. Children cognitively engage in gender comparisons, observe social outcomes, and adopt the behavior most rewarding to them (Bandura & Bussey, 2004). They begin to adopt gender-linked preferences and then practice self-regulation as they evaluate outcomes that harmonize their ideals and actions. Sociocultural factors, such as the modeling of teachers, solidify children's predetermined preferences and reinforce their views of gender-linked behavior (Miller, 2011).

In social cognitive theory, observational learning not only provides students an opportunity to imitate a model, but also a component of the process for developing self-efficacy

and other beliefs that form judgments (Bandura, 1977; Zimmerman, 1995). As students observe the behaviors of others and as they analyze their own performance, they form beliefs about their own abilities and determine whether their efforts will result in positive outcomes (Glanz et al., 2000). The formation of self-efficacy requires more than a positive outcome expectancy from specific behavior; students must possess a belief in their own abilities to achieve the desired outcome (Bandura, 1995). Self-efficacy impacts self-regulation when students encounter difficulties and must make judgments about how to respond to temporary failures (Bandura, 2002; Glanz et al., 2000; Zimmerman, 1995). The response strategy they employ will directly reflect the judgments they have made about their abilities, and perceived self-efficacy will initiate self-regulation that results in persistency (Glanz et al., 2000; Zimmerman, 1995). Students with perceived self-efficacy have the human capacity to utilize self-regulation and press through setbacks in order to meet their goals (Glanz et al., 2000; Zimmerman, 1995).

Self-Determination Theory

Self-determination theory addresses one's motivation for engaging in specific behaviors by separating the content of desired outcomes and the processes by which those outcomes are practiced (Deci & Ryan, 2000). Desired goals are pursued through processes related to one's innate psychological needs, the conditions required for obtaining well-being (Deci & Ryan, 2000). Whereas social cognitive theory provides a framework for the development of gender-linked beliefs and behaviors, self-determination theory (SDT) offers a framework for motivating male students to be engaged at school.

Deci and Ryan (2004) presented three basic, psychological needs in the processes of human functioning: competence, relatedness, and autonomy. *Competence* exists as a feeling, rather than a skill; it causes one to make decisions that foster confidence. *Relatedness* involves

feeling accepted by others and undergoing the psychological attainment of unity with others in the community. *Autonomy* refers to the determination of one's own values and actions, and all behaviors, even if suggested by an outside source, become part of the self before they are enacted. SDT explains these basic needs as indispensable components for psychological well-being; the emphasis is placed on the individual's satisfaction with these needs rather than the strength level of these needs (Gagné & Deci, 2005). SDT operates from the belief that human behavior is growth oriented, and people naturally engage in activities believed to contribute to their goals (Deci & Ryan, 2004). A person's natural tendency compels them to seek out these basic needs if they are not satisfied; therefore, they will not be engaged in doing what they deem to be productive or enjoyable if the activity does not satisfy their basic needs (Gagné & Deci, 2005).

SDT differentiates between intrinsic and extrinsic motivation, and special consideration is given to factors of competence and autonomy for cultivating intrinsic motivation (R. M. Ryan & Deci, 2009). The motivation spectrum between external and internal motivation may be explained by four stages: external regulation, introjection, identification, and internalization (Deci & Ryan, 2000). External regulation motivates with coerciveness – when behavior is controlled due to an external reward or a desire to avoid a consequence. External regulation undermines intrinsic motivation because actions transpire with no autonomy satisfaction, and the actions will likely cease once the reward or fear of consequence is removed (Deci & Ryan, 2000). *Introjection* may take place when individuals become motivated by consequences placed on themselves rather instead of another person (Koestner & Losier, 2004). In this stage, motivation is partially internal and catalyzed only by external consequences. *Identification* occurs when a person accepts the value of a certain action because the external outcome is

desired. This type of behavior accompanies more autonomous behavior than the introjection because the value of the behavior has been internalized; however, the person does not yet fully engage in the behavior out of an internal desire, but rather for an external outcome (Deci & Ryan, 2000). *Internalization* takes place when a person is fully motivated intrinsically and engages in behavior due to personal enjoyment, not an external reward. Behaviors resulting from internalization will accompany the greatest level of commitment and persistence (Deci & Ryan, 2000).

Intrinsic motivation is believed to be a key component of school engagement and a critical factor for improving achievement among males students (Vantieghem & Van Houtte, 2018). As students increase their satisfaction with outcomes in the classroom (e.g., positive feedback), their intrinsic motivation will increase (R. M. Ryan & Deci, 2009). Autonomy is undermined when students are coerced to perform rather than permitted choices that are congruent with their thinking; this further reduces intrinsic motivation. Ryan and Deci (2009) illustrated this concept with play and active learning. Students willingly engage in these activities because they are naturally enjoyable. In application to the gender achievement gap, SDT compels teachers to avoid controlled-motivation and employ methods that provide autonomy as they seek to improve male engagement (Vantieghem & Van Houtte, 2018).

Merging Social Cognitive Theory and Self-Determination Theory

In social cognitive theory, human agency involves the interplay of personal cognition, behaviors, and environmental influences as individuals demonstrate the ability to regulate themselves and practice self-reflection (Bandura, 1977). Accordingly, individuals possess the human agency to desire specific outcomes and choose behaviors in an attempt to achieve those outcomes. Bandura did not address autonomy (nor relatedness and competence) in the sense that

it is posited in self-determination theory as a component of intrinsic motivation (Deci & Ryan, 2000). Social cognitive theory emphasizes the type of motivation sourced from one's feelings of capability which is influenced by social interactions (Deci & Ryan, 2000). However, both basic needs support and self-efficacy are critical for motivation; while needs support promotes intrinsic motivation, self-efficacy relates to both extrinsic and intrinsic motivation (Diseth, Danielsen, & Samdal, 2012). Ryan and Deci (2000) proposed that self-efficacy accompanied by intrinsic motivation, rather than external control, creates greater excitement for the task, resulting in persistence and better performance. Self-efficacy can be predicted by basic needs support, because all three components – autonomy, competence, and relatedness – contribute to the formation of self-efficacy (Diseth et al., 2012; Jungert & Koestner, 2015). Accordingly, the need for competence predicts students' goals for achieving mastery when self-efficacy is present (Diseth et al., 2012), and competence coincides with a higher sense of belonging and overall positive attitudes about school (Chong, Liem, Huan, Kit, & Ang, 2018).

In the school setting, educators can shape students' influences, the subject of their self-reflection, to improve their emotional well-being and to guide academically effective behaviors (Schunk & Pajares, 2009). Students can reciprocate by becoming agents who support their own instruction when they cooperate with the teacher, engage in classroom activities, and interact in a manner that permits the teacher to respond in an effective manner (Johnmarshall Reeve, 2013). Through interactions with teachers and peers, students can form self-efficacy beliefs as they reflect on negative experiences, persuasions from others, outcomes from their own actions, and outcomes of a model (Schunk & Pajares, 2009). In the attempt to prevent school burnout, educators may strive to increase students' self-efficacy and elevate the likelihood that students will choose to engage in challenging tasks and persist until performing successfully; but the need

for students to be intrinsically motivated through basic needs satisfaction also emerges as a necessity (Jungert & Koestner, 2015).

As teachers strive to improve male achievement, encourage engagement, and prevent school burnout, their position as a social support can be utilized to improve students' self-efficacy. Male students need sociocultural influences to convey positive learning expectations and reinforce proper gender-linked behavior (Bandura & Bussey, 2004; Miller, 2011). Teachers can become the social agent male students need to encourage the formation of sound judgments, develop self-efficacy, and exercise self-regulation (Bandura, 1995). Reducing school burnout may require the combination of providing social support to improve self-efficacy and instilling intrinsic motivation to increase engagement. If teachers can help boys experience positive outcomes in the classroom, then they will advance the formation of intrinsic motivation needed to advance engagement (Johnmarshall Reeve, 2004). In summary, social cognitive theory provides the framework for positioning teachers to be social supports who can influence male students' judgements and beliefs, and SDT provides the framework for challenging teachers to provide instruction that cultivates intrinsic motivation. This study will focus on the influence teachers possess for preventing burnout and engaging male students.

Related Literature

Teachers commonly consider boys to be less attentive in the classroom, more likely to demonstrate hyperactivity (Bugler et al., 2016), and less motivated to perform academically (Vecchione et al., 2014). Many teachers have stereotyped masculinity as a characteristic accompanied by low engagement in academic tasks (Heyder & Kessels, 2015). In addition to demonstrating lower levels of engagement, boys demonstrate lower levels of intellectual performance, partly due to academically detrimental behavior (Frawley et al., 2014; Marcenaro–

Gutierrez et al., 2018). In many cases, the local school community and environmental factors contribute to males' low achievement (Legewie & DiPrete, 2012).

An examination of boys' achievement scores evidences the reasons teachers often consider boys to be the challenging gender. For approximately half a century, the National Assessment of Educational Progress (NAEP) has reported higher achievement scores for girls than boys (Robinson & Lubienski, 2011). The achievement gender gap has not been attributed to a limited number of nations; the fact that girls outperform boys is an international concern (Voyer & Voyer, 2014). Among students in OECD countries, girls outscore the boys in literacy, although boys sometimes outscore girls in math (Genlott & Grönlund, 2016). Despite the stereotype that male students often outscore girls in science and math, studies reveal that elementary and middle school scores in all subjects overwhelmingly favor girls (Lai, 2010). In 70% of the countries examined by Stoet and Geary (2015), girls outperformed boys in reading, mathematics, and science. In each of these countries, economic conditions and gender equality factors were considered, and neither were determined to be mediators of the gender achievement gap. To develop reasonable strategies for reducing the achievement gap, literature should be considered on the topics of teacher-student relationships, masculine stereotypes, and motivating boys.

Teacher-Student Relationships

The relational impact of teaching boys cannot be underestimated. The relationship a teacher has with male students can have a greater influence than the instructional methods employed (Reichert & Hawley, 2011). In general, when students of both genders reveal dissatisfaction with teachers, their negative perceptions correlate to their level of compliance or rule-breaking behavior (Laet et al., 2016). As students improve their behavior, their

relationships with teachers become more positive and result in better teacher-student connections. Consequently, students become more satisfied with their teachers and become more open to their teachers' instruction. Because rule-breaking behavior begins the damaging cycle rather than negative interactions, teachers can, in theory, intervene early by helping students develop positive behaviors that foster healthy teacher-student relationships (Laet et al., 2016). A study of preschool teachers conducted by Choi and Dobbs-Oates (2016) revealed the need to emphasize teacher-student connections at an early age. Teachers in the study reported lower levels of closeness with their male students than their female students already at the preschool age. Lai (2010) encouraged educators to seek interventions early to improve male academic performance after uncovering evidence that a wide-spread gender achievement gap exists at the end of middle school. A challenge may occur, however, when teachers attempt to improve their connections with boys by implementing new classroom strategies: some boys bring to class preconceived equity bias that creates resistance to intervention (Consuegra & Engels, 2016). Nevertheless, schools have the power to implement intervention plans, even at an early age, that will instill non-cognitive skills. Prioritizing non-cognitive training has the potential to positively influence boys' personality traits and behaviors that will persist into their adulthood years (Heckman, Pinto, & Savelyev, 2013).

Relationship perceptions. To the amazement of many teachers, male students and teachers do not always view their relationships equally (Stroet, Opendakker, & Minnaert, 2013). Boys are likely to define the elements of a positive teacher-student relationship differently than their teachers (Kavenagh, Freeman, & Ainley, 2012). Although teachers may view their treatment of boys and girls equally, boys believe that teachers discriminate and allow girls to get away with more bad behavior than boys (Consuegra & Engels, 2016; Hu, 2012). Video footage

reviewed by Consuegra, Engels, and Willegems (2016) revealed that teachers who insistently claim to be gender equal are oblivious to their disproportionate interactions. A contrasting result was found when Harrop and Swinson (2011) observed that teachers offered similar feedback and talk to primary age boys and girls, although teachers interacted with boys much more frequently than girls. A possible explanation for the variation may be explained by age group dynamics; behaviors and needs of primary age boys differ significantly than those of adolescents. Also, when comparing studies involving the observations of researchers (Consuegra et al., 2016; Harrop & Swinson, 2011) and studies that solicit male students' perceptions (Kavenagh et al., 2012; McFarland et al., 2016; Stroet et al., 2013), counter perspectives result. Observer bias can potentially influence results, and it is easier to measure students' perceived teacher support than to definitively identify a specific teacher action as motivationally supportive (Stroet et al., 2013).

In general, teachers report better relationships with female students than male students, primarily due to the number of conflicts teachers encounter with males (Koomen & Jellesma, 2015). Unsurprisingly, teachers report closer connections with boys when their relationships are less contentious (Collins et al., 2017; Koomen & Jellesma, 2015; Spilt, Koomen, & Jak, 2012), and the frequency of conflicts between boys and their teachers negatively correlates to boys' self-concept (McFarland et al., 2016). Healthy relationships can be developed by teachers who improve their classroom management skills and initiate interventions to improve student connections. Spilt, Koomen, Thijs, and van der Leij (2012) studied teachers who improved their self-efficacy by participating in instructional sessions about implementing interventions for disruptive students. As their sensitivity toward students increased, interactions improved and conflicts decreased significantly. Disruptive students need teachers to intervene by initiating

ways to improve student-teacher connections, and resultantly diminish the risk of detrimental behavior (Collins et al., 2017).

Emotional and social factors. According to Katz (2017), the perception of girls does not match the perception of boys regarding teacher support; boys were much less likely to rate their teachers as supportive. When Bertrand and Pan (2013) studied social influences on the gender gap, boys were found to receive much less hands-on involvement than girls. This phenomenon may partially explain the lack of non-cognitive training boys receive and the need for teachers to intervene. To help boys improve their school performance, teachers may need to examine unfavorable environmental circumstances some boys must endure, analyze deficiencies that impair learning, and attempt to compensate for students' neglected needs (Nuttall & Doherty, 2014). Programs designed to teach boys social skills and study skills have reaped positive results by improving behavior and academic performance (Graham, Taylor, & Hudley, 2015). In the most ominous cases, expecting teachers to compensate for poor environmental effects may be expecting too much from teachers, but the persuasiveness of a teacher's guidance cannot be negated. Laet, Colpin, Goossens, Leeuwen, and Verschueren (2014) found that students in their early adolescence were more likely to view teachers as a secure base rather than a safe haven. In other words, the teacher-student relationship parallels the parent-child relationship, such as the teacher's role in encouraging students to set future goals and achieve new accomplishments. This places teachers in a position to significantly influence boys' behavior, in addition to their academic growth, even beyond their elementary years. Although teacher interventions cannot fully substitute for a lack of quality parenting (Song, Bong, Lee, & Kim, 2015), teachers occupy an influential position than be utilized to improve deficits in value training (Nuttall & Doherty, 2014).

Teacher gender-pairing and same-sex classes. When Howard (2012) studied the teacher-student relationship factor with African-American boys, evidence was found that boys excel when they develop positive relationships with teachers of both genders. Attempts have been made to narrow the achievement gap by implementing same-sex classrooms; however, boys have revealed a preference for co-ed classes and reported more distractions in same-sex classes due to overwhelming behavioral problems (Simpson & Che, 2016). For male students, heterogeneous classes engender higher motivation (Akhtar et al., 2017), a quality directly related to school engagement. Gender-pairing boys with male teachers has been suggested as a means for improvement. However, Choi and Dobbs-Oates (2016) compared scores from 15 different countries and found that teacher-student gender pairing evidenced no positive results. Other studies have found no correlation between students' achievement and their gender or the gender of their teachers (Burusic, Babarovic, & Serie, 2012; Cho, 2012).

Masculine Stereotypes

Although teachers and parents may desire to be gender neutral in their beliefs about students, research corroborates gender stereotypes about learning expectations and behavioral characteristics (Chui & Wong, 2017; Duckworth et al., 2015; Heyder & Kessels, 2015; Sarouphim & Chartouny, 2017). Teachers expect boys to be more extroverted, and they attribute male shyness to symptoms of loneliness and social difficulties (Akseer, Bosacki, Rose-Krasnor, & Coplan, 2014). This characterization represents the types of interactions teachers commonly experience with boys. Teachers report that boys are more likely to exhibit behaviors that are counterproductive to learning (Duckworth et al., 2015; Frawley et al., 2014). A deficiency of non-cognitive skills and shorter attention spans contribute to little interest in delayed gratification (Bertrand & Pan, 2013). Male students are more responsive to their teacher's initiations in the

classroom in both positive and negative ways; they are also more inclined to receive negative teacher feedback than girls (Howe & Abedin, 2013). Even when teachers report that motivation may be similar between male and female students, they report that boys lack self-control which correlates to lower achievement (Duckworth et al., 2015). Stereotypic beliefs about established causes of behavior contribute to disproportionate discipline and alter teachers' actions (Kunesh & Noltemeyer, 2015). This can be especially problematic in the case of African-American males because teachers tend to label them as hyper-masculine – an anti-academic, low-engagement stereotype (Cunningham, Swanson, & Hayes, 2013).

Parent gender-based expectations. Parents can have gender-based views of learning that influence the expectations presented to their children. Chui and Wong (2017) reported that parents' gender-based expectations affect the motivation of their children. Parents with high expectations were less surprised when their boys performed well academically, and they were more delighted than when their girls performed well. Their research indicated an assumption among parents that boys perform well because they possess inherent abilities, and girls perform well due to hard work (Chui & Wong, 2017). This view coincides common teacher beliefs which consider high academic effort to be a more feminine quality than masculine characteristic (Heyder & Kessels, 2017).

Students' gender views. Not only are parent and teacher perspectives about gender stereotypes central to understanding the reasons for student engagement, but also students' personal views of gender. How students connect school factors to their gender correlates to their success (Forgasz & Leder, 2017; Gaspard et al., 2015). For boys, connecting learning to masculinity can increase expectations of future academic success, predictions of occupational success, and effort toward learning tasks (Elmore & Oyserman, 2012). Counterproductive to

male engagement is the perception among male students that their peers have negative attitudes about school (King, 2016). Male students want to be masculine to the point that learning activities may be jeopardized if they threaten the stereotype. For example, when Munson-Warnken (2017) studied the effect of boy-covers versus girl-covers on books, boys were unwilling to read a book because the cover appeared feminine, not because the book's contents were non-masculine.

Learning environments. Girls demonstrate higher levels of verbal intelligence, motivation, and self-discipline pertaining to school; these factors evidence that typical school environments make it easier for girls than boys to acclimate (Spinath, Eckert, & Steinmayr, 2014). In language learning, differences exist with the direct strategies that boys and girls use, but not their indirect strategies (Akbar, Vahdany, & Arjmandi, 2014). In other words, boys often think about their language studies differently than girls, and they approach memorization and mastery in a different manner. When male students participate in lessons with tactical learning, they are more engaged with in-class tasks than in settings of direct teaching (Smith et al., 2015). Given boys' propensity to interact with the teacher, their proclivities can be utilized to gain a learning advantage. Male students have displayed more learning and greater motivation than their female classmates when lesson instruction included a high level of questioning and teacher feedback (Jurik, Gröschner, & Seidel, 2014). Incorporating instructional methods that encourage social interactions also resonate with male students (Vekiri, 2013). Incorporating male-friendly strategies may be especially critical in the early adolescent stage when boys are admittedly unengaged and report feeling less academically capable than their female classmates (Bugler et al., 2016).

School Burnout

Academic engagement is inversely related to the outcomes of school burnout syndrome (Bask & Salmela-Aro, 2013; Çapri, Gündüz, & Akbay, 2013; Fiorilli et al., 2017). School burnout has only been studied in recent years on the middle school and high school level, but it has been researched more extensively on the college level (Walburg, 2014). Prior to being applied to the school context, burnout syndrome was mostly studied in the workplace to assess practitioners' ability to cope with stress and make adjustments (Ates, 2016; Walburg, 2014). The commonly used definition of burnout derives from the Maslach Burnout Inventory (Maslach & Jackson, 1981), and it follows a three-dimensional model paradigm which includes emotional exhaustion, depersonalization, and diminished personal accomplishment (Maslach, Schaufeli, & Leiter, 2001). When burnout entered the body of educational research, researchers mostly chose participants who were college graduates and undergraduates (Walburg, 2014). Burnout studied among students has retained a similar definition as the three-dimensional model of Maslach and Johnson (1981). School burnout syndrome may also manifest in various levels of school engagement. Virtanen, Lerkkanen, Poikkeus, and Kuorelahti (2018) found that low-burnout students were highly engaged in school, average-burnout students were moderately engaged, and high-burnout students demonstrated low levels of engagement.

Specifically, school burnout can be described as cynicism about school, feelings of inadequacy, and exhaustion about school (Ates, 2016; Aypay, 2017; Bask & Salmela-Aro, 2013; Fiorilli et al., 2017). When students face high expectations and are unable to manage the pressures of high academic standards, burnout begins to emerge (Durmuş et al., 2017; Salmela-Aro, 2017). Inefficacy felt by students, in addition to a cynical perspective about school, results in a loss of motivation for completing their school work (Fiorilli et al., 2017).

Causes of burnout. In the process of school burnout, the first sign begins with exhaustion from school work (Sorkkila, Aunola, Salmela-Aro, Tolvanen, & Ryba, 2018), and then feelings of cynicism about school and academic inefficacy follow. The other two dimensions of school burnout, cynicism and inefficacy, increase as exhaustion increases (B. Kim et al., 2015; Noh et al., 2013). During adolescence, school burnout is unlikely to improve during a school year (Sorkkila et al., 2018), and it is likely to increase each subsequent year once a student begins to experience the syndrome (Fiorilli et al., 2017; B. Kim et al., 2015). The cause of school burnout relates primarily to students' academic stressors and beliefs, rather than other non-academic matters (Sorkkila, Aunola, & Ryba, 2017). Although various social factors may need to be considered when male students fail to perform academically (Bertrand & Pan, 2013; Lamport & Bulgin, 2010), burnout has been considered a domain-specific problem. For example, student athletes who experienced burnout in sports did not experience burnout in school, and athletic burnout was not a cause of school burnout (Sorkkila et al., 2018; Sorkkila et al., 2017).

Exhaustion, in relation to school burnout, exists as an emotional response to the academic pressures of school (Noh et al., 2013; Robins et al., 2015). When study demands placed on students are seemingly insurmountable, and students doubt their ability to meet those demands, engagement levels decrease (Robins et al., 2015). When students experience emotional exhaustion over periods of time, they may resort to coping strategies that are counterproductive, such as depersonalization (Noh et al., 2013). Consequently, feelings of cynicism and academic inefficacy increase as students attempt to lower their feelings of exhaustion (B. Kim et al., 2015).

Perfectionism can be a catalyst of school burnout in environments where students are prescribed high academic demands (Chang, Lee, Byeon, & Lee, 2015). Perfectionism may be

self-oriented or socially oriented, and these two types of perfectionism create inverse outcomes. Self-oriented perfection pertains to a student who sets high personal standards of academic performance; socially oriented perfectionism pertains to academic demands students feel from their parents or other social influences (Chang et al., 2015). Students characterized by self-oriented perfectionism possess higher levels of intrinsic motivation than their peers, and their rates of school burnout are significantly lower (Y. Chang & Chan, 2015). In contrast, students possessing lower levels of intrinsic motivation who are inundated with societal pressure to perform have much higher rates of school burnout (Y. Chang & Chan, 2015).

Effects of school burnout. Students who experience school burnout demonstrate poorer general well-being and life satisfaction (Aypay, 2017; Çapri et al., 2013; Salmela-Aro, 2017). Well-being involves both cognitive and affective factors relating to a student's spiritual health and attitude about school that can predict future academic success or failure (Aypay, 2017; Mehdinezhad, 2015). When positive life-satisfaction is present, feelings of fulfillment experienced within the school context promote engagement rather than school burnout (Mehdinezhad, 2015). An overall positive attitude about school includes the vigor and dedication needed to complete assignments, even when school demands become stressful (Çapri et al., 2013). Optimism is an irreplaceable quality students need in order to proactively cope with school pressures (Aypay, 2017; Y. Chang & Chan, 2015). If students believe they will be successful in the end, their optimism can be the safeguard needed to prevent themselves from experiencing school burnout.

Poor well-being accompanies a lack of optimism that also affects attitudes about the future (Aypay, 2017). Academic success requires *absorption* – students immersing themselves in their school work with dedication despite reasonable difficulties (Çapri et al., 2013).

Insufficient levels of absorption often result from hopelessness students feel when they possess an overall negative attitude about school, especially when their grades are low (Bask & Salmela-Aro, 2013). The negativism students feel in the case of academic disappointment lowers their motivation to make plans about the future and develop goals (Aypay, 2017). An emotionally healthy student with a positive well-being will develop long-term plans for preventing future school stress; however, low-optimistic students respond to their fears with burnout (Aypay, 2017).

Disengagement from school as a result of school burnout may manifest in a variety of ways. Students' achievement levels are significantly related to their burnout levels due to students' lack of motivation to work (Fiorilli et al., 2017; Virtanen et al., 2018). Disengagement accompanying school burnout can result in poor attendance (Virtanen et al., 2018), substance abuse (Walburg et al., 2015), internet addiction (Salmela-Aro, 2017), and ultimately dropping out of high school (Fiorilli et al., 2017; Wang & Fredricks, 2014).

Depression symptoms, according to researchers, are significantly related to low school engagement and school burnout (Fiorilli et al., 2017). When students report higher levels of school burnout, they also experience greater signs of depression, which led researchers to consider burnout to be a possible cause of depressive symptoms (Fiorilli et al., 2017). Utilizing social supports to mitigate depressive symptoms early in adolescence is critical due to the tendency for these symptoms to increase the older adolescents grow (Duineveld, Parker, Ryan, Ciarrochi, & Salmela-Aro, 2017). Given the connection between depressive symptoms and school burnout, the tendency for school burnout to worsen rather than self-improve (Fiorilli et al., 2017; Boyoung Kim et al., 2015; Sorkkila et al., 2018), and the likelihood that depression

symptoms will increase throughout adolescence (Duineveld et al., 2017), interventions are crucial for preventing the effects of school burnout syndrome.

Interventions. Peers, teachers, and parents, comprise the group of social supports that provide the best intervention strategy for reducing school burnout (Freeman & Simonsen, 2015; B. Kim et al., 2018; Virtanen et al., 2018). Social supports provide the emotional coping mechanism students need to choose engagement in school rather than disengagement (Wang & Fredricks, 2014). Increasing the influence of parents, peers, and teachers increases students' self-efficacy, thereby decreasing burnout levels (B. Kim et al., 2018). The outcome of focus groups illustrates how social supports can improve students' feelings about school and themselves. In an experimental study, Ates (2016) discovered the effective outcome focus groups had on reducing burnout levels among high school students who participated in discussing setbacks, personal abilities, and strategies for improving.

Classroom climate can predict the likelihood that students will experience school burnout (Shih, 2014). When students are comfortable with their classroom structure, they are more likely to properly cope with school stress by connecting with teachers and peers (Durmuş et al., 2017; Shih, 2014). Healthy school climates foster an overall environment where students have access to social supports that prevent school burnout. Schools with low-burnout climates prioritize assisting students with their academic progress, they cultivate positive teacher-student relationships, and they operate appropriate and consistent disciplinary systems (Durmuş et al., 2017; Shih, 2014). The teacher-student relationship can make a significant impact in preventing burnout and raising engagement levels (B. Kim et al., 2018; Virtanen et al., 2018). When students report receiving high or moderate levels of teacher support, they also report significantly lower levels of school burnout (Virtanen et al., 2018).

Parental monitoring lowers the likelihood of school burnout, due to parents' ability to identify overwhelming circumstances and properly intervene for their children (Durmuş et al., 2017). When parents are informed about their children's activities and stay engaged in their children's school life, burnout rates decrease significantly (Durmuş et al., 2017). Similarly, students who report receiving adequate support from their parents are more motivated to perform academically (Ricard & Pelletier, 2016), more engaged in their schoolwork, and experience lower levels of burnout (Virtanen et al., 2018). The academic expectations parents present about their child's ability positively influence how well a student functions in school (Sorkkila et al., 2017), and their expectations of success are positively related to well-functioning and negatively related to school burnout (Sorkkila et al., 2017).

Depressive symptoms related to burnout and self-esteem also improve when students perceive autonomy support from their parents (Duineveld et al., 2017). In other words, when parents consider their child's perspective, offer them choices, and encourage them to show initiative, they provide the support needed to decrease inefficacy and prevent school burnout. This type of social support correlates to the type of context Deci and Ryan (2004) proposed would encourage self-determination. As male students receive social support from parents and teachers that includes autonomy support and instills intrinsic motivation, they will become more engaged in their school work (Vantieghem & Van Houtte, 2018).

Motivating Boys

Katz (2017) reported that boys perceive less teacher support than their female peers, and they possess less autonomous motivation. Consequently, they generate more negative emotions associated with school than girls. Student perceptions of need support teaching are critical to the teacher's aim of motivating students. For students to become motivated and engaged, they must

perceive teacher support that provides needed autonomy, competence, and relevance (Kiefer & Pennington, 2016; Stroet et al., 2013). When students begin the school year with high levels of intrinsic motivation, they are more likely to excel academically throughout the year (Vecchione et al., 2014). Teachers can support students' autonomy by connecting learning to students' individual future goals. When high school boys are provided with interactions and personal interests, especially those related to their college ambitions, their motivation increases (Bozack & Salvaggio, 2013).

Learning beliefs. The common stereotype that boys are good at math and girls are good at language influences boys' self-perceptions. Boys' tend to possess a fixed view of intelligence, specifically pertaining to mathematics (Ross, Scott, & Bruce, 2012); this illustrates the difficulty teachers will face as they attempt to improve engagement. Wach, Spengler, Gottschling, and Spinath (2015) examined how fear of failure affected male and female students' math performance. Only the female's math performance was affected, evidencing the students' stereotypic perceptions. In conjunction with having higher self-perceptions about school overall, boys are significantly less likely to deal with school anxiety than girls (Frawley et al., 2014; Ross et al., 2012; Wach et al., 2015). When boys excel in math, they attribute success to a high ability self-concept in that subject area (Wach et al., 2015); this same effect manifests in girls with language success (Spinath et al., 2014). Counterproductive to improving the gender gap is the common belief among school age children and adults that females are innately better at reading (Martinot, Bagès, & Désert, 2012). In settings of direct and indirect instruction, teachers transmit their personal beliefs about gender stereotypes. When teachers maintain traditional masculine stereotypes, boys' motivation to improve their reading skills decreases (Wolter, Braun, & Hannover, 2015). Views of masculinity transmitted through teaching and individual

interactions fail to include a love for reading, thereby influencing boys to disassociate masculinity and reading.

Male and female students' views about the importance of mathematics and language arts corresponds to their level of motivation in each of those subjects. Researchers have identified higher levels of intrinsic motivation for language among females (H. Lee & Kim, 2014) and higher intrinsic motivation for mathematics among males (Gaspard et al., 2015; H. Lee & Kim, 2014). Accordingly, girls believed it was important to perform in mathematics in school, but they did not believe mathematics was critical to their personal future plans (Gaspard et al., 2015). In contrast, boys viewed mathematics as an important subject for their future careers (Forgasz & Leder, 2017).

The power of teacher modeling presented in social cognitive theory (Bandura & McDonald, 1963) has an applicable effect with students' opinions about their subject matter. According to Lazarides and Watt (2015), students were apt to imitate directly conveyed perspectives of their math teachers. When teachers held mathematics in high esteem, both male and female students were inclined to hold favorable opinions of mathematics. Student motivation can be altered by teachers' implicit instruction when a gender stereotype is attached to a specific subject. In a study conducted by Thomas (2017), teachers who implicitly stereotyped science-is-male positively affected boys' self-concept and increased their motivation in that class.

Examining the way teachers rate boys' and girls' mathematics performance offers insight about teachers' inequitable perspective. When teachers explain why they believe girls excel at mathematics, they are likely to attribute success to hard work; their explanation for boys' success involves a belief in boys' innate ability (Robinson-Cimpian, Lubienski, Ganley, & Copur-

Gencturk, 2014; Sarouphim & Chartouny, 2017). This may partly be explained by teacher's perception that boys are less engaged than girls (Heyder & Kessels, 2015; King, 2016). Boys tend to exhibit more confidence in math than language, and even overconfidence at times (Bench, Lench, Liew, Miner, & Flores, 2015). When overconfident males receive teacher feedback about their poorer than expected performance, their levels of confidence significantly decrease, evidencing the powerful effect teachers' feedback has on boys' perceptions (Bench et al., 2015). The phenomenon with mathematics contrasts with the subject of reading. In Boerma, Mol, and Jolles (2016), teachers' perceptions of boys had little effect on their reading motivation or self-concept, although it significantly influenced the girls. The study's results compelled researchers to note that teacher-motivation relationships with boys and girls are not identical.

Developing intrinsic motivation. Teachers' instructional knowledge significantly influences boys' learning, even more than the teachers' gender (Choi & Dobbs-Oates, 2016). This relates to the way boys are motivated, because the achievement of males correlates to the intrinsic motivation of the teacher (Akhtar et al., 2017). Intrinsically motivated teachers deliberately support boys' autonomy rather than employ controlled motivation (Akhtar et al., 2017), but teachers tend to become content-focused rather than needs support-focused throughout the school year. As a result, they begin employing controlled motivation which decreases male motivation; this inclination is especially present among male teachers (Akhtar et al., 2017).

Boys are more independent in the formation of self-concept and rationale that controls motivation (Boerma et al., 2016), and teachers can adjust their motivational strategies to be as gender effective as possible (Bozack & Salvaggio, 2013). Autonomy support is a key factor for teaching boys because it stimulates boys to take initiative as they are given choices about their

learning (Lietaert et al., 2015). Another component of creating intrinsic motivation was applied to a study conducted by Kim and Kim (2018) as they examined students who were learning a second language. When boys were able to construct positive self-images of how a second language would help them succeed, and when they were able to envision instances of how they could use a second language, intrinsic motivation and achievement scores were positive. In principle, male students are more motivated when learning is enjoyable and makes a connection with their personal interests (Cortright et al., 2013; Kim & Kim, 2018). Vantieghem and Van Houtte (2018) measured lower autonomous motivation in a study among boys, and the researchers attributed controlled-motivation and related teacher-student interactions to boys' lack of desire to study.

Students of both genders become more motivated the more they feel supported by their teachers, and for boys, teacher support will be connected to respect (Kiefer & Pennington, 2016). The level of respect boys perceive from teachers mediates their behavior and achievement. The personal aspect of the teacher-student relationship emerges again as a critical component for engaging boys, especially given that boys report less teacher support than girls (Lietaert et al., 2015).

Teacher Support

The role of teachers in promoting student engagement and academic achievement relates directly to the psychological needs presented in self-determination theory (Deci & Ryan, 2004; Diseth et al., 2012; Hospel & Galand, 2016). Teachers can support students' needs for autonomy, competence, and relatedness through their teaching styles and their rapport with students (Johnmarshall Reeve, Jang, & Jang, 2018). As students receive support for their innate needs, levels of intrinsic motivation increase. Furrer, Skinner, and Pitzer (2014) conveyed how

teachers can utilize their relationships with students to promote all three primary needs. First, teachers can support autonomy by giving students opportunities to be authentic and by avoiding situations that require coercion. Second, teachers can support competence by managing the classroom environment in a manner that fosters social relationships. Third, teachers can support relatedness by helping students build connections and preventing feelings of rejection.

Adolescents, in particular, need support from various sources, such as parents and peers, but teacher support has a potent effect on school engagement (Chui & Wong, 2017; King, 2016; Ricard & Pelletier, 2016; Song et al., 2015). The psychological needs support that teachers provide not only contributes to academic motivation, but also minimizes the tendency for unmotivated adolescents to engage in academically detrimental behavior or, in an extreme case, become a high school dropout (Ricard & Pelletier, 2016). For example, persistent gaming has become associated with low engagement at school. Yu, Li, and Zhang (2015) examined the relationship between persistent gaming and how well students' psychological needs were satisfied. When teacher support satisfied students' psychological needs, students became more motivated at school and found enjoyment in their school work. Students were more likely to plummet into persistent gaming as a reaction to unsatisfied psychological needs when teacher support was lacking.

Parental support provides an irreplaceable stimulus for motivating students to perform academically; however, teacher support has a greater effect than parental support on mastery goal setting (Song et al., 2015). According to research conducted by Song, et al. (2015), teachers had more influence than parents at motivating students to learn new skills and striving to learn as much as possible in class. Teachers have a direct effect on students' grades due to their power to shape the classroom atmosphere (Kashy-Rosenbaum, Kaplan, & Israel-Cohen, 2018). As a

result of attending to students' well-being, not just their academic achievement, students' academic performance increases within the positive classroom environment (Kashy-Rosenbaum, et al., 2018).

Bundick and Tirri (2014) explored the influence of teacher support on three factors that impact high school students in the United States and Finland. First, have students developed purpose identification by finding a meaningful purpose in one's life? Second, have students acquired goal directedness by obtaining a sense of direction for their life and proceeding with intentionality? Third, have students realized and cultivated beyond-the-self-orientation of life goals involving relationships, family, community, and religion? The researchers discovered that teacher influence on all three components was significant among students in the United States. Bundick and Tirri (2014) determined that teacher influence on student's future planning was especially significant because high school students in the U.S. have not typically finalized definite career paths. In other words, teachers play an impactful role in shaping students' attitudes about learning, futuristic thinking, and other life issues. These findings coincide with similar research that indicates how teacher influence exceeds academic matters and effects affective growth by helping students develop values (Diseth & Samdal, 2014; B. Kim et al., 2018; Laet et al., 2014; Nuttall & Doherty, 2014).

Autonomy support. Ryan and Deci (2009) gave special credence to autonomy and competence as intrinsically motivating factors when students experience satisfaction with these needs. The body of recent literature regarding motivation and teacher support indicates that researchers have centered on autonomy support more than the other components of self-determination theory. Ryan and Deci (2009) especially emphasized the necessity of autonomy-supportive teaching by indicating that controlling teachers fail to relate to the way students think

and fail to require students to take responsibility for their own learning. When students perceive a lack of autonomy support from their teachers, student frustration increases in conjunction with disengagement (Haerens, Aelterman, Vansteenkiste, Soenens, & Van Petegem, 2015; Jang, Kim, & Reeve, 2016). In contrast, students who perceive autonomy support and are satisfied with their teachers' instructional style report higher levels of engagement (Jang, et al., 2016).

Students may not immediately acknowledge their teachers' autonomy-supportive style, but over time, students become more energized as they experience classroom instruction that meets their psychological needs (Cheon & Reeve, 2015).

Autonomy-supportive teaching does not equate to flexible standards or the absence of classroom demands, but rather the acknowledgement of students' feelings about learning (Vedder-Weiss & Fortus, 2018). After finding a relationship between democratic-styled teachers and student motivation, Vedder-Weiss and Fortus (2018) pinpointed specific autonomy-supportive teaching practices that increase motivation: (a) offering choices about students' methods of evaluation; (b) allowing choices about seating; (c) allowing choices about the content of assignments; (d) giving students options about members in their collaborative groups; and (e) acknowledging the students' perspectives about the content and the learning process. According to Aelterman, Vansteenkiste, Van den Berghe, De Meyer, and Haerens (2014), teachers misunderstand autonomy support if they believe the students need to choose the content of the lessons; instead, students may be offered choices within the lessons concerning assignments and procedures. The teacher's personality and teaching qualities presented to the students also contribute to autonomy-supportive instruction. Reeve, Jang, and Jang (2018) identified the personality traits of openness and agreeableness as dispositions that students infer to be autonomy supportive. In the instructional context, openness refers to a teacher's willingness to

consider new ideas, and agreeableness conveys a willingness to help students (Aelterman, et al., 2014). As teachers develop greater understanding about their students' capabilities and preferences, they can adapt instruction to the students' proclivities in a manner that will result in greater student engagement (Mustafaa, Lozada, Channey, Skoog-Hoffman, & Jagers, 2017). When teachers increase their ability to include student preferences, their lessons become more meaningful to the students. Mustafaa, et al. (2017) reported that students considered this type of teacher to be more supportive, and the result yielded higher student engagement. If students are not given marginal opportunities to take control of their learning, the temptation increases for them to substitute academic engagement with competing, detrimental engagements (Yu, et al., 2015).

Autonomy support can benefit students in ways that improve their well-being in addition to their academic performance. Diseth and Samdal (2014) explored the correlations among autonomy supportive teaching, academic performance, and life-satisfaction. The tested variable *life-satisfaction* refers to students' evaluation of their positive psychological well-being and overall level of happiness. In this study, academic performance was predicted by achievement goals – the specific levels of academic performance students desired to achieve. Diseth and Samdal (2014) found that student perception of autonomy support (i.e., teachers offered choice and options) predicted high achievement goals, academic performance, and positive life-satisfaction ratings. These findings suggest that the influence that teachers have in shaping attitudes – such as achievement goals – impact other outcomes such as performance and well-being. Similar findings about student attitudes by Hagger, Sultan, Hardcastle, and Chatzisarantis (2015) revealed the way students' intrinsic motivation increases when their attitudes about the importance of their studies improves. Mathematics teachers who demonstrated autonomy-

supportive teaching effectively motivated their students to complete their mathematics homework. These teachers' instructional style correlated with a high level of intrinsic motivation because their students understood the importance of the subject and the need to engage in assignments outside the classroom (Hagger, et al., 2015).

Research indicates that the benefits of autonomy-supportive teaching extend to language arts (Marshik, Ashton, & Algina, 2017), mathematics (Hagger et al., 2015), and science (Jungert & Koestner, 2015; Vedder-Weiss & Fortus, 2018). However, autonomy has a greater effect when students have a predisposition in a specific subject area. When students perceive autonomy support in a subject they prefer, their self-efficacy improves (Jungert & Koestner, 2015). With a higher level of self-efficacy, students build a greater desire to develop skills in that content area, they remain motivated when academic standards are high, and they strive to conquer learning challenges (Jungert & Koestner, 2015).

When teachers support student autonomy in the learning process, they open doors for students to experience deep thinking that exceeds mere memorization (Jang, Reeve, & Halusic, 2016). Autonomy-supportive teaching can motivate students to become active agents in the learning-instructional process. By deliberately engaging in class discussions, asking questions, and sharing their thoughts about the content, students join the autonomy-conscious teacher in advancing academic growth (Johnmarshall Reeve, 2013). The motivation students receive from autonomy need satisfaction strengthens deep thinking about the material that needs to be learned. Teachers can be less concerned about creating lessons that entertain students and capture their attention when students have been given opportunities to take responsibility for their own learning (Jang, Reeve, et al., 2016). In this scenario, students are making choices about their

learning that not only increases their responsibility, but also allows them opportunities to learn in ways that facilitate conceptual learning.

Competence support. As autonomy support builds engagement by involving students in their own learning, competence support supplies the emotional confidence students need to acquire intrinsic motivation (Furrer et al., 2014; León, Medina-Garrido, & Ortega, 2018). As students receive positive feedback from teachers, competence improves; and as students make choices about their learning and perceive personal causality for their success, autonomy improves. Patall, Hooper, Vasquez, Pituch, and Steingut (2018) found that autonomy-supportive teaching can minimize student tendencies to become extremely disengaged, but a lack of competence explained the initial cause for disengagement. This study explored high school students' perspectives of competence when they predicted that the current day's science lessons would be unusually difficult; those who possessed greater feelings of competence were more likely to be engaged. Competency-supportive teaching becomes especially critical when students have a lower interest at the outset or lack a belief in the purpose of the subject (Shen, 2015).

Hospel and Galand (2016) established a connection between structure and competence, and students who received competence support had a more positive view of their progress. Teachers who provide structure give their students the information needed to be academically successful, and they help students know how to meet the expectations presented to them (Hospel & Galand, 2016). When students are supported in this manner, they acquire the positive emotions correlated to school engagement (Hospel & Galand, 2016). León, Medina-Garrido, and Ortega (2018) found that students felt more confident when they rated their teachers highly in class structure. These students perceived that their teachers explained problems well, tried

various solutions until students improved, and ensured learning instead of leaving them behind. Structuring instruction in a manner that builds students' confidence helps them acquire the emotional competence needed to promote further engagement and achievement (León et al., 2018).

Relatedness support. Teachers who support students' need for relatedness help them acquire the personal connections needed to cultivate intrinsic motivation; the atmosphere of acceptance these teachers promote deters the detrimental effects of rejection (Furrer et al., 2014). Relatedness can be satisfied by promoting a student's sense of belonging in every aspect of school (Golaszewski et al., 2018). When an atmosphere of respect among peers has been established, students perceive that their teachers are being emotionally supportive and therefore feel a greater sense of connectedness to the school (Ruzek et al., 2016). Teachers can support belongingness by allowing students to experience classroom activities that promote positive relationships and respectful collaboration among peers (Ruzek et al., 2016). In addition, students perceive teacher support when they receive adequate help from their teachers (Chong et al., 2018). For example, Federici and Skaalvik (2014) noted a key consideration students make before risking the embarrassment of asking for help in class. When they perceived their teacher to be supportive instructionally, they were less fearful of risking their self-esteem and more likely to ask for help. Student perceptions of teacher competence and instructional effectiveness are significantly related to a higher sense of belonging and positive attitudes about school (Chong, et al., 2018; Federici & Skaalvik, 2014). Nurturing positive peer-to-peer and teacher-student relationships may be more critical for male students than females, in that boys tend to show less sense of belonging, especially when there are more females in the class (Huyge et al., 2015).

Emotional support. Whereas instructional support relates to effort and anxiety, emotional support relates to intrinsic motivation (Federici & Skaalvik, 2014); however, both elements work in concert together. Emotional support and instructional support are typically concurrent qualities of a teacher; the teacher either provides both or neither because teachers considered to be helpful are also perceived as emotionally supportive (Federici & Skaalvik, 2014). When teachers support students' psychological needs, they provide emotional support that elevates student happiness, school enjoyment, and satisfaction with school (Hospel & Galand, 2016; Li-Jun Wang et al., 2014; Yu et al., 2015). Students' enjoyment of school involves positive peer relationships that directly benefit from teacher support (Li-Jun Wang et al., 2014; Martin & Rimm-Kaufman, 2015; Ruzek et al., 2016). Offering personal sentiments, such as empathy and encouragement, give students the inspiration needed to stay engaged in their school work (Federici & Skaalvik, 2014; Ruzek et al., 2016). In contrast, students perceiving a lack of needs support become dissatisfied with their teachers, which causes frustration and leads to a decrease in intrinsic motivation (Haerens et al., 2015).

Students who make good grades tend to perceive adequate emotional support from their teachers; this may reflect the positive academic interactions these students have had with their teachers (Federici & Skaalvik, 2014; Kashy-Rosenbaum et al., 2018; Ruzek et al., 2016; Tennant et al., 2015). As a result of engaging in beneficial interactions, students are motivated to set high standards for themselves and engage in activities that assist with achieving those goals (Ruzek et al., 2016). When emotional support is deficient, students regress into conditions and behaviors that negatively affect academic progress, such as inattention, internalizing problems, behavioral problems, and various emotional problems (Tennant et al., 2015).

As students perceive that their teachers care for them, their perceived empathy shapes the way they view their teachers' level of competency (Corno & Anderman, 2015; Federici & Skaalvik, 2014). Teacher competency manifests through classroom structure, which consequently supports students' needs for relevance and competence (Furrer et al., 2014). In addition, empathy contributes to the positive classroom atmosphere in a manner that decreases anxiety and elevates self-efficacy. Accordingly, Martin and Rimm-Kaufman (2015) observed that students with low self-efficacy in math still engaged emotionally, showing interest, and socially, within collaborative activities, when their teachers provided a high level of emotional support. The emotional support teachers provided was efficacious enough to overpower the low self-efficacy of the students. The positive atmosphere that competent teachers create also includes the support of enough student autonomy to decrease anxiety, and emotionally-supportive teachers effectively create collaborative activities that build self-efficacy (Corno & Anderman, 2015; Martin & Rimm-Kaufman, 2015; Ruzek et al., 2016).

Although emotionally-supportive teachers possess much power to create opportunities to learn, limitations exist for teachers. Research conducted by Hoferichter and Raufelder (2015) concluded that positive peer relationships improved emotional problems, such as test anxiety; but teacher support did not play a role in decreasing test anxiety. However, teachers' emotional support did effect negative emotionality not connected to test anxiety. Raufelder, Regner, and Wood (2018) studied a case in which strong teacher support failed to significantly improve feelings of self-helplessness and test anxiety. The researchers cited fear of failure as a primary source of motivation, as well as over-dependence on the teacher as reasons why teacher support could not mitigate students' emotional deficiencies. Despite teachers' limitations to solve all motivational challenges, the researchers noted that teachers possess the power to build positive

relationships with students, facilitate positive peer relationships, and organize other interventions that will benefit students emotionally (Raufelder et al., 2018).

Teaching style. Students' perceptions of autonomy support contributes to their satisfaction with the teacher and the teacher's instructional style, and their satisfaction with style directly affects their levels of motivation (Haerens et al., 2015; Jang, Reeve, et al., 2016). In contrast, when students view a teacher's style as controlling, their frustration levels increase and thereby become less motivated. Although students tend to become less engaged when their school work becomes challenging, autonomy-supportive teaching can mitigate that effect, even when students battle feelings of inadequacy (Patall et al., 2018). *Teaching style* involves both the relational and instructional roles of the teacher, with both components working in concert to raise intrinsic motivation (Kiefer et al., 2015; Ruzek et al., 2016). Accordingly, conscientiousness as a teacher improves academic support, while agreeableness improves personal support (L. E. Kim, Dar-Nimrod, & MacCann, 2018). Both teacher traits characterize teachers who effectively help students achieve academically (Kim, et al., 2018). The relational element of teaching not only applies to the teacher-student relationship, but also to peer-to-peer relationships. Teaching styles that provide collaborative experiences and facilitate opportunities for positive peer interactions support psychological needs connected to intrinsic motivation (Martin & Rimm-Kaufman, 2015; Ruzek et al., 2016).

According to Reeve, et al. (2018), teachers' who are characterized by agreeableness possess a willingness to listen to students express their problems, attempt to understand their plight, and help them overcome challenges. In turn, students become more motivated for these teachers due to the needs support they receive. In the process of learning more about how students think and what learning challenges they face, teachers learn new ways to motivate

students and energize their engagement (Reeve, et al., 2018). The type of feedback teachers offer also involves motivation. When students receive constructive feedback that benefits them instructionally, their intrinsic motivation increases (Kiemer, Gröschner, Pehmer, & Seidel, 2015). Simple feedback that does little to improve students academically has no effect on elevating engagement (Kiemer, et al., 2015). What may complicate beneficial interactions are teacher reactions when students become disengaged. If teachers react to disengaged students in a manner that is excessively controlling, students will no longer feel supported (Jang, Reeve, et al., 2016).

Group perceptions of teacher support is critical because individual student perceptions are influenced by the group's opinion (Dietrich, Dicke, Kracke, & Noack, 2015). Considering this, the need for teachers to establish a positive atmosphere among the entire class, not just individuals, proves essential (Martin & Rimm-Kaufman, 2015; Ruzek et al., 2016). Teachers also need to consider the way students compare their teaching style to other teachers. Dietrich, Dicke, et al. (2015) measured the group's rating of perceived teacher support and intrinsic motivation across subjects as students rated multiple teachers. When the group (mean score) rated the mathematics teacher high in needs support, students' intrinsic motivation for the language teacher was lower; and when needs support from the language teacher was rated highly, students showed lower intrinsic motivation in mathematics. Although positive relationships have a powerful effect, academic performance may be affected more by negative relationships than positive relationship (McCormick & O'Connor, 2015). To motivate school engagement and promote academic engagement, teachers need to establish relationships of respect in their personal interactions with students (Kiefer, et al., 2015; Martin & Rimm-

Kaufman, 2015), in the peer-to-peer interactions they facilitate (Ruzek et al., 2016), and among the overall group's perceptions (Dietrich, et al., 2015).

Teacher training. Teachers' personal traits define a personal teaching style, and their traits have a bearing on the level of support they are able to provide students. For instance, Kim, Dar-Nimrod, and MacCann (2018) identified conscientiousness as a trait that positively supports students' academic performance, while teacher self-doubt negatively impacts students' self-efficacy. Teachers who are highly engaged in instructional tasks develop higher academic goals for their students (Karahan, 2018), but in contrast, teachers who experience burnout and have difficulty coping with teacher stress correlate to poor academic outcomes (Herman, Hickmon-Rosa, & Reinke, 2018; Shen et al., 2015). Given the instrumental effect that teacher behaviors have on the satisfaction of students' psychological needs, professional development programs have been instituted to shape teacher's beliefs and abilities to provide needs support (Herman et al., 2018; Kiemer et al., 2015; Johnmarshall Reeve et al., 2018).

Researchers have examined the effects of professional development and found various positive outcomes on the improvement of teacher support. Teacher training designed to improve classroom discussions has raised student perceptions of autonomy and competence support, in addition to elevated intrinsic motivation (Kiemer et al., 2015). Professional development training that specifically targeted the importance of autonomy-supportive teaching and autonomy strategies resulted in higher student motivation than a control group (Cheon & Reeve, 2013). The effects of autonomy-support training may not produce an immediate improvement, but teachers who consistently implement their training observe higher student motivation over a period of time (Cheon & Reeve, 2015).

Research has also revealed specific teacher outcomes related to needs support resulting from professional development. First, teacher beliefs about student motivation can be improved as they learn the cause for increased motivation (Aelterman, Vansteenkiste, Van Keer, & Haerens, 2016; Johnmarshall Reeve et al., 2018). As teachers learn how autonomy provides causality, they more fully understand how students' interests can be utilized as a more effective motivator than external influences (Reeve, et al., 2018). Second, professional development can improve teachers' viewpoint of structure and the impact structure has on student competence (Aelterman et al., 2016). In a study which examined the outcome of teacher interventions intended to improve classroom structure, Aelterman, Vansteenkiste, Van den Berghe, De Meyer, and Haerens (2014) discovered that teachers increased their belief in structuring, and accordingly implemented competence-supportive instructional strategies as a result of the intervention. Third, teachers can improve their understanding about the feasibility of autonomy-supportive teachers. As Reeve and Cheon (2016) observed, the more training teachers received in autonomy-supportive teaching methods, the more teachers believed they could feasibly implement those practices in their instruction. Fourth, teachers can increase their structure support as a result of experiencing it in their professional development activities (Aelterman, et al., 2016). Experiencing the benefits of instructional support impacted teachers' beliefs in structural effectiveness and increased their application of these methods in their own teaching (Aelterman, et al., 2016).

Summary

If teachers intend to narrow the gender achievement gap, considerations must be given to the power of the teacher-student relationship. Social cognitive theory conveys the critical role of social supports for developing students' self-efficacy and promoting self-regulation, especially

when school work becomes challenging (Bandura, 1995). Self-determination theory conveys the necessary factors for instilling intrinsic motivation and inspiring students to stay engaged (Wentzel & Miele, 2009). In an effort to narrow the gender achievement gap, teachers can initiate interventions that will improve learning for male students (Laet et al., 2016). Positively influencing boys will require teachers to develop proper perceptions of male students' intellectual abilities (Heyder & Kessels, 2017) and configure expectations accordingly. By realizing the perceptions boys develop based on the expectations presented to them, teachers can present themselves as a proper model for students to imitate (Bandura & Bussey, 2004). The masculine qualities that often impede learning (Duckworth et al., 2015) may be utilized to fashion learning in manner that connects with boys (Jurik et al., 2014). Once teachers improve their relational connections with boys, the need for intrinsic motivation can be addressed. As teachers develop instructional strategies that support autonomy and competence, male students are likely to become more engaged. By incorporating male-friendly instructional styles and building quality teacher-student connections, teachers can effectively prevent school burnout and motivate boys to respond to their academic challenges.

CHAPTER THREE: METHODS

Overview

The purpose of this quantitative correlational research study was to determine if male high school students' perceived teacher support predicts school burnout. Teacher support relates to behaviors that motivate students to be engaged in learning tasks and ultimately promote achievement. Burnout refers to an acquired lack of interest in academics, mostly from a failure to see academics as a useful endeavor. This study utilized a quantitative correlation research design to explore the predictive relationship between school burnout and perceived teacher support. The students invited to participate in the study were male high school students in four private high schools in North Carolina and Virginia. Burnout levels of high school males were measured by the School Burnout Inventory (SBI), and perceived teacher support were measured by the Teacher Support Scale (TSS). This chapter will detail the procedures followed when collecting the data and analyzing the results after conducting a multiple regression.

Design

A quantitative correlational research design was conducted to explore a predictive relationship between perceived teacher support and student burnout. A correlational design was chosen because the study includes a predictor variable (perceived teacher support) and a criterion variable (school burnout), and this type of design permits a researcher to explore how a change in one variable correlates to the variation of one or more criterion variables (Gall, Gall, & Borg, 2007). A major purpose of correlational designs is to predict the future value of one variable in relationship to the present value of one or more variables (Gall et al., 2007). Rather than manipulating the variables as in the case of an experimental design, a correlational design permits variables to be studied as they naturally exist (Warner, 2012). Participants in this study

were scored on their perceived teacher support for the purpose of predicting their level of school burnout. Correlational studies may also be used to determine the degree of a relationship between two or more variables (Gall et al., 2007). Studies using a correlational design could yield one of three types of results – positive linear association, negative linear association, or no linear association (Warner, 2012). A positive association between two variables indicates that two variables increase or decrease together, and a negative association indicates that one variable increases as the related variable decreases. When no correlation has been found, the lack of correlation indicates that the variables do not impact each other (Warner, 2012).

The variables were not manipulated in this study, which is appropriate for correlational research (Creswell, 2014). Correlational studies are not particularly designed to find a conclusive cause-and-effect relationship between two factors (Creswell, 2014). However, the design can effectively measure the strength and degree of the relationship between the two variables (Gall et al., 2007), and in this study, the relationship between students' perceived teacher support and their level of school burnout is measured. The aim of this study addresses the gender achievement gap and the need to increase male engagement (Stoet & Geary, 2015; Voyer & Voyer, 2014); therefore, only high school male students were selected as participants. The research question involved measuring school burnout on a global scale and four factors of teacher support: invested, positive regard, expectations, and accessibility. The *invested* factor relates to the level of teachers' engagement in helping students achieve; the *positive regard* factor involves teachers' emotional connection and care for the students; the *expectations* factor relates to the positive expectations teachers convey to their students; the *accessible* factor refers to how inviting teachers are and how willingly they respond to students' requests for help (Metheny, McWhirter, & O'Neil, 2008).

Research Question

RQ1: How accurately can school burnout among high school males be predicted by the linear combination of four teacher support sub-categories (invested, positive regard, expectations, and accessibility)?

Null Hypothesis

H₀1: There is no significant predictive relationship between high school male students' school burnout as measured by the School Burnout Inventory and the linear combination of teacher support sub-categories (i.e., invested, positive regard, expectations, and accessible) as measured by the Teacher Support Scale.

Participants and Setting

The participants for this study were selected among high school males from four private-Christian schools in eastern North Carolina and southeast Virginia. Table 1 provides the racial demographic data for the sample. Convenience sampling was used, in that the researcher is familiar with the schools, their administrators, their constituents, and their curriculum. Because school burnout exists in settings where students must face high demands (Aypay, 2017; Chang et al., 2015), these private-Christian schools were chosen due to their rigorous academic standards and the high expectations parents place on their children in these settings. The schools in North Carolina are members of the Association of Christian Schools International, or the North Carolina Christian School Association and its national affiliate the American Association of Christian Schools. The school in Virginia has been accredited by multiple agencies, including the National Council for Private School Accreditation. Each of the high schools offers a college preparatory track, in which a majority of their students participate.

Table 1

Racial Demographics of Sample

School	White	Black	Hispanic	Asian	Other
1	60%	36%	0%	5%	0%
2	91%	3%	6%	0%	0%
3	74%	14%	5%	7%	0%
4	86%	14%	0%	0%	0%
Total	80%	13%	4%	3%	0%

Participants for this study were ninth, tenth, eleventh, and twelfth grade males taking either a general high school track or a college preparatory track in high school. Among the four high schools, 182 male students were invited to participate in the study. The number of males who participated ($N = 126$) exceeded the suggested 121 participants needed for an alpha significance level ($\alpha = 0.05$) with a statistical power of 0.07 to achieve a medium size effect (Warner, 2012). Table 2 provides the grade demographics of the students who accepted the invitation to participate in the study; the totals do not include several surveys that the researchers removed due to incomplete answers. Data collection took place in May of 2019 on all four school campuses.

Table 2

Grade Demographics of Sample

School	9 th	10 th	11 th	12 th	Not listed	Total
1	4	5	7	5	0	21
2	18	13	6	0	3	40
3	10	17	10	0	2	39
4	9	6	9	0	2	26
Total	41	41	32	5	7	126
Percent	32.5%	32.5%	25.4%	4.0%	5.6%	100%

Instrumentation

Two instruments were used in this study: 1) Teacher Support Scale (TSS) and 2) School Burnout Inventory (SBI).

Teacher Support Scale (TSS)

To measure students' perceptions of teacher support, the Teacher Support Scale (TSS) was administered. The TSS is a self-report test developed to assess the degree to which students perceive that their teachers view students positively and convey high expectations for them (Ellen Hawley McWhirter, Rasheed, & Crothers, 2000). Zhang, et al. (2018) documented that the TSS has been the most frequently cited measurement for evaluating student perceptions of teacher support. The TSS has been used in connection with studies about Latino students' perceptions of high school counselors (Vela, Zamarripa, Balkin, Johnson, & Smith, 2013), school engagement (Perry et al., 2010), African-American career decisions (Gushue & Whitson,

2006), adolescent career development (Metheny et al., 2008), and effects of non-cognitive skills (Ellen Hawley McWhirter et al., 2000).

After creating the original 27-item test, McWhirter et al. (2000) reported reliability with a Cronbach's alpha of 0.96 and concurrent validity with a correlation of $r = 0.72$ ($p < .001$) between the TSS and a test developed by Farmer (1983). The present study will utilize the modified 21-item test that Metheny et al. (2008) revised by organizing four sub-categories: invested, positive regard, expectations, and accessible. Reliability for the sub-categories of the TSS has also been established (See Table 3; Metheny et al., 2008; Vela et al., 2013).

Table 3

Cronbach's Alpha Coefficients for TSS Sub-categories

Category	Coefficient
Invested	.92
Positive Regard	.89
Expectations	.88
Accessible	.85
Overall	.96

The instrument asks students to rank teacher support items on a five-point Likert-type scale, and responses are awarded points as follows: Strongly Agree = 5, Agree = 4, Neutral = 3, Disagree = 2, and Strongly Disagree = 1. The range of scores is from 21 to 105. The mean score of all 21 items should be calculated, and students with higher scores are considered to have higher perceived teacher support (Ellen Hawley McWhirter et al., 2000). Subscale results are also determined by averaging the scores of each category. The item numbers of each sub-

category on the self-report are listed in Table 4. The researcher calculated the scores after all tests were collected. Permission to use the instrument was approved by the test creator (see Appendix A).

Table 4

Item Numbers for TSS Sub-categories

Category	Item Numbers
Invested	3, 4, 6, 7, 9, 10, 12, 18
Positive Regard	5, 8, 11, 14, 15
Expectations	1, 2, 13, 16, 17
Accessible	19, 20, 21

School Burnout Inventory (SBI)

Students' school burnout levels were measured by the School Burnout Inventory (SBI). The first Burnout Inventory Instrument was originally designed to measure the effectiveness of interventions intended to reduce burnout in the workplace (Salmela-Aro, Näätänen, & Nurmi, 2004). The instrument was modified to apply to the school context in order to measure school burnout (Salmela-Aro et al., 2004). Specifically, the SBI was repurposed from a workplace assessment to a measurement of burnout among high school students (Merino-Tejedor, Sánchez-García, Prizmic-Kuzmica, Vigil-Colet, & Boada-Grau, 2015), although the instrument has been used for measuring middle school students and college students (Walburg, 2014). The SBI is a nine-item test that asks students to self-report feelings about three factors: exhaustion with school work, cynicism toward school, and feelings of inadequacy. Students are asked to rank each of the items on a six-point Likert-type scale with the responses scoring as follows: 1 =

Completely Disagree, 2 = Partly Disagree, 3 = Disagree, 4 = Partly Agree, 5 = Agree, and 6 = Completely Agree. The range of scores is between 9 and 54. Low scores represent low burnout, and high scores represent a high level of burnout. The researcher calculated the scores after all the tests were collected. Salmela-Aro, Kiuru, and Leskinen (2009) examined the reliability of the instrument and established validity for the SBI to be used among upper high school students. Cronbach's alpha of 0.88 was reported for the overall reliability of the test. Good concurrent validity was also reported as school-burnout factors of adolescent depressive symptoms, lower academic achievement, and lower engagement predicted higher student burnout scores on the instrument (Salmela-Aro et al., 2009). The SBI was modified and validated to measure burnout among high school students (Salmela-Aro et al., 2009), and it has been used subsequently in numerous studies involving adolescents, such as studies related to physical activity (Elliot et al., 2015), comparisons with academic performance (Bilge et al., 2014), smoking habits (Kinnunen et al., 2016), subjective well-being (Mehdinezhad, 2011) and life satisfaction (Mehdinezhad, 2015). Permission to use this instrument has been obtained (see Appendix B).

Procedures

The researcher first contacted the school's principals to obtain permission to conduct the study among their high school males (see Appendix C for principal letter). In addition to sending a letter of consent, the researcher spoke with each principal to explain the purpose of the study, scheduling implications, and the required procedures for collecting the data. Then, Institutional Review Board (IRB) approval was secured before any data collection procedures began (See Appendix D). Following approval, the researcher met with each principal to arrange the proper distribution of parental consent letters and forms. The researcher obtained permission from IRB and each principal to conduct an opt-out survey, which only required parents to sign an

opt-out waiver if they did not want their child to participate in the study (See Appendix E). It was decided by the researcher and the principals that paper-pencil surveys would be the most convenient method for distributing the TSS and the SBI to the students. Arrangements were made for each school to allow the surveys to be administered during a class period that would not inconvenience teachers or conflict with students' responsibilities. The time required to administer the surveys was approximately 20 minutes.

The four schools assisted with recruitment and parental consent by emailing parents and giving a copy of the opt-out consent form to the students. Parental consent forms (See Appendix E) were attached to an email message (See Appendix F) which explained the study, invited each student to participate, and provided the opt-out option. The recruitment period for each school was approximately one week, permitting the parents ample time if they chose to opt-out of the study. Students gave their assent to participate by completing the administered surveys. The first page of the survey was the student consent form, which instructed them to simply not complete the survey if they chose to not-participate or withdraw at any point while taking the survey administration (See Appendix G).

Data was collected by the researcher alone in one of the schools, and assistants were trained to collect data in other three schools. The assistants were instructed to properly explain the purpose of the survey to the students, remind participants of the study's voluntary nature, explain student consent, assure students of confidentiality, and collect and store completed surveys. Surveys were submitted to the students during the class period the principals designated as an appropriate time, free from conflicts. The TSS and SBI were attached as a front-back form to match both instruments to the participant, and the student consent form was provided as the front page of the distributed survey. Codes were placed on the surveys by the researcher to assist

with matching participants to their schools and organizing the data in a spreadsheet. Each survey was scored by the researcher and stored in an Excel spreadsheet. Once all the data was collected and all surveys were scored, the data was entered into SPSS for analysis.

Data Analysis

The data was entered into SPSS for the purpose of running a multiple regression to test the first and second null hypotheses. Multiple regression is appropriate for examining how a criterion variable can be predicted by more than one predictor variable (Gall et al., 2007). In a non-experimental study, a multiple regression can be used to test the significance of the relationship between various factors (Gall et al., 2007). Multiple regressions calculate the contribution of each individual predictor variable while controlling for the other predictor variables, and it examines the relationship between the predictor variables while predicting the criterion variable outcome (Warner, 2012). Testing the null hypothesis required conducting the regression to determine if a significant predictive relationship exists between the linear combination of perceived teacher support factors and school burnout. In this study, the perceived teacher support categories were the predictor variables, and school burnout was the criterion variable. The next stage of analysis involved examining the four sub-categories of teacher support on the TSS. In the case of this study, the four predictor variables (i.e., sub-categories of teacher support) are invested, positive regard, expectations, and accessible.

Before conducting the analysis, the data was screened for missing values, human errors, and outliers. Several surveys were discarded due to students' failure to complete every question; those surveys are not included in the totals charted on Table 2. A scatterplot matrix was created and examined to address the assumption of bivariate outliers and identify outliers between each of the variables. Outliers were identified, but none of them were considered to be extreme and

would therefore have no detrimental effect. A scatterplot matrix was used to address the assumption of multivariate normal distribution, as the researcher examined the shape between each predictor variable and the criterion variable to determine a normal distribution of data (Warner, 2012). The assumption of non-multicollinearity was met by conducting a multicollinearity test in SPSS and by examining the variance inflation factor (VIF) of each variable. Confirming non-multicollinearity indicated that each of the four predictor variables have a low degree of intercorrelation and each possess its own effects on the criterion variable (Warner, 2012). The R^2 value indicated the effect size according to the Cohen (2013) definitions of small (.02), medium (.13), and large (.26) values. The F -statistic ($p < 0.05$) determined the existence of a statistically significant relationship between perceived teacher support and school burnout (Warner, 2012). Slope coefficient values ($p < 0.05$) determined statistical significance of the four categories of teacher support, the predictor variables (Warner, 2012).

CHAPTER FOUR: FINDINGS

Overview

The purpose of this study was to utilize a quantitative correlation research design to determine if male high school students' perceived teacher support predicts school burnout. A multiple regression was conducted to explore a research question which pertains to the predictive relationship between school burnout and perceived teacher support, as well as the predictive relationship between school burnout and four sub-categories of perceived teacher support. This chapter includes the investigation of the research question and the results of the multiple regression analysis.

Research Question

RQ1: How accurately can school burnout among high school males be predicted by the linear combination of four teacher support sub-categories (invested, positive regard, expectations, and accessibility)?

Null Hypothesis

H₀1: There is no significant predictive relationship between high school male students' school burnout as measured by the School Burnout Inventory and the linear combination of teacher support sub-categories (i.e., invested, positive regard, expectations, and accessible) as measured by the Teacher Support Scale.

Descriptive Statistics

This study explored the predictive relationship between perceived teacher support and school burnout. The criterion variable in the study was school burnout, and the predictor variables were four sub-categories of perceived teacher support. Data was initially collected from 135 students, but several surveys were left incomplete by the students. Surveys with

incomplete questions were removed, and only data from the students ($N=126$) who completed the surveys were included in the study. School burnout scores ($M = 3.42$, $SD = 1.01$), measured by the SBI, indicate that the majority of the participants revealed an average level of burnout.

Teacher support scores ($M = 3.76$, $SD = 0.69$), measured by the TSS, indicate that a majority of the students' perceived support from their teachers on a slightly above-average level. The other criterion variables, sub-categories of the TSS, included invested ($M = 3.65$, $SD = 0.82$), positive regard ($M = 3.63$, $SD = 0.78$), expectations ($M = 4.14$, $SD = 0.69$), and accessibility ($M = 3.47$, $SD = 1.02$). See Table 5 for the descriptive statistics.

Table 5

Descriptive Statistics for Criterion Variable and Predictor Variables

	<i>N</i>	Range	Min	Max	Mean	SD
SBI	126	4.89	1.00	5.89	3.4154	1.00795
TSS totals	126	3.24	1.76	5.00	3.7612	.68530
Invested	126	4.00	1.00	5.00	3.6467	.82123
Positive regard	126	3.40	1.60	5.00	3.6333	.78046
Expectations	126	3.80	1.20	5.00	4.1429	.68998
Accessibility	126	4.00	1.00	5.00	3.4699	1.02194

Results

Assumption Tests

Before beginning the analysis, the researcher screened the data to ensure that inconsistencies did not exist. Nine students failed to complete both surveys or single questions on one of the surveys. The data calculated in the analysis only included students who completed all questions on both surveys; therefore, 9 student scores were removed from the original 135 participant scores.

To address the assumption of bivariate outliers, a scatterplot matrix was created to identify inconsistencies or outliers that may have a disproportionately large impact on the analysis (Warner, 2012). Scatterplots were created among all of the predictor variables and the criterion variable (see *Figure 1*). A few outliers were identified, but none of the outliers were considered to be extreme. The assumption of bivariate outliers was met by the examination of the scatterplot matrix.

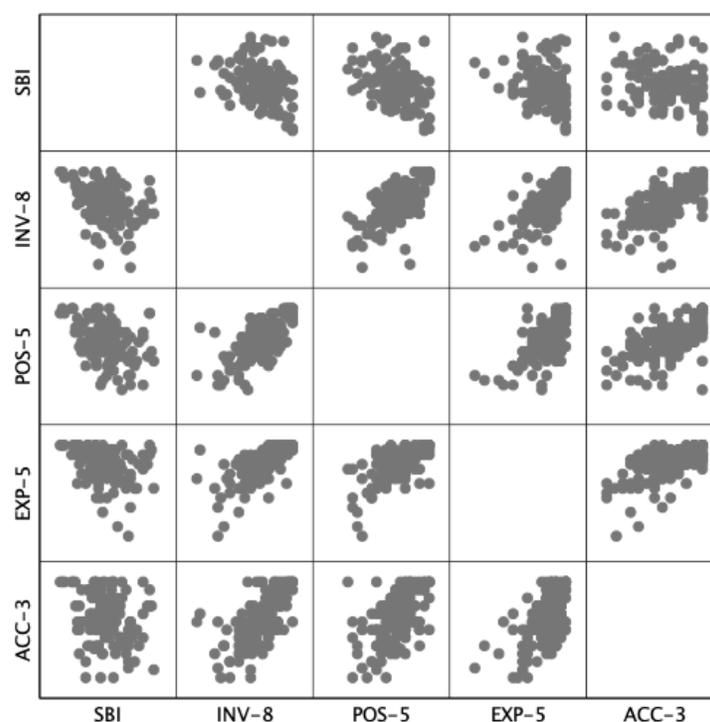


Figure 1. Scatterplot Matrix of School Burnout, Invested, Positive Regard, Expectations, and Accessibility

The scatterplot matrix was also examined to address the assumption of multivariate normal distribution. Upon inspecting the scatterplot matrix and the shape of the data points, no extreme outliers were found. Each of the 20 scatter plots indicated that the points in each set

were clustered around the mean value. Therefore, the assumption of a normal distribution of data between the criterion variable and each of the predictor variables was satisfied.

The assumption of non-multicollinearity was tested to ensure that the predictor variables were not highly correlated with each other. To address this assumption, Variance Inflation Factor (VIF) and Tolerance values were examined (see Table 6). Each of the Tolerance values scored mid-range between 0 and 1, and the range of VIF values were between 1.81 and 2.30. These findings indicate that there is a low degree of intercorrelation among the predictor values, and the assumption of non-multicollinearity was met.

Table 6

Collinearity Statistics

Model	Tolerance	VIF
Invested	.434	2.302
Positive regard	.499	2.006
Expectations	.479	2.087
Accessibility	.552	1.812

Null Hypothesis

To test the null hypothesis, a multiple regression was conducted to test the predictive relationship between perceived teacher support scores and reported levels of school burnout. Student scores on the SBI indicated their level of school burnout, and scores on the TSS measured student's perceived teacher support. The correlation between the criterion variable (school burnout) and the linear combination of predictor variables (perceived teacher support) was statistically significant, $F(4, 121) = 5.65, p < .001$ (See Table 7). Due to the result of a statistically significance relationship, the null hypothesis was rejected. The multiple correlation coefficient was .40, indicating that 16% of the variability in the regression model can be

accounted for by the linear combination of TSS sub-category scores (see Table 8). The value $R^2 = .16$ indicates a medium effect size as the predictor variable (teacher support scores) is added to the mean model of school burnout scores (Cohen, 2013).

Table 7

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	19.984	4	4.996	5.649	.000 ^b
	Residual	107.011	121	.884		
	Total	126.996	125			

a. Dependent Variable: SBI

b. Predictors: (Constant), ACC-3, POS-5, EXP-5, INV-8

Table 8

Model Summary^b

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.397 ^a	.157	.130	.94042

a Predictors: (Constant), ACC-3, POS-5, EXP-5, INV-8

The slope coefficients of each predictor variable were examined. Among the four variables, only positive regard was statistically significant $T(121) = -2.07, p < 0.05$ (see Table 9). None of the other predictor variables – accessibility, expectations, and invested – reported a statistically significant relationship. Given the coefficient value of -0.32, it could be predicted that school burnout scores among high school males will decrease .32 deviations as positive regard scores increase one standard deviation. As a result, the factor *positive regard* was found to be the best predictor of school burnout among high school males.

Table 9

Coefficients^a

	Unstandardized		Standardized		T	Sig.
	B	Std. Error	Beta			
(Constant)	5.390	.524			10.293	.000
Invested	-.292	.155	-.238		-1.879	.063
Positive regard	-.316	.153	-.245		-2.073	.040
Expectations	-.011	.176	.007		-.060	.952
Accessibility	.082	.111	.083		.740	.961

a. Dependent Variable: SBI

CHAPTER FIVE: CONCLUSIONS

Overview

This study examined the predictive relationship between perceived teacher support and school burnout among high school males. The study utilized two instruments to measure participants' levels of perceived teacher support and school burnout, and this chapter includes a discussion of the findings from the data analysis. In addition, this chapter contains a discussion about the implications of the study, limitations to the study, and suggestions for future research.

Discussion

The purpose of this study was to utilize a quantitative correlation research design to determine if male high school students' perceived teacher support predicts school burnout. This study aimed to determine if students' perceived teacher support is significantly related to their level of school burnout. The study examined four specific areas of teacher support, and whether a significant relationship between burnout and each of these categories exists. Previous research has examined school burnout on both the secondary and college levels, but mostly on the college level. Several variables have been studied in the research on school burnout, but few have examined social supports, especially teacher support. More research is needed to examine the dynamic influence teachers have in preventing or alleviating high school burnout among male students. Research regarding teacher support is overabundant, but most research examines student outcomes such as disciplinary behavior or test scores. Little research investigates the relationship between teacher support and the specific emotional factor of school burnout, which consequently impairs student performance.

Findings from the analysis of the current study indicate that there is a statistically significant relationship between school burnout and perceived teacher support. In general, these

results are consistent with the research that examines the effect teacher support has on student outcomes and the effect that social supports have on school burnout. The potency of teacher relationships with male students has been evidenced by research indicating its greater impact over teaching methods (Reichert & Hawley, 2011). Teacher-student relationships among males correlate to the student's self-concept; this is highly impacted by the frequency of negative interactions between the student and teacher (McFarland et al., 2016). Minimizing school burnout and improving engagement may begin with addressing non-academic implications rather than instructional elements, such as relational-emotional factors. When male students experience less contentiousness with teachers, their personal connections with teachers improve (Collins et al., 2017; Koomen & Jellesma, 2015).

Laet et al. (2016) found that students who engaged behaviorally in the classroom conveyed satisfaction with their teachers. Adolescents who had difficulty adjusting to their teachers' expectations conveyed dissatisfaction with teachers and reported lower levels of dopamine on a Biologically Informed Multilocus Genetic Profile Score analysis. In addition, Laet et al. found that students with moderate levels of dopamine, not extreme highs or lows, were most impacted by environmental conditions – dissatisfaction with their teachers. In the current study, the mean score (3.78) for perceived teacher support was in the slightly above-average range. Since $SD = .0.67$, a majority (68%) of the participants' TSS scores ranged from 3.11 to 4.45 – a range of scores on an average to above-average level. The significant relationship between these students' perceived teacher support levels and burnout levels corresponds to the Laet et al. (2016) discovery that students with extreme high or low levels of satisfaction are not the only students who are vulnerable to teacher relationships.

Researchers have examined the impact that social supports have on school burnout levels. In a meta-analysis of 19 studies in school burnout, Kim et al. (2018) found that social support from the school or teacher was greater than other sources of support, as they relate to school burnout. Previous research has explored the positive effect that support from instructional supervisors has on students who face study demands in high-pressure scenarios (Robins, et al., 2015). This corresponds to the current study of students who attend classes in private schools designed with college-preparatory levels of rigor. The academic demands in this type of setting places pressure on students to perform (LeBlanc & Slaughter, 2012; Feld & Shusterman, 2015). High school students taking in college-preparatory tracks are more likely to experience burnout than their peers who take vocational tracks (Walburg, 2014). Given the pressures of an academically rigorous curriculum, the need for adequate teacher support becomes essential for mitigating school burnout.

Previous research has made a connection between student burnout and the role teachers play in creating a supportive environment. Teachers, in concert with parents and peers, have contributed to forming a motivating climate that encourages students to remain engaged (Durmuş et al., 2017; Salmela-Arro & Upadaya, 2012). As students perceive a positive school climate along with parental involvement, their burnout levels decrease (Durmuş et al.). Students who demonstrate low engagement and lower levels of burnout report higher levels of teacher support; they are also less likely to engage in truancy (Virtanen et al., 2018). Teacher support is also more likely to be reported among students who are at least moderately engaged and experience average levels of burnout, in contrast to students who are disengaged and experience high burnout levels (Virtanen et al.).

The current study examined the relationship between school burnout and four distinct categories of teacher support. These four categories were (a) invested, (b) positive regard, (c) expectation, and (d) accessibility. As a result of the data analysis, the linear combination of teacher support factors was deemed statistically significant, but positive regard was the only teacher support category found to have a predictive relationship with the students' levels of school burnout.

Invested refers to the student's perception of teacher engagement with the students and their deliberate efforts to help students succeed (Metheny, McWhirter, & O'Neil, 2008). Student engagement increases and school burnout decreases as they perceive the supportive efforts from their authorities, especially when they are supported by both their parents and teachers (Virtanen et al., 2018). As students receive instructional support from teachers, their self-efficacy increases, as well as their ability to deal with academic setbacks (Chong et al., 2018). Personal investment may be perceived by male students when teachers tailor methods to males' preferences, a strategy that promotes intrinsic motivation (Lietaert et al., 2015). Although previous research has indicated the power of teacher support for reducing burnout (Chu et al., 2010), the teacher's role may be most effective as a facilitator for creating a positive classroom environment that makes coping with school stress more likely (Shih, 2014; Salmela-Aro, 2008). For some males, teacher efforts to structure a supportive classroom atmosphere may be more effective than personal efforts directed toward individual students. When students perceive academically beneficial interactions with their teachers, they feel emotionally supported by the environment that those interactions create. In turn, academic achievement increases due to the emotional support received from the structured environment (Kashy-Rosenbaum, Kaplan, & Israel-Cohen, 2018).

Positive regard refers to the students' perception of how much the teacher cares for them personally and the level of closeness that exists between them (Metheny, McWhirter, & O'Neil, 2008). Closeness with teachers correlates to higher self-concepts and better overall enjoyment of school (McFarland et al., 2016). What threatens the formation of close teacher-student relationship are conflicts that affect the perspectives of male students and teachers. Teachers and students feel more connected when less contentious interactions exist between them (Collins et al., 2017; Koomen & Jellesma, 2015; Spilt, Koomen, & Jak, 2012). However, male students are inclined to view teachers as being more permissive with females than males (Consuegra & Engels, 2016; Hu, 2012), and this perceived bias may jeopardize teachers' ability to develop beneficial relationships with male students. Closeness may also be jeopardized by the teachers' perspectives, in that they typically perceive closer connections with female students than male students (Koomen & Jellesma, 2015) and remain blind to their unequal interactions among the genders (Consuegra et al., 2016; Harrop & Swinson, 2011).

In the current study, positive regard was determined to be statistically significant as a predictive measure of school burnout. Teacher support was measured by five questions on the TSS. Items measured the students' perception of the teachers' opinion about students' work ethic (e.g., "I am a hard worker"), communication about the students (e.g., "would tell other people good things about me"), view of intelligence (e.g., "believe I am smart"), and personal connection (e.g., "enjoy having me in their classes" and "care about what happens to me"). This category of teacher support corresponds with the need for relatedness set forth by self-determination theory (Deci & Ryan, 2004). As students receive relatedness support from teachers, intrinsic motivation increases. Relatedness is supported when teachers increase their personal involvement with the students and show interest in student concerns outside the

classroom, not merely academic concerns (Kiefer & Pennington, 2016). Personal involvement cultivates feelings of respect, an emotional factor associated with academic performance and positive behavior (Kiefer & Pennington). Teachers support students' need for relatedness not only by building respect within the teacher-student relationship, but by also establishing an environment of respect among peers. Students interpret these teacher efforts as emotionally supportive (Ruzek et al., 2016).

Expectation refers to the students' perception that the teacher anticipates student success and positive performance (Metheny, McWhirter, & O'Neil, 2008). In the current study, the *expectations* sub-category was not a significantly significant predictor of school burnout; however, research has suggested that teacher expectations have a beneficial effect on students. Teacher expectations affect the interactions that contribute to students' formation of self-efficacy (Reeve, 2013; Schunk & Pajares, 2009). Male students require teachers to act as social agents who will influence the shaping of values and development of self-regulation (Bandura, 1995). Teachers bring gender beliefs with them into the classroom, although sometimes unknowingly, that influence student motivation (Duckworth et al., 2015; Heyder & Kessels, 2017; Huyge, Maele, & Houtte, 2015; King, 2016). Given the trend that boys are more responsive to teachers' initiations and are more likely to receive negative feedback than girls (Howe & Abedin, 2013), the expectations that teachers convey may have a considerable impact on male students' motivation.

Accessibility refers to the students' perception of the responses they receive when asking for teacher assistance, as well as the teachers' willingness to help with specific requests (Metheny, McWhirter, & O'Neil, 2008). Although the current study did not find the sub-category *accessibility* to be significantly predictive of school burnout, previous research has

indicated that teacher involvement contributes to student motivation (Kiefer, 2015). When teachers offer their students instrumental support, not just emotional support, their efforts promote student motivation and alleviates anxiety (Federici & Skaalvik, 2014). Research indicates that male students are more impacted than female students by their perceptions of teacher supportiveness, which is primarily judged by the teachers' willingness to help them (Katz, 2017).

Implications

Previous research has identified a gender gap in achievement (Stoet & Geary, 2015; Voyer & Voyer, 2014) as well as the difficulties that many teachers experience in their attempts to motivate male students (Frawley et al., 2015; Marcenaro-Gutierrez, 2018; Vecchione, 2014). The results of this study underscore the significance of teacher support for maintaining engagement and preventing school burnout. Given the effect of the teacher-student relationship, boys' affective needs should be regarded as a pivotal factor for predicting their academic performance. School burnout results from feelings of inadequacy about their academic abilities, emotional exhaustion with their assignments, and cynicism about the importance of their work (Fiorilli, 2017). When these emotional tendencies emerge, teachers possess the ability to intervene for male students if positive relationships have been cultivated. Findings of the current study evidence the connection between emotional and academic factors due to the predictability of the *positive regard* variable and participants' school burnout levels. How the students perceived their teachers' personal concern for them and the degree of closeness felt with their teachers corresponded to their level of burnout. Previous research has indicated that student needs for relatedness is supported when teachers show personal interests in the students, not just concern for their academic performance (Kiefer & Pennington, 2016). Likewise, personal

involvement can build a personal connection that gives teachers influence to impact students when school burnout develops.

The teacher-student relationship is critical for advancing male students' emotional well-being. The stress resulting from an academically demanding environment can cause various emotionally detrimental outcomes, such as students becoming unfocused, anxious, and sleep deprived (Feld & Shusterman, 2015); and this type of demanding environment can exist in the private-school setting (Leonard et al., 2015). Such a scenario causes students to experience school burnout (Sorkkila et al., 2017) as they unwisely adopt poor coping mechanisms in order to compensate for their feelings of inadequacy and cynicism. To prevent burnout and promote male students' well-being, teachers can take measures to support their students' psychological needs of autonomy, relatedness, and competence (Johnmarshall et al., 2018).

For students to avoid burnout, they must develop a healthy level of self-efficacy – an irreplaceable quality that utilizes self-regulation to achieve persistence amid difficulty (Glanz et al., 2000; Zimmerman, 1995). The development of self-efficacy corresponds to the support given for student's needs of autonomy, relatedness, and competence (Jungert & Koestner, 2015). As social cognitive theory presents, males can learn self-regulation and contribute to their own well-being as they develop proper judgements in an environment created by their teachers (Bandura, 1995). By properly shaping student's influences, teachers can offer students opportunities to observe and experience outcomes that enable self-reflection and cultivate self-efficacy. Consequently, students will become more intrinsically motivated to remain academically engaged (Johnmarshall et al., 2018).

The dynamic effect of teacher support on school burnout signals the need for professional development that improves teachers' abilities to motivate boys. Through professional

development initiatives, teachers can learn more about what motivates boys (Aelterman et al., 2016). Professional development programs have successfully developed teachers' abilities to fashion instructional strategies in a manner that elevates boys' intrinsic motivation (Kiemer, et al., 2015; Cheon & Reeve, 2013). Teachers benefit their students as they improve their classroom structure (Aelterman et al, 2016), autonomy-supportive instruction (Reeve & Cheon, 2016), and personal interactions (Consuegra et al., 2016). Each of these factors contribute to the students' perception of teacher support, which male students infer from the teacher's style as much as their personal relationships (Kiefer et al., 2015; Ruzek et al., 2016). As teachers learn how to handle their own stress and experience results in the classroom, the more likely they are to help their students prevent school burnout (Herman, Hickmon-Rosa, & Reinke, 2018; Shen et al., 2015).

Limitations

The limitations in this study mostly involve the sampling – the method and the population of participants. A convenience sampling method was used due to the researcher's familiarity with the administrative leaders at each school and the need to recruit participants who benefit the purpose of the study. Convenience sampling has limitations when applying the results to the general population. Caution is urged about generalizing and applying results from only one study when a convenience sample is used (Gall et al., 2007). The schools in this study were located in eastern North Carolina and southeast Virginia, and each school shared similar curricular standards and religious instruction. Two of the schools were located in urban locations, and two schools were located in a rural setting; however, the study did not consider the urban-rural factor in the analysis.

This study did not include racial or socioeconomical factors in the analysis. For example, aggregate demographics of all four schools reveal that 80% of the participants were Caucasian, a factor which should be considered when applying the results. Socioeconomical status cannot be categorically assumed due to the fact that all four schools charge tuition. Private schools in North Carolina accept enrollment from students who have been granted tuition funding from the state government due to their socioeconomic status. Another sampling factor involves the class diversity of high school boys. Only 4% of the sample included seniors, a class of college-minded students who may face distinctly different emotional challenges than underclassmen.

Recommendations for Future Research

After reviewing the findings of this study which examined the predictive relationship between perceived teacher support and burnout among high school males, four recommendations can be made for future research.

1. Additional research is needed to explore reasons for the extreme discrepancy between the coefficient values for the four sub-categories of perceived teacher support. While the t values and p values for invested and positive regard were similar, values for expectations and accessibility revealed that these factors had little effect on school burnout (see *Table 9*). Further research could examine reasons why expectations and accessibility did not have a similar effect as invested and positive regard.
2. Additional research should explore the three primary causes of school burnout – mental exhaustion, cynicism, and inadequacy. The current study only measured school burnout on a global scale as student scores on the SBI were calculated. The SBI, however, can measure the sub-categories of school burnout, and the instrument has been tested and validated for this purpose in previous studies (Salmela-Aro et al.,

- 2009). Future research should test the relationships among sub-categories of school burnout measured by the SBI and sub-categories of perceived teacher support measured by the TSS.
3. Additional research should explore the relationship between teaching style and school burnout. Given the relationship between teaching style and student perceptions of teacher support (Ruzek et al., 2016), a closer examination of motivating instructional practices may offer more insight for preventing burnout.
 4. Additional research should include female students when studying the relationship between perceived teacher support and school burnout. Male students often differ from their female classmates in their perception of teacher interactions and in the factors that motivate them. Studies that compare how both genders react to the same group of teachers may offer findings that benefit teachers of both genders.
 5. Future research in teacher support and school burnout should control for demographic factors, such as socioeconomic status, racial diversity, and grade diversity. The current study included few twelfth-grade students, and it did not control for any other demographic classification.

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APPENDIX A: TSS PERMISSION

Ellen McWhirter 

RE: Permission to use the TSS

 Saved Info Yesterday at 5:21 PM

[Details](#)

EM

To: Travis Moots, Cc: Ellen McWhirter



Hi Travis,

Here is the measure and an untested revision of it. Please let me know if you have questions. If you wish to use the measure, please send me an email of your agreement to cite it as indicated & to send me a brief description of your sample and its properties (reliability, validity) in your sample. If you are willing to do that you have my permission to use.

Best wishes in your research,

Ellen

Ellen Hawley McWhirter, Ph.D.
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I support all students regardless of immigration status or country of origin. As a member of the UO Dreamers Working Group, I support Dreamer students and promote their sense of belonging and safety as they pursue their higher education goals. For more information and resources please visit our Dreamers page (<https://blogs.uoregon.edu/dreamers/>) and the Immigration FAQs page (http://international.uoregon.edu/immigration_faq). Remember, when interacting with faculty, staff, and offices around campus you are never required to reveal your status.

APPENDIX B: SBI PERMISSION**Caterina Fiorilli**

Yesterday at 2:12 AM



Re: SBI

To: Travis Moots

Siri found new contact info in this email: Caterina Fiorilli fiorilli@lumsa.it

[add to Contacts...](#)

Dear Travis,
thank you for your email.
You can use (by quoting the Authors) the SBI without any problem.
Good luck for your work.
Caterina

Caterina Fiorilli, PhD
Associate Professor
Developmental Psychology and Education
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[See More](#) from Travis Moots

APPENDIX C: PRINCIPAL CONSENT

Dear _____,

My name is Travis Moots, and I am a doctoral candidate at Liberty University. As a graduate student in the School of Education, I am conducting research as part of the requirements for an Ed.D. degree. The title of my research project is “The Relationship of Perceived Teacher Support and School Burnout Among High School Males,” and the purpose of my research is to determine if perceive teacher support predicts school burnout.

I am writing to request your permission to conduct my research at Friendship Christian Academy. The procedures for the study include two self-report surveys for the students to complete. One test asks nine questions to measure students’ level of burnout regarding their school work. The other survey asks 21 questions about how they view the support their teachers provide them. I am asking for your consent to administer these surveys to your 9th, 10th, 11th, and 12th grade male students. Confidentiality can be ensured by coding the tests and allowing them to remain anonymous. The names of the students, teachers, and the school will remain anonymous. Completed surveys will be kept under password protection and locked storage by the researcher, and only the researcher will view the results. Participating in this study would bring no harm to your students, and the study will be conducted according to the procedures approved by the Institutional Review Board (IRB) of Liberty University.

Thank you for considering this request to conduct a study at your school. If you choose to grant permission, please respond to me by email at [REDACTED]. A permission letter document is attached for your convenience.

Sincerely,

Travis Moots

APPENDIX D: IRB APPROVAL**LIBERTY UNIVERSITY.**
INSTITUTIONAL REVIEW BOARD

May 13, 2019

Travis Moots

IRB Approval 3774.051319: The Relationship of Perceived Teacher Support and School Burnout among High School Male Students

Dear Travis Moots,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

Your study involves surveying or interviewing minors, or it involves observing the public behavior of minors, and you will participate in the activities being observed.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,


G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
Research Ethics Office

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APPENDIX E: PARENTAL CONSENT

PARENT/GUARDIAN CONSENT FORM

The Relationship of Perceived Teacher Support and School Burnout Among High School Male Students

This research study is being conducted by Travis Moots, a doctoral candidate in the School of Education at Liberty University. Your child was selected as a possible participant because he is a high school male. Please read this form and ask any questions you may have before agreeing to allow him to be in the study.

Why is this study being done?

The purpose of this study is to determine if perceived teacher support can significantly predict school burnout among high school males. This study may give educators more information that can be used to help students succeed academically.

What will my child/student be asked to do?

If you agree to allow your child to be in this study, he will be asked to do the following things:
During a class in the regular school day, students will be asked to complete two questionnaires, taking approximately 20 minutes total.

What are the risks and benefits of this study?

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include interventions teachers may use to reduce school burnout. Student burnout results from the stress of school work. If educators can learn more about how teacher support is connected to school burnout, they can develop better interventions for students.

Will my child be compensated for participating?

Your child will not be compensated for participating in this study.

How will my child's personal information be protected?

The records of this study will be kept private. Research records will be stored securely and only the researcher and the two members of his dissertation committee will have access to the records. Your child's identity will remain anonymous. The researcher will collect the questionnaires, not the teachers. All records will be stored in a locked cabinet and a password-protected computer file. After three years, all electronic data will be deleted.

Is study participation voluntary?

Participation in this study is voluntary. Your decision whether or not to allow your child to participate will not affect his current or future relations with Liberty University or his school. If

you decide to allow your child to participate, he is free to not answer any question or withdraw at any time, prior to submitting the survey, without affecting those relationships.

What should I or my child do if I decide to withdraw him or her or if he or she decides to withdraw from the study?

If you choose to withdraw your child or if your child chooses to withdraw from the study, he should inform the teacher that he wishes to discontinue participation and not return his survey.

Whom do I contact if my child or I have questions or problems?

The researcher conducting this study is Travis Moots. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact him at tsmoots@liberty.edu. You may also contact the researcher's faculty chair, Dr. Daniel Baer, at dnbaer@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Green Hall 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

If you do NOT want your child to participate in this study, please sign below to opt-out, and your child will not be administered the questionnaires. Otherwise, your child will be included in this study and administered the anonymous questionnaires.

Signature of Parent

Date

APPENDIX F: INVITATION EMAIL-LETTER

Dear High School Parent:

As a graduate student in the School of Education at Liberty University, I am conducting research as part of the requirements for the Doctorate in Educational Leadership program. The purpose of my research is to determine if perceived teacher support predicts school burnout, and I am writing to invite your child to participate in my study.

If your child is a high school male and if you are willing to allow your child to participate, he will be asked to complete two questionnaires. It should take approximately 20 minutes total for your child to complete the procedures. Your child's participation will be completely anonymous, and no personal, identifying information will be collected.

If your child wishes to participate, he will be administered the two questionnaires unless you choose to opt him out of this research study. If you do not want your child to participate, please sign the attached opt-out form and send it to your child's homeroom teacher, and the questionnaires will not be administered to your child.

A paper copy of the attached parental opt-out form will also be given to your child by the homeroom teacher. This form provides more details about the purpose and procedures of the study.

Sincerely,

Travis Moots

APPENDIX G: STUDENT ASSENT FORMS

CONSENT FORM

The Relationship of Perceived Teacher Support and School Burnout Among High School Male Students

Travis Moots
Liberty University
School of Education

You are invited to participate in a research study about perceptions of teacher support and level of school burnout. You were selected as a potential participant because you are a male high school student. Please read the consent form before agreeing to participate in the study.

Travis Moots, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to determine if perceived teacher support can significantly predict school burnout among high school males. This study may give educators more information that can be used to help students succeed academically.

Procedures: If you agree to be in this study, I would ask you to do the following things:
Complete two anonymous questionnaires, taking approximately 20 minutes total.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.

Benefits to society include interventions teachers may use to reduce school burnout. Student burnout results from the stress of school work. If educators can learn more about how teacher support is connected to school burnout, they can develop better interventions for students.

Compensation: Participants will not be compensated for participating in this study.

Confidentiality: The records of this study will be kept private.

- Your identity will remain anonymous.
- The researcher will collect the questionnaires, not the teachers.
- Research records will be stored securely, and only the researcher and the two members of his dissertation committee will have access to the records. All records will be stored in a locked cabinet and a password-protected computer file. After three years, all electronic data will be deleted.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or your school. If you decide to participate, you are free to not answer any question or withdraw at any time, prior to submitting the surveys, without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, simply do not complete and return your survey.

Contacts and Questions: The researcher conducting this study is Travis Moots. You may ask any questions you have now. If you have questions later, you are encouraged to contact him at tsmoots@liberty.edu. You may also contact the researcher's faculty chair, Dr. Daniel Baer, at dnbaer@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.