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EFFECTS OF HIGH-STAKES ACCOUNTABILITY  
TESTING ON TEACHER MOTIVATION

By

Megan T. Mahoney

A Thesis

Presented to the Faculty of  
Bucknell University  
In Partial Fulfillment of the Requirements  
for the Degree of Master of Science in  
Education

Approved: *Candice K. Stefanou*  
Advisor

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May2014

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## Table of Contents

	Page
List of Tables	vii
Abstract	viii
Chapter I – Introduction	1
Rise of High-Stakes Testing	1
Purpose of Accountability Testing	6
Effects of High-Stakes Accountability Testing	10
Purpose of Research	14
Chapter II – Literature Review	18
Self-Determination Theory	20
Levels of Motivation	22
Autonomy Support	26
Theory of Incentives	29
Effects on a School Environment	33
Institutionalization of Accountability Testing	36
Chapter III – Method	43
Participants	45
Independent Variables	46
Wealth of the District	46
Grade Level Taught	47

Number of Years Teaching	47
Dependent Variables	47
Work Climate Questionnaire	47
Work Tasks Motivation Scale for Teachers	48
Procedure	48
Instruments	50
Demographic Questionnaire	50
The Work Climate Questionnaire	50
The Work Tasks Motivation Scale for Teachers	51
Analysis	53
Primary Analysis	53
Secondary Analysis	54
Chapter IV – Results	55
Analysis of Variance	56
Public or Private School Teachers	56
Aid Ratio	59
Grade Taught	61
Number of Years in Teaching	63
Time of Response	65
Bivariate Correlations	67
Perceived Autonomy Support and Motivation	67
Perceived Autonomy Support and Aid Ratio	69



Chapter V – Discussion	70
Limitations of Study	80
Future Research	81
Summary	82
References	83
Appendices	88
Appendix A	88
Participation Consent Email	89
Appendix B	90
Demographic Questionnaire	91
Appendix C	92
Work Climate Questionnaire	93
Appendix D	95
Work Tasks Motivation Scale for Teachers	96

## List of Tables

		Page
Table 1	Analysis of Variance for Type of School	58
Table 2	Analysis of Variance for Aid Ratio	60
Table 3	Analysis of Variance for Grade Taught	62
Table 4	Analysis of Variance for Number of Years in Teaching	64
Table 5	Analysis of Variance for Time of Response	66
Table 6	Pearson Correlations for Perceived Autonomy Support and Teaching Tasks	68
Table 7	Pearson Correlation for Perceived Autonomy Support and Aid Ratio	69

## **Abstract**

There is always a driving force behind our actions in any given situation. In 2000, NCLB instituted accountability testing with strict requirements for all schools in the U.S., hoping to motivate teachers to reach higher levels of instruction by using sanctions or rewards against teachers when standards were not met. However, Deci and Ryan's (2000) SDT explains that fostering intrinsic motivation and providing autonomy support for an individual results in more effective outcomes and increased satisfaction.

Private and public school teachers in PA were surveyed using the Work Climate Questionnaire and the Work Task Motivation Scale for Teachers to examine differences in self-reported motivation and perceived autonomy support in order to investigate if the use of high-stakes accountability testing (HST) is related to decreased teacher motivation. The results from ANOVAs and correlations indicate differences in self-reported motivation levels of teachers in public and private schools, as well as aid ratio, grade taught, number of years in teaching, and the time the participant responded (before or after the PSSA), as well as perceived autonomy support, suggesting that the presence of HST may influence motivation in teachers.

## CHAPTER I

### Introduction

#### **Rise of current high-stakes testing**

Students have always been required to demonstrate what they have been taught and subsequently evaluated on their performance of the learned information on formal tests. As early as 650 AD in imperial China, civil service examinations, tests of education merit, were used as a method to recruit civil officials for high-ranking elite civil service jobs (Elman, 2009). These examinations, which people often had to travel across the country on foot to partake in, gave a much sought after upper echelon gentry and merchant status for those who gained credentials with the passing of the difficult tests (Elman, 2009). Passing this rigorous exam not only gave individuals opportunities to hold higher-level civil office positions that were recognized by rulers, it opened doors for families seeking to gain and maintain social and cultural status (Elman, 2009). Even the earliest known examinations held systematic and “police-like rigor” (Elman, 2009, p. 408) standards with heavy weighing outcomes for those taking the tests. The Chinese civil service examinations were used for over twelve hundred years in China, up until the early 1900s. The twentieth century gave way to new Chinese testing inventions modeled after “Confucianism” (Elman, 2009). As the Chinese began to move away from civil service exams, Western countries began to adopt testing methods of their own.

In the US, student testing has been used for more than 150 years (U.S. Congress, Office of Technology Assessment (U.S. Congress), 1992). During colonial

times, schools were using oral examinations administered by teachers to assess children. However, during and after the Civil War, American cities grew at a faster rate than any other period in U.S. history (U.S. Congress, 1992). As families immigrated to America, the idea of universal schooling took hold, and with it educators needed to shift their mission from servicing only the elite and upper class members to educating the masses (U.S. Congress, 1992). The growing number of a student population called for institutional efficiency and organization. Henry Barnard, a prominent figure in the early schooling movement, believed that objective and efficient classification of pupils was crucial to educational bureaucracy, stating that “It was inefficient to fill a classroom with children of widely varying ages and attainment levels” (U.S. Congress, 1992, p. 106). Barnard’s belief led educational reformers to seek a way to discover additional information that would aid in the efficient classification of students and they turned to achievement testing (U.S. Congress, 1992).

During the period from 1875 to the time of World War I, need for the development of a new range of testing instruments emerged in order to measure the mental ability of those preparing for college or enlisting in the war (U.S. Congress, 1992). In the late 19<sup>th</sup> century and early 20<sup>th</sup> century, European and American psychologists, such as Sir Francis Galton, J. McKeen Cattell, and Alfred Binet, began independently working to develop standardized intelligence tests that measured individual differences and abilities to perform various mental behaviors (U.S. Congress, 1992). As these intelligence tests were emerging in the United States,

immigration continued to grow and affect the school population; educators needed a way to assess the rapidly growing number of children who needed education. The idea of standardized tools held promise for schools to provide fair and equally accessible tests that would analyze current conditions of school curriculum (U.S. Congress, 1992). Schools were intrigued by the idea of a standardized test capable of being administered to large groups, as was the American army.

The U.S. Army began using standardized group-ability tests during World War I to determine which recruits were capable for service and which jobs to assign them to (U.S Congress, 1992). The army using such tests for placement decisions became the first application of, what is known today as, “high-stakes decisions.” The quick development and use of intelligence testing experiments used during World War I prompted schools to become inclined to use standardized tests to assess students at the conclusion on the war.

As the years progressed, tests continued to be reformed and adapted. Following World War II, the population of the United States once again increased dramatically during the “baby boom” era (Gelbrich, 1999). As the numbers of students, yet again continued to increase, so did the need for the number of teachers. Unfortunately, as the demand for teachers increased, the certifying requirements needed to teach were lowered (Gelbrich, 1999). Tests during the “pre-Cold War” era were implemented to test “basic or minimum” skills (Kornhaber, 2004), and many suggested this led to decreased performance of America’s school children. The presumed “slump” in the American education system came to the

nation's attention after the Russian launching of the space shuttle, "Sputnik" (Gelbrich, 1999). The United States felt defeated in its anti-communist and technology "race" with Russia. Immediately, politicians blamed this failing on the American educational system, claiming it was not rigorous enough, and did not spend enough attention on science or mathematics (Gelbrich, 1999).

In 1983, as a product of the Cold War "race" mentality (Cromack, 2012), members of President Ronald Reagan's National Commission on Excellence in Education produced a written report criticizing the United States educational system (National Commission on Excellence in Education, 1983). The report, *A Nation at Risk*, requested states to better assess the quality of teaching and learning in schools, pointing out flaws in the educational system by stating, "The educational foundations of our society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people" (National Commission on Excellence in Education, 1983, p. 9). The report also suggested several different criteria for school curriculum and needed changes in the educational system for reform such as, requiring specific content areas of study for high school students, raising admission standards for colleges, increased hours in a school day and increased days in a school year, and making teacher salaries professionally competitive and performance-based (National Commission of Excellence in Education, 1983). After the publication of this report, 35 states implemented more challenging standards and tests for their schools, and since then standards for which students and schools are judged have become more demanding (Kornhaber, 2004).

On January 8, 2002, President George W. Bush signed into law the No Child Left Behind (NCLB) Act of 2001 (Simpson, LaCava, & Sampson-Graner, 2004). This act arguably became one of the most influential acts on educational systems in the United States. The NCLB act compelled states to conduct annual student “assessments” that were linked to state-established standards, and performance on those tests would identify schools that did not meet “adequate yearly progress” (AYP) goals (Dee & Jacob, 2010). One of the main intents of this reform was to improve the focus and productivity of public schools through publically presenting detailed information on school-specific performance levels and linking the students’ performance to possible sanctions on schools (Dee & Jacob, 2010).

Schools now became legally responsible for student academic improvement, particularly for low-performing students and students from monitories and low-income families (Simpson et al., 2004). Simpson et al. (2004) reported that historically, students from minority and low-income groups were sometimes passed along through the education system; their limitations overlooked. After the passing of NCLB, every student- even those students with disabilities - in grades 3 through 8 (and at least once in grades 10 through 12) were expected to meet state identified standards (Simpson et al., 2004). A second feature of NCLB pronounced that quality of teachers was critical to student success (Sclafani, 2002). This required that all teachers were required to be “highly-qualified,” having earned a bachelor’s degree and passing state certification teaching tests (Simpson et al., 2004).



One of the most pivotal aspects of NCLB was the introduction of the notion of “sanctions and rewards” (Dee & Jacob, 2010, p. 154) based on a school’s AYP goal status. For example, a severe sanction could be staff replacement, teacher-salary rations, and/or federal budget cuts. Overall, NCLB aimed to ensure that children across the nation were educated to their full potential and did not fall behind, with the hope of engendering a population of students fit to be competitive, active members of society with foundational quality education, as the members of the National Commission of Excellence in Education proposed (Sclafani, 2002).

### **Purpose of accountability testing**

Assessments are used in many ways. Assessments can help professionals diagnose disabilities that impede learning, award placements in competitive programs, certify mastery in particular skills, and determine students’ base of existing knowledge (William, 2010), to name a few uses. One of the main purposes of accountability assessments is to provide a rich data source that can be used to assess individual children, as well as identify teacher and curriculum strengths and weaknesses (Sclafani, 2002). It is through assessment that we can determine if instruction has been effective.

Educational assessments can vary. Schools have routinely used standardized assessments and alternative assessments, which are assessments designed by the teacher and allow the test to mirror the content of instruction (Frost, 2014).

Alternative assessments can include authentic assessment, comprehensive assessment, and performance assessment. An authentic assessment is a task that

requires students to perform real-world assignments that demonstrate meaningful application of essential knowledge and skills (Mueller, 2014). For example, if teaching students to do their taxes, a teacher would not evaluate a student with a “multiple-choice,” “true/false” test, but rather have the student actually calculate the taxes. A performance assessment, simply, is a test that requires students to demonstrate mastery of a skill by performing or producing something (Frost, 2014). A comprehensive assessment, also known as a summative assessment, would usually occur at the end of an instructional unit or a course to measure the extent at which students have acquired knowledge of the content (Frost, 2014). Alternative assessments are tests developed by the teacher, instead of writers of a textbook or large corporation. These types of tests allow teachers to have complete control over the format of the test and it provides teachers with opportunities to test exactly what has been taught. Commercially prepared tests do not always accurately assess the same information that has been covered in the classroom. Teacher-made tests also allow teachers to assess knowledge and experiences that the students may have gained outside of the textbook curriculum, such as in interactions with guest speakers, results from classroom-based experiments, or allow assessment of a broader curriculum by integrating additional fiction and nonfiction books (Frost, 2014). This way of testing students assesses them on more than what is just covered in a textbook and encourages teachers to use creative and new teaching methods to make content relevant to the real world. Although alternative assessments allow teachers to determine the best fit of format for testing their students, and may

utilize real-world application skills through a more “hands-on” approach, authentic assessments present certain technical hurdles that standardized assessments consider. Standardized assessments allow for uniform assessment across schools in different districts, guaranteeing all students are tested on the same standards in the same way. Standardized assessments are also more cost-effective to deliver and have the potential to be machine-scored, providing better reliability across time by eliminating the introduction of human error in the scoring process (Kornhaber, 2004). Because of these advantages, it was determined that standardized assessments would be the instruments to assess students and hold educators accountable for student achievement.

William (2010) points out that the term “held to account” or “to be accountable” means to be responsible, liable, or blameworthy. An organization or person can be expected, or even required, to provide reason for his or her actions (William, 2010). However, William (2010) presents an interesting question, “to whom are schools accountable?” It could be proposed that schools are accountable to those who pay for educational services (taxpayers) and those who consume educational services (students and parents). There are many people involved in the success of education: teachers, learners, parents, taxpayers, and other community members and organizations. The aforementioned parties want to know if students are actually successfully learning, so it seems fitting to hold a straightforward evaluation of students’ achievement, which is done through standardized accountability testing (William, 2010).

Pre-NCLB governmental concerns were that children were not being educated to full potential, too many children were falling behind, and students would not be ready when needed to make an impact for economic success (Sclafani, 2002). With the passing of NCLB, education was at the forefront of governmental policy concerns; educators quickly had to shift attention to supporting the goals of the law (Shaul & Ganson, 2005). Historically, when an issue becomes the focus of public policy attention, the situation is likely to improve, or in the least, change (William, 2010). Post-NCLB, governmental documents and laws required states and school districts to implement certain standards and meet those pre-determined standards (AYP goals) thus raising student achievement to higher levels. When schools do not meet AYP goals two consecutive years in a row, the district must provide students with a choice to attend another public school. If the district does not meet AYP goals three years in a row, the school must provide additional services, such as tutoring for their students (Kornhaber, 2004).

After NCLB, all states had to adopt statewide accountability policies and the purpose of the accountability testing policies should be to ensure that all students are functioning at their highest-level possible (Kornhaber, 2004). Unfortunately, since the close examination of student test scores has become the main measure of student learning, the dominant aim of administrators is now to advance the test scores, not necessarily to advance student learning (Kornhaber, 2004). In order to achieve higher test scores, and to motivate teachers to improve strategies and students to perform well, nearly all states have various “high-stakes” consequences

in place when standards are not met. Despite the original intended purpose of high-stakes testing (HST) that aims to address a wide array of educational problems, when intense sanctions and consequences are placed on teachers and students to meet standards, it can result in negative effects.

### **Effects of high-stakes accountability testing**

At its initiation in 2002, NCLB required that by the 2013-2014 school year, all children would achieve proficient scores on state standardized accountability tests. Now, twelve years later, we have entered the anticipated high-scoring year, where students were projected to be performing at proficient levels. However, many schools are still performing “below proficient” (Kornhaber, 2004). An expected “level” of achievement for all schools to attain is perhaps a flawed prediction for mainly one reason: different states have different interpretations of what proficient is (Kornhaber, 2004). Even though not all students may be achieving at proficient levels by the end of this year, the practice of accountability testing due to NCLB has had some effects.

Evidence from a study conducted by Dee and Jacobs (2010) showed an elevation in student achievement trends from the years 1997 to 2007. Dee and Jacobs (2010) used data gathered from the National Assessment of Educational Progress (NAEP) that revealed a shifted increase in 4<sup>th</sup> grade math scores on the tests during the NCLB era. The increase in trends, as Dee and Jacobs (2010) present, particularly affected math achievement and achievement for disadvantaged students. However, Dee and Jacobs (2010) are also quick to point out that there is

no clear indication that it was specifically the onset of NCLB that improved performance. Dee and Jacobs (2010) also produced evidence that NCLB has been irrelevant in private schools. Trends in private, Catholic schools were compared to public school trends before and after the implementation of NCLB accountability tests. Dee and Jacobs (2010) found that before NCLB both private and public school test scores trended upward. After NCLB, public school math scores for 4<sup>th</sup> grade students increased slightly more than private school 4<sup>th</sup> grade students, however 8<sup>th</sup> grade reading scores of public and private school students were quite similar, which presents an argument that there may have been no meaningful presence of a NCLB impact (Dee & Jacobs, 2010).

Even with the evidence from Dee and Jacobs' (2010) study revealing that private schools are advancing without the use of accountability tests, public schools in some states like North Carolina, Florida, Georgia, and Louisiana are using accountability test scores to make major decisions like retention decisions, a practice that is highly discouraged by the National Association of School Psychologists (Thomas & Grimes, 2002), and some policy makers are even demanding specific scores for high school graduation determinations (Kornhaber, 2004). When schools do not meet AYP goals they are at risk to become categorized as "in need of improvement" (Shaul & Ganson, 2005, p. 161). However, this is not an opportunity for schools to get needed assistance and support from the state, even when the state has judged it as essential; it is considered a "sanction," and schools are "charged" to provide supplemental services (Shaul & Ganson, 2005). When

schools are sanctioned to provide extra services, on an already likely thin budget, it can result in forcing administrators to make difficult decisions such as eliminating employee positions and allocating resources away from important but non-tested subjects like social studies, art, and music, and direct focus and expenses on a more relatively narrow set of topics that are most represented on the tests (Dee & Jacobs, 2010).

To some, it is better to focus on math and reading, but to others it can take away attention from other important subjects, ultimately narrowing school curriculum. Policy makers have the power to influence particular classroom practices (Kornhaber, 2004). For instance, if state tests focus on events from the Civil War, it will likely spur teachers to thoroughly cover information about the Civil War. This can be argued as a point as to why accountability tests can be effective, because it may influence teachers to teach only what the policy makers want children to know. A common concern has been though, that teachers are “teaching to the test” (Sclafani, 2002). Teachers in states where exam results were used to hold teachers accountable report shifting instructional time toward the subjects that were tested more than did teachers in schools where results were primarily used as information (Dee & Jacobs, 2010). When this happens, teachers lose their freedom and independence as educators because they do not have a choice in what they teach; they are forced to spend more time teaching what is covered on the tests, which can result in neglecting non-tested subjects. An additional finding from Dee and Jacobs (2010) shows that teachers use different styles of instruction, focusing

on specific tasks when consequences are attached to the outcome of high-stakes tests, supporting an earlier claim that HST prevents teachers from teaching what they want and how they want. Dee and Jacobs (2010) found that 36% of elementary teachers who faced severe consequences from accountability test outcomes spent over 30 hours on activities designed to improve test scores, like taking practice tests, while only 12% of teachers who did not have to face consequences spent that much time on activities designed solely to improve test scores. Amrein and Berliner provide the results of a study (as cited in William, 2010) that show that test results from “stricter” accountability regimes did have an increase in NAEP scores more than did weaker regimes. However, they found that the “report card” about the school’s performance that is made available to the public and used to make sanction/reward decisions was a more significant and influential factor to the teachers than was the successful result from the students. The results from this study indicate that it is the effect of incentives that may have motivated the teachers to use better strategies to increase student learning. Yet, are the sanctions and rewards contingent on student performance for teachers really motivating them more?

Amrein and Berliner also point out (as cited in William, 2010), that although the use of strict consequences may be linked to increased HST scores, there is no evidence of improved performance on related measures such as the SATs or ACTs. William’s (2010) point presents a question: to what extent do students’ test-taking skills and acquired knowledge from taking the accountability tests transfer to future



academic evaluations? We would expect students who do well on elementary and middle accountability tests to crystallize the knowledge gained from early academic days and transfer similar educational skills and habits to future academic endeavors. If student performances on measures that are similar to accountability tests are unpredictable, how can educators be sure that student's ability to use and apply the knowledge tested will be transferable to real-world situations? The high-stake assessments should help to test students' ability to generalize their knowledge beyond the testing sphere (Kornhaber, 2004). Kornhaber (2004) proposes that if assessments operate against students attaining higher functioning ability for use in real-world situations, then they should be deemed ineffective, no matter the results.

Lastly, Amerin and Berliner direct particular attention to the additional findings (as cited in William, 2010) that high stakes testing (HST) has also led to increased student dropout, inappropriate and or ineffective test preparation strategies, such as cheating, and in particular for the focus of this research, decreased teacher morale and satisfaction leading teachers to withdraw from the profession.

### **Purpose of research**

Research shows that intrinsically motivated people are more likely to experience satisfaction and success in their jobs than those who are extrinsically motivated (Malikow, 2007). If this is the case, then why are states attempting to extrinsically motivate teachers with incentive and sanction programs based on test results? Proponents of NCLB hope that by holding schools accountable and

presenting possible consequences and rewards teachers will be motivated to use more effective teaching strategies to help their students achieve to higher levels. But what NCLB's high-stakes incentives fail to consider is that intrinsic motivation, rather than extrinsic motivation, has proven to be a critical contributor to a productive and satisfying work life for a person (Deci & Ryan, 2000). Based on what is known about human motivation, state and school policy makers should be more concerned with fostering teacher intrinsic motivation to produce positive school-wide results, but the requirement to meet AYP standards as measured by the accountability tests may be causing teachers to focus their efforts on achieving rewards or avoiding punishments, a concept that instead fosters external motivation.

Teachers are forced to restrict their teaching to what is tested in order to make certain students are most prepared to answer what is covered on the accountability tests. This begs the question, "How do teachers feel when being restricted in what they can teach?" What has high-stakes accountability testing with conditional incentives and sanctions psychologically done to the teachers? Have accountability tests with contingent rewards and punishments decreased teacher intrinsic motivation?

The goal of the present study is to investigate if the motivation of teachers has been affected by high-stakes accountability testing. When teachers feel pressured to teach toward specific outcomes, does it undermine their motivation, and do they become less engaged, as Deci and Ryan (2000) suggest might happen in

their Self-Determination Theory? If pressuring teachers to meet strict outcomes actually lowers intrinsic motivation, should we be using incentives to bring about outcomes potentially fostering extrinsic motivation?

This study examines the following questions:

- (1) Does high-stakes testing affect self-reported teacher motivation in public school teachers?
- (2) Do perceptions of autonomy support affect self-reported teacher motivation toward teaching tasks?
- (3) Does the wealth of a district affect self-reported motivation of teachers?
- (4) Due to the fact that high-stakes tests are required for public school students in grades 3 through 8, does the grade a teacher teaches in affect motivation?
- (5) Does the number of years teaching affect teacher motivation, indicating possible teacher burnout?
- (6) What is the relationship between teachers' perceptions of autonomy support from their principals and teachers' motivation toward teaching tasks?
- (7) What is the relationship between aid ratio of a district and perceived autonomy support in teachers?

As research has shown, NCLB has had some positive effects on student achievement, such as an increase in 4<sup>th</sup> grade math scores during the NCLB era shown by Dee and Jacobs (2010); however, it has also had some unintended negative side effects, such as, increased student dropout, cheating on the tests, and decreased teacher morale, as William (2010) presented. This work will provide

additional insight into how high-stakes testing may be related to teachers' motivation and satisfaction with their work. Malikow (2007) states that stimulating work that is satisfying for teachers will draw on individual strengths, and when people love their work; they will do well and prosper. If results show that teachers who are subjected to preparing their students to take high-stakes tests report lower intrinsic motivation, and lower professional satisfaction than teachers who are not subjected to these same conditions, then policy makers might want to reconsider the importance they place on and sanctions they utilize when analyzing student achievement test scores.

## CHAPTER II

### Literature Review

DeHeus and Diekstra presented evidence that teachers all over the world are more vulnerable to burnout symptoms than any other workers (as cited in Fernet, Guay, Senecal, & Austin, 2012). Attrition rates among teachers have been estimated at 30% for beginning teachers in only the first three years of work (Goddard, O'Brien, & Goddard, 2006). Fernet et al. (2012) studied how motivational factors impact teacher burnout building up over a period of time and what the symptoms are. They characterized burnout symptoms as three components: (a) emotional exhaustion, or the depletion of energy resources, (b) depersonalization, or an adopted, detached attitude toward the job itself or the relationships with the people associated with it, and (c) reduced personal accomplishment, which is a decrease in a teacher's individual feelings of achievement at work (Fernet et al., 2012). The general perception of burnout is based on the notion that it takes considerable time to develop, emerging after many years toward the end of a career (Goddard et al., 2006). However, a study conducted by Goddard et al. (2006) presented varying findings suggesting that burnout doesn't depend so much on length of time in a career; it is a demanding work environment that might be the cause of teacher burnout, for specifically beginning teachers.

Goddard et al.'s (2006) longitudinal study surveyed teachers immediately out of college, at the beginning of their career, and periodically over the course of

two years. Beginning teachers in the study reported feeling a high imbalance between the efforts they were putting into their work and the rewards they were receiving from administration (Goddard et al., 2006). The study noted several respondents' advice to future beginning teachers about work pressures. The experienced teachers made recommendations to first year teachers to be prepared to work weekend and nights for each term, and try to be prepared to have very little personal time. Other recommendations teachers gave to first year teachers warned them that their first year would be rough and the second year would begin to make more sense (Goddard et al., 2006, p 864). Other teachers surveyed gave advice about feeling a lack of acceptance and encouragement from school administrators. Experienced teachers' cautioned new teachers to try to learn how to be submissive and diplomatic, as it would be best to conform. If they didn't it would be likely they would feel weighted down by old, cynical teachers who were set in their routines (Goddard et al., 2006, p 864). Goddard et al. (2006) found that how creative or innovative beginning teachers feel they can be in their teaching is significantly related to the level of burnout from the reports of the teachers surveyed during their second year of teaching. The teachers' expectations about the freedom they believed they would have in exercising new and creative practices that they had recently learned at the university clearly impacted how they felt when they responded to the survey. Friedman suggests that it becomes "a teacher's shattered dreams" unable to exercise his or her initiatives and talents that contributes to new teacher burnout (as cited in Goddard et al., 2006, p. 868). Supporting Goddard et

al.'s (2006) findings that constraints placed on teachers can diminish teachers' motivation and cause them to feel restricted, and often times contribute to burnout, Fernet et al. (2012) also points out that when environmental factors cloud perceptions of supported autonomy, motivation can be decreased.

Fernet et al. (2012) observed the contributing factors to teacher burnout, but discovered an additional influence. Fernet et al. (2012) found that teachers' perceptions of the principal's leadership behaviors and demanding aspects of the school environment, specifically classroom overload and disruptive student behavior, have a strong effect on teachers' psychological well-being when they perceive their self-determination and efficacy as threatened; thus lowering motivation and increasing burnout. Fernet et al.'s (2012) study suggests that it is not only environmental factors that contribute to burnout; it is also the influential links between environmental and motivational factors. It is the psychological process underlying burnout that may erode teachers' autonomous motivation in the classroom that causes them to feel exhaustion. In order to fully comprehend how influential motivation is to any endeavor, it is essential to understand how a person is motivated.

### **Self-Determination Theory**

Deci and Ryan (2000) state there is always a driving force behind our actions in any given situation. We are motivated when we are *moved to do* something. There is always a varying degree to which we are motivated to do something from zero incitement, to very little, to a great deal. People not only have different degrees and

levels of motivation, but also different kinds of motivation, specifically different orientations. The different orientations of motivation explain where the inspiration is coming from or where it is originating. Deci and Ryan (2000) attribute the driving forces behind our motivation to either intrinsic factors or extrinsic influences. To further understand where our intrinsic or extrinsic motivation comes from, Deci and Ryan (2000) expound upon three psychological needs: competence, relatedness and autonomy that are essential for understanding human goal pursuits.

Competence refers to a person's ability to do something successfully and efficiently; relatedness refers to the desire to feel connected to others; and lastly autonomy refers to a person's desire to voluntarily engage in an activity because it is related to what he or she finds purposeful and is something the individual truly wants to be involved in (Deci & Ryan, 2000).

Self-Determination Theory (SDT) is based upon the idea that human psychological well-being is determined by feelings of competence, relatedness and autonomy as a person pursues and attains valued goals (Deci & Ryan, 2000). The starting points for this theory are the belief that humans are naturally growth oriented and are innately inclined to engage in interesting activities, pursue social connectedness in groups, and exercise their fullest intellectual capacity (Deci & Ryan, 2000). It is important to acknowledge that Deci and Ryan (2000) note that positive psychological health insists on satisfaction of not just one or two needs, but all three. The presence or absence of one of these conditions is a key predictor of whether a person will display full vitality of mental health or not. When a need is



hindered by an environmental condition, a person will in return act in a defensive, self-protective manner that is not always functional psychologically (Deci & Ryan, 2000). For example, an environment that is excessively controlling, over-challenging, or rejecting can produce negative consequences for the individual; a person may begin to become antisocial, focusing only on oneself, become controlled either by complying or defying, or even become completely amotivated (Deci & Ryan, 2000). Even though SDT indicates that being antisocial, compliant or amotivated can be useful defense mechanisms when in unfavorable situations, in the long run, they can have significant repercussions on mental health; hence the justification of Deci and Ryan's (2000) suggestion that competence, relatedness, and autonomy are so important to our well-being.

Human's needs to feel related to others or an event, and the need to feel competent and autonomous are necessary to facilitate intrinsic motivation. When conditions derail satisfaction of these needs, intrinsic motivation can be undermined (Deci & Ryan, 2000). A person can only be naturally intrinsically motivated toward a process or activity when he or she has the resources available that facilitate competence, autonomy and relatedness. As Goddard et al. (2006) and Fernet et al. (2012) found, when environments or people constrain the means to sustain autonomy and competence, people begin to feel burnt out and unmotivated. For the purpose of this paper, we will focus on motivation in terms of autonomy support.

**Levels of motivation.** Intrinsic motivation refers to doing something because we find it inherently interesting or enjoyable, whereas extrinsic motivation

refers to doing something because it leads to a separate and desirable outcome. When people are intrinsically motivated, they find enjoyment and reward solely in the activity itself. As SDT points out, even from birth, we are curious creatures ready to actively listen, play, and discover new experiences without external forces. This form of motivation proves to be a critical element in the productive cognitive, social, and physical development of an individual because it is through an individual's curiosity and inherent interest that knowledge can grow (Deci & Ryan, 2000). Humans continue to seek out knowledge for the basic satisfaction of the need to learn and feel competent in the work place as well (Niemi & Ryan, 2009).

Ideally, all working professionals in an educational setting should be intrinsically motivated to do their job, however, not all activities hold intrinsic interest for every individual; some tasks are met with resentment, resistance, and disinterest. This can happen when the individual feels pressure to conform to an externally imposed standard, such as when higher authority figures require certain levels of performance. When people do not have a sense of intrinsic motivation for an activity, external controlling methods, such as rewards and punishments are used to inspire motivation in a person (Niemi & Ryan, 2009). Self-Determination Theory examines the continuum of four different states of extrinsic motivation: external regulation, introjected regulation, identified regulation, and integrated regulation. The internal feelings a person can have toward an event or situation can be considered "states of motivation" because each type of extrinsic motivation varies in the degree to which it is experienced (Niemi & Ryan, 2009). Deci and

Ryan (2000) also point out that a person can be amotivated toward a task as well, meaning the individual finds no purpose or meaning in an activity, even with external forces attempting to instigate a deeper motivation. The first extrinsic state explained in SDT, and the least autonomous is external regulation. *External regulation* is when a behavior is enacted to receive a reward, perhaps a prize, or to avoid punishment (Niemic & Ryan, 2009). A person who is externally regulated may study for a test to receive a good grade, or to avoid disappointing a parent. An externally regulated student would most likely not seek out additional information on the topic after the test is taken because he or she was only motivated for the outcome and not necessarily to learn the material. Another example is that of a teacher who might be externally regulated to do her or his job in order to receive an end-of-the-year bonus. *Introjected regulation* is a state where an individual is motivated by internal contingencies such as, to feel pride in producing satisfactory work, or to not feel guilty for failing. This state of motivation is generated by ego involvement and performing in order to maintain self-esteem and self-worth, in the eyes of others (Deci & Ryan, 2000). The third state of motivation, *identified regulation* is when the individual is doing the task or activity to reach a future goal. This is more autonomously derived because it is in accord with the individual's own plans and ambitions he or she has previously established (Niemic & Ryan, 2009). The fourth extrinsic and most autonomous state is *integrated regulation*. Integrated regulation corresponds to the individual's beliefs and values. For example, a person might study medicine and aspire to become a doctor to cure a disease and help

those in need because he or she believes it is important and worthwhile (Niemic & Ryan, 2009). Integrated regulation occurs when people engage in self-examination of their values and assimilate the reasons for their actions with what they are engaged in (Deci & Ryan, 2000). Deci and Ryan (2000) note that people do not always start out at the least autonomous state, external regulation, and then move through each one until they reach the most autonomous state of motivation for an engagement. People can have a different orientation toward each activity they participate in. However, changes in how autonomous a person feels for a particular event can change at any time. Therefore, these states of extrinsic motivation are more a continuum, allowing for movement in every direction, rather than a one-way street. For example, a person might become involved in an activity like joining a workout class because he or she feels it will enhance self-esteem, but a controlling and demeaning instructor might cause a “shift” into external regulation. On the other hand, a person might originally become involved in an activity for external rewards; however, increased positive participation and a supportive environment might cause an orientation shift resulting in the person discovering the intrinsically interesting properties the activity has for him or her. In this example, where an individual discovers the valuable intrinsic properties the activity provides by internalizing his or her reaction to the supportive environment, he or she might begin to feel a stronger sense of agency and determination to be successful in the activity. This process of internalizing the behaviors and actions over time in order to reach a more intrinsic state of motivation can grow when an individual’s sense of

relatedness, competence and autonomy are assimilated with reasons for engaging in an activity. A critical issue for educators and administrators, given the research on teacher burnout and retention in the field, is how to effectively support teacher autonomy to facilitate teachers' intrinsic states of motivation.

### **Autonomy Support**

A distinction must be made between autonomous motivation for teaching and autonomy-supportive teaching. Autonomy-supportive teaching occurs when teachers work to promote a similar self-determined learning environment for their students (Roth, Assor, Kanat-Maymon, & Kaplan, 2007). An autonomy supportive person in a position of authority will take another's perspective while acknowledging his or her feelings by providing choice and minimizing pressure and demands (Black & Deci, 2000). Autonomy-supportive teachers are responsive, supportive, provide choice, offer student discussion time, and generate motivation in their students to want to learn (Pelletier & Sharp, 2009).

Alternatively, autonomous motivation for teaching is when teachers feel self-determined in their work (Roth et al., 2007). Feeling self-determined includes feeling authentic and satisfied when engaging in an action that is most identifiable to your inner self, or in other words, how intrinsically motivated you feel toward a task (Roth et al., 2007). Further examining what teachers' own thoughts and feelings are regarding how autonomous they feel in their work may have a bearing on how motivated that teacher is to teach.

Roth et al. (2007) suggest that autonomous motivation is a psychologically important aspect in promoting desirable characteristics in teachers. Teachers who are autonomously motivated to teach have an increased understanding and appreciation for the subjects being taught as well as knowledge of different ways to teach the material (Roth et al., 2007). When teachers have intrinsically motivated appreciation and understanding of the subject being taught, they can provide students with real-life examples and explanations for why the material being taught is important. Providing an understanding for real-world application and the real life uses of a subject is an aspect that Reeve, Jang, Hardre, and Omura (2002) report to be an important factor when teachers are aiming to facilitate a deeper motivation and understanding for students. Roth et al. (2007) also suggest that when teachers have a full understanding of the material they are teaching, it may open doors to new ways of teaching subjects to students, which will give them an opportunity for choice in their learning. Deci, Spiegel, Ryan, Koestner, and Kauffman (1982) support Roth et al.'s (2007) idea that having the opportunity for choice in activities promotes student's development of personal autonomy. Even though Deci et al. (1982) suggest that providing choice is a highly desirable and growth promoting practice, some teachers may offer few choices to students. Teachers may not provide relevance for their students, assuming that the relevance is apparent or that students can determine the relevance on their own, when this might not always be the case. This type of approach to teaching would not be highly autonomous-supportive for students. However, if teachers personally experience autonomous

motivation, it can help them to facilitate autonomous learning among their students, beginning with providing choices and relevance. Understanding the benefits that autonomous motivation can provide for both teachers and students can create an atmosphere conducive of high quality teaching. In addition, when students are achieving, teachers feel a sense of personal accomplishment, gaining a full realization of their abilities and the impact they can have on a student (Roth et al., 2007), which as SDT purposes is an essential need to psychological well-being and promoting motivation. But in order for teachers to provide autonomy support for their students, they need to feel their autonomy is supported by their superiors (Deci & Ryan, 2000).

Deci and Ryan (2000) suggest that people are more likely to feel autonomously motivated if people in the environment around them support their needs. Autonomy support can be shown when administrators and superiors acknowledge individuals' feelings, opinions, and also strive to gain an understanding of teachers' perspectives, which creates an environment where teachers will feel cared for and heard. When school principals make an effort to gain an understating of their teachers' needs they can begin to foster autonomous motivation for teaching among their teachers. As we have seen from Goddard et al.'s (2006) study which reports on the growing attrition rates and beginning teacher burnout, it is important for school principals to be aware of the benefits an autonomy supportive environment can have for teachers. Principals could create this environment by providing teachers with opportunities for professional identity exploration,

encouraging participation in major discussions, and involvement in creating an organizational structure, that allows teachers to feel open to explore innovative teaching methods (Roth et al., 2007).

### **Theory of incentives**

Pelletier, Legault, Seguin-Lecques (2002) suggest that when school systems place pressures on teachers to have their students meet specific standards, a positive teacher-student relationship could deteriorate. Pelletier et al, (2002) showed there is an association between student motivation and teacher behavior, implying that positive teacher-student engagement and intrinsic motivation on both ends could make a teacher feel more engaged in his or her work. Pelletier's et al. (2002) findings are relevant to Deci and Ryan's (2000) SDT and the three needs necessary for psychological well-being, specifically relatedness in this case. An additional reason people are likely to be motivated to act based on Deci and Ryan's (2000) theory could be because they believe a significant other to whom they feel connected to values that particular action, which satisfies their relatedness need. For example, when a teacher demonstrates care and pride in a student's successful work, that student may feel more motivated to do well in order to relate and feel closer to the teacher.

The literature suggests that autonomously supportive environments enhance self-determination and greater job satisfaction because teachers perceive their work to be meaningful and interesting (Deci & Ryan, 2000). Roth et al. (2007) studied the correlation between feelings of accomplishment and feelings of exhaustion in



teachers. They predicted that higher levels of autonomous motivation would be positively correlated with personal accomplishment and negatively correlated with feelings of exhaustion. A second prediction was that autonomous motivation would lead to autonomy supportive teaching, resulting in autonomous motivation for learning among students. Their results were in agreement with their predictions: autonomous motivation was positively correlated with teachers' sense of personal accomplishment and negatively correlated with exhaustion, and autonomous motivation for teaching was positively correlated with students' perceptions of their teacher being autonomously supportive to their learning (Roth et al., 2007). From the results of this study, we can see the benefits of teachers feeling autonomously motivated and how feeling insufficiently supported can lead a teacher toward feeling exhausted.

Pelletier et al. (2002) suggest that rewards and pressures placed on teachers decrease their self-determination in their work and cause them to be more controlling toward their students in order to meet those pressures. Fryer, Levitt, List and Sadoff (2012) recently conducted a field study on the outcomes on student achievement when teachers are presented with a reward of salary bonuses. Fryer et al. (2012) examined the effects of the recent trend in school policy of tying teacher pay incentives to increases in student achievement in an attempt to increase teacher productivity. Theory of incentives is based on the belief that if teachers lack motivation in their job then giving financial incentives that are tied to their students' performance will increase their motivation and effort. In other words, teachers will

be extrinsically motivated to work harder in order to receive a bonus of money in the end (Fryer et al., 2012). Schools in at least ten different states have adopted this kind of policy for their teachers (Fryer et al., 2012).

Fryer et al.'s (2012) study explores the power of loss aversion as opposed to incentives. They suggest that there is more psychological stress if a person feels that something is at risk of being lost than if there is the potential of something being gained. In other words, people try harder when they have something to lose than they do for the chance of gaining a reward. Fryer et al. (2012) states that numerous lab experiments have demonstrated that when subjects are presented with protocols framed as losses, rather than protocols framed as gains, they are more likely to respond positively. In order to test their theory of the power of loss aversion in terms of teacher productivity, the researchers conducted a field experiment in several schools in the Chicago area. Teachers were randomly placed into two groups and agreed to a "pay-for-performance" program. The group labeled as the "gain" treatment group received a traditional financial incentive in the form of a bonus at the end of the year if their students performed at a certain level (pre-determined by the school). The "loss treatment" group was given a sum of \$4,000 at the beginning of the year and signed a contract agreeing to give back the difference and a final reward if their students' performance was below average. If their students' performance was above average, they could keep the \$4,000 and receive an additional \$4,000, totaling \$8,000 (the same total that the "gain" group would get

at the end of year). The only difference in the groups was the timing and framing of the rewards (Fryer et al., 2012).

The study commenced in September after baseline testing was completed. Teachers received a mid-way report summarizing the students' performance. The researchers only focused on math scores, instead of both reading and math scores, to avoid any student having an overlap between teachers in the different groups and to avoid the possibility of increasing reading scores due to participation and involvement in reading programs. The results of their study are interesting: the "loss" treatment teachers' students showed large and statistically significant gains in math test scores (Fryer et al., 2012). The researchers noted their findings are different from previous research experiments due to their framing of the incentive design. When teachers are presented with an incentive reward at the beginning of the year, Fryer et al. (2012) suggested they spend more time making sure all students understand and grasp the material before moving to different content; they feel less pressured to "get through" material. Teachers presented with reward money at the beginning of the year could also use their money to purchase new materials for their classroom for their students and their teaching. However, 69% of the teachers in the "loss" group reported not spending any of their upfront money, exemplifying the concept of loss aversion: having to give back money they may have already spent if their students did not meet standards (Fryer et al., 2012). The results of this study indicate that the thought of losing something rather than the thought of gaining something seems to encourage a teaching style that is more

concerned with ensuring students gain a deeper understanding of the subjects by spending more time on content, rather than a teaching style that the “gain” group of teachers appeared to employ, one that is centered around broad, quick achievements aimed to cover more (Roth et al., 2007).

Incentives structured in a way that puts added pressures onto teachers, i.e. having conditional rewards for teachers only when certain student standards are met, can create the feelings of a controlling environment. However, other factors as well have been found to contribute to a shift in teachers’ attitudes and motivations when the work environment feels controlling.

### **Effects on a school environment**

One particular study observed teachers’ attitudes and behaviors when they were involved in a controlling work environment (Deci et al., 1982). The researchers examined behaviors of participants when given a task in two different settings. The researchers identified an informational setting that would foster choice and provide meaningful feedback to the participants. This type of informational setting mirrors an autonomy supportive environment, which acknowledges teachers competence and strives to enhance that competence (Deci et al., 1982). The other setting in the experiment was established to be similar to that of a controlling environment: one that pressures people toward a specific outcome. The experimenters gave two groups of participants directives to teach a student how to solve a puzzle. Emphasis on the importance of the students’ results was given to the teachers designated as the “controlling group.” They were told, “Your

role is to ensure that the students learn to solve the puzzle. It is a teacher's responsibility to make sure that students perform up to standards" (Deci et al., 1982, p. 853). The participants in the "informational group" were told their job was to "simply help the students learn how to solve the puzzle" (Deci et al., 1982, p. 853). The results from the study indicated that the teachers in the control group made twice as many utterances in a twenty minute period, allowed students to work alone less, gave three times as many directives as the informational teachers, and said twice as many "should" statements. The "controlling group" of teachers also was rated as giving students less choice and more criticism by a panel of judges listening to the recordings of the lessons (Deci et al, 1982). Although the results indicated that the controlled group of students assembled more puzzles than the informational group of students (12.9 to 6.1), these students could only solve the puzzles with the directives of the teachers. The controlling group of teachers told the students what they had to do to solve the puzzles and as a result the students could only solve 0.4 puzzles on their own without the directives of the teacher (Deci et al., 1982). Deci et al. (1982) concluded that when participants are told they are responsible for students' performance they become more controlling and tend to lecture and explain more, giving the students less opportunity for choice and independence.

The study conducted by Deci et al. (1982) can have implications for school systems to change and improve the school's environment toward a more supportive climate that encourages choice and independence. Pelletier et al. (2002) also

suggest in their study that when school systems place pressures on teachers to have their students meet specific standards, the relationship between teacher and student could deteriorate. Additionally, Pelletier's et al. (2002) study showed there is an association between student motivation and teacher behavior, implying that positive teacher-student engagement and intrinsic motivation on both ends could make a teacher feel more engaged in his or her work. Pelletier's et al. (2002) findings are relevant to Deci and Ryan's (2000) SDT and the three needs necessary for psychological well-being, specifically relatedness in this case. An additional reason people are likely to be motivated to act based on Deci and Ryan's (2000) theory could be because they believe a significant other to whom they feel connected values that particular action, which satisfies their relatedness need, in this case, a teacher. Research shows that there are noticeable positive effects for supporting teacher autonomy, however there are factors that can also decrease teachers' autonomous motivation as well, such as pressures from the school administration and environment.

Several specific types of pressures that teachers are likely to perceive at work are (a) pressure to conform to the school's standards and curriculum, (b) pressure to maintain classroom and student discipline, and (c) pressure to conform to the school's or a colleague's teaching method. Teachers in public schools may experience pressures and threats of government budget cutting, while private school teachers may feel an enhanced pressure from parents because in the case of a private school setting, the parents are the ones funding their child's education.

Other added pressures that teachers may feel at work include: feeling underpaid, teaching a subject or using technology when feeling unprepared, or dealing with parents' concerns about the teacher's quality of educating (Pelletier et al., 2002). These pressures can undermine teacher motivation toward teaching because when higher authorities such as the principals, the school board, or the school district impose restrictions and regulations for teachers to follow, they lose their own sense of agency. Losing this sense of agency can undermine a teacher's need for competence which, as Deci and Ryan (2000) point out, is an essential need for psychological well-being to foster motivation. Pelletier et al.'s study (2002) supports that pressure from above will cause teachers to feel less autonomously motivated and consequently act more controlling toward their students (Roth et al., 2007). One recent event helps to contextualize the theoretical propositions offered by the self-determination framework--the passing of the No Child Left Behind Act in January of 2002.

### **Institutionalization of accountability testing**

The field of education dramatically changed in 2002 when the United States Department of Education signed into law the No Child Left Behind Act (NCLB). This act was set forth because too many children were not being educated to their fullest potential and too many students were being passed through school without the mastered skills to become active members of society (Sclafani, 2002). Over the last century in the United States, education has become an increasingly important requirement for personal and economic success. Before this time students having

only a high school diploma could find profitable jobs and enjoy a stable middle-class life. This is no longer the case and it became the department's aim to improve the life chances for American children beginning with improving how states educate them (Sclafani, 2002). The overarching theme of NCLB is accountability; schools and school districts became fully responsible for ensuring positive academic outcomes for their students (Simpson et al., 2004), particularly for low-performing students and students from low income and minority groups.

Requiring all schools to be accountable for their students makes schools responsible for identifying the practices that make schools and teachers successful. According to Sclafani (2002), the counselor to the secretary of education, NCLB states that the whole point of annual assessment is to provide states and school districts with rich data that could be used to determine where a teacher's strengths and weaknesses lie. Determining and improving the caliber of teachers is one of the main elements of NCLB (Simpson et al., 2004). NCLB states that "highly qualified" teachers must be experts in their field or area of focus and have the necessary skills to teach that content. Simpson et al. (2004) report that highly qualified teachers are required to have at least a bachelor's degree, pass state exams, have certification credentials, and demonstrate competence in their content area. The idea is that student assessment results will show student classroom performance advances over time, pointing toward mastered or missed objectives. This was purposed to indicate where teacher professional development was needed or what particular teacher skills should be shared with other teachers.



Another principle of NCLB expanded parental involvement with the school and provided new opportunities for parents to advocate for their children (Simpson et al., 2004). Simpson et al. (2004) reported that with the passing of NCLB, parents were encouraged to become active participants in their child's education. Parents would have access to their child's test scores, and even the district test results. Free additional services to increase student achievement, such as tutoring, were now made available to children in schools that did not meet certain state standards. Parents were also permitted to transfer a student from a low-performing school to a higher-performing school in the district in order for their child to have access to a better education (Sclafani, 2002).

The federal policy required that states identify what their standards should be and develop an assessment that adequately measured those standards (Sclafani, 2002). States objectively identified areas of strength and areas of needed improvement and set performance targets known as "adequate yearly progress" (AYP) goals (Simpson et al., 2004). Schools that meet AYP goals could receive public recognition of achievement and even *rewards* for faculty and staff. However, if a school failed to meet AYP goals, they could be subjected to corrective and disciplinary measures from the state (Simpson et al., 2004). NCLB raised the stakes for teachers and, as Sclafani (2002) noted, hoped to provide motivational incentives to teachers and school leaders to improve their students' achievement. However, while NCLB had constructive intentions, aspects of this law have been met with controversy and resentment from teachers.

The core idea behind the high stakes testing (HST) policy assumes that when rewards and sanctions are contingent on students' test score outcomes, teachers and administrators will be more motivated to increase student performance (Ryan & Weinstein, 2009). Further, HST ideas claim to have a motivational approach because rewards and sanctions determined by test outcomes should inspire teachers to employ better teaching strategies that result in better test scores. However, Deci and Ryan's (2000) Self-Determination Theory (SDT) has argued using controlling external contingencies to change behaviors that undermine autonomy, competence, and relatedness are typically ineffective in the long run. Unlike the idea behind HST, SDT demonstrates that fostering autonomous forms of motivation in teachers is associated more with positive outcomes, such as creativity, persistence, and enhanced learner wellness (Ryan & Weinstein, 2009); while external contingencies relative to HST that pressure teachers toward a specific outcome undermine teacher motivation and produce a number of other negative effects.

One of the major detrimental effects of HST that has been occurring are instances of cheating that have been taking place in some schools in the country. Several major news stories revealing educators and administrators altering test answers in order to raise student's test scores have recently been reported. Lorenzo Garcia, superintendent of a public school in EL Paso, Texas was arrested in August of 2011 for fraud and reporting false test scores for financial gain (Sanchez, 2013). Garcia and his administration were inflating student test scores by not testing the

poorest performing students in the high school, changing failing grades to passing grades, and even forcing struggling students to drop out. After the school's increased scores were recognized by the state, Garcia collected over \$56,000 in bonuses and was nominated twice for superintendent of the year in Texas (Sanchez, 2013). This example of cheating shows how the pressures to raise test scores can create enormous stress for the teachers and administrators, and perpetuates a controlling environment. Sanchez (2013) confirmed teachers' perceptions of feeling controlled in his report by suggesting that the superintendent most likely got away with cheating because he held people's careers in his hands; teachers feared to speak out. Ryan and Weinstein (2009) point out that although a controlling environment may prompt immediate compliance; over time people tend to exert less effort to gain the reward, which diminishes self-motivation and investment in the value of the performance. When teachers and administrators simply change students' answers from wrong to right, instead of providing improved teaching to raise the test scores, it may exemplify the point made by Ryan and Weinstein (2009) that people will exert less effort over time to gain a reward.

Another major cheating scandal implicated over 178 teachers and principals cheating on the standardized tests in Atlanta, Georgia. In 2010, a criminal investigation began which examined the school's extraordinary increases in test scores from one year to the next, as well as an unusually high number of erasure marks on the test, only to reveal cheating instances occurring in the school since 2004 (Winerip, 2013). One teacher reported that she considers the cheating as part

of her job because it had been going on for so long. Ms. Parks, a teacher in the Atlanta school that finally confessed to the cheating, revealed details of the act. “We sat in a locked windowless room every afternoon during the week of state testing, raising students’ scores by erasing wrong answers and making them right” (Winerip, 2013, p. 4). Dr. Beverly Hall, the superintendent of the Atlanta school who is facing a charge of 45 years in prison, encouraged the cheating, giving tenure and thousands of dollars in bonuses, and threatening termination if anyone spoke out or failed to meet the standards (Winerip, 2013). One teacher reported that the cheating masked students’ deficiencies and inhibited them from receiving proper diagnoses; some of her students had appeared to score as proficient on the reading portion, but really were actually on a first grade reading level. Ryan and Weinstein (2009) point out that falsifying assessment results limits students from receiving individualized and responsive education because the tests are designed to be uniform to ‘fit’ all students. This can lead some students to feel under-challenged and other students to feel over-challenged. As seen by the events in El Paso, the students who were over-challenged by the test were encouraged to drop out and not take the test in order to avoid potential score decline. Other destructive practices Ryan and Weinstein (2009) suggest include preventing certain students from passing onto a grade where high stakes milepost tests are given and re-categorizing low-achieving students into special education programs.

As SDT points out, external contingencies can cause individuals to take the shortest route to reach the specified end. The pressure to reach the end goal of

higher test scores can lead teachers to use excessive test preparation strategies, like “teaching to the test,” which can lead to a narrowing of the curriculum (Ryan & Weinstein, 2009) Narrowing the curriculum can limit best teaching practices, leaving teachers feeling controlled in how they might choose to educate their students and thus undermine their autonomy (Ryan & Weinstein, 2009). From a Self Determination Theory perspective, testing student achievement is not necessarily a bad practice, however when high stakes are contingent on the outcome it becomes damaging. Tests can be valuable in that they help to identify gaps in student knowledge, or lack of progress in specific content areas. Tests can be useful tools to document needed resources to improve student achievement and learning, as well as targeting which groups of students need more instruction. It is when rewards and punishments are attached to the test that the participants, (i.e., teachers and students) suffer (Ryan & Weinstein, 2009). “Schools should not be factories with an aim of producing a standardized product, but rather contexts that foster human development” (Ryan & Weinstein, 2009, p. 230). As SDT proposes, developmental and educational progress must be nurtured through meeting an individuals’ competence, autonomy and relatedness needs, instead of being ‘force-fed’ to reach a pre-determined outcome through high-stakes testing (Ryan & Weinstein, 2009). Ryan and Weinstein (2009) lastly offer that instead of attaching high stakes to standardized tests, an SDT approach to testing and educating students can help schools to improve the way they attempt to increase student performance through

identifying the barriers that restrain student performance, such as undermining the need for autonomy and failing to foster student intrinsic motivation.

## CHAPTER III

### Method

The main question of the current study is to investigate whether high-stakes accountability testing affects teacher motivation. A survey that indicates a teacher's motivation for various teaching tasks was used to explore differences between public and private school teachers' self-reported motivation. These two groups were chosen because while public schools are required to participate in statewide accountability testing, private schools are not. If differences in motivation are found between the two groups, those differences may be partially explained by the pressure of the high stakes test. Additionally, differences in grade level taught, number of years in teaching, and wealth of the district are examined as potential sources of variation in teacher motivation. Teachers were also asked to complete a short survey focused on how well they feel their principals support them in order to analyze how perceived autonomy support correlates with teacher motivation.

The following questions were examined:

- (1) Does high-stakes testing affect self-reported teacher motivation in public school teachers?
- (2) Do perceptions of autonomy support affect self-reported teacher motivation toward teaching tasks?
- (3) Does the wealth of a district affect self-reported motivation of teachers?
- (4) Due to the fact that high-stakes tests are required for public school students in grades 3 through 8, does the grade a teacher teaches in affect motivation?

(5) Does the number of years teaching affect teacher motivation, indicating possible teacher burnout?

(6) What is the relationship between teachers' perceptions of autonomy support from their principals and teachers' motivation toward teaching tasks?

(7) What is the relationship between aid ratio of a district and perceived autonomy support in teachers?

### **Participants**

A total of 1,118 public and 640 private school teachers in Pennsylvania were contacted to be participants in the study. Of the 1,118 public school teachers who were contacted, 20.7% responded to the survey (N = 54, 39 female and 15 males with a mean age = 37) and 17.7% of the private school teachers responded (N = 36, 22 females and 13 males, with a mean age = 40).

A stratified random sample of public school teachers was selected from the list of schools on Pennsylvania's Department of Education website, based on a wealth indicator known as the aid ratio. The aid ratio and how it was used to create wealth categories for this study is described below. Sampling differed for the private schools. A convenience sample was used from a list of private schools in Pennsylvania for two reasons: the absence of a wealth indicator, and only private schools with teacher emails available to the public were used.



**Independent variables.**

**Wealth of the district.** Public Schools were grouped into three categories based on a socioeconomic metric known as aid ratio. The aid ratio is a wealth indicator of a district, which is established by Pennsylvania's department of education each year. Aid ratio is the general term for the following three numerical values that are used to determine a school district's relative wealth: market value, which refers to the value of taxable real estate; personal income, which is the combined individual personal income of residents in the district reported on the PA-40 income tax form; and market value/personal income (Pennsylvania Department of Education, 2014). These computed values are calculated together to determine the reimbursement value the district receives from the state relative to the state average for each pupil in the district (Skrapits, 2013). Aid ratios are then generated for all public schools in Pennsylvania by county. Districts with lower ratios, which are numbers closer to 1.0 receive more state funding than districts with aid ratios closer to 0.0, and would be considered districts at a lower socioeconomic status. The state average aid ratio is 0.5. A value closer to 0.1 would indicate that district is wealthier and therefore does not receive as much state funding (Skrapits, 2013). Aid ratios values can range from 0.1500 (wealthy districts) to 0.8865 (poorer districts).

Public schools in this study were divided into three categories based on their aid ratios: high (the wealthiest districts in the state), medium (moderately wealthy districts in the state), and low (least wealthy districts in the state) groups.

Researcher determined aid ratio values for schools in the "low" group were 0.7000

and above, schools in the “medium” group were values 0.4000 - 0.6999, and schools in the “high” group were 0.1500- 0.3999, essentially dividing the range of aid ratio values into thirds.

The sampling plan called for every 9<sup>th</sup> school on the list in the high and low aid ratio groups and every 35<sup>th</sup> school on the list in the medium aid ratio group to be selected. Sampling differed for the schools in the medium aid ratio category due to the larger number of schools in that range in the state.

**Grade level taught.** Teachers were divided into one of three categories based on the grade they reported teaching. These three categories were elementary (grades kindergarten - 5<sup>th</sup>), middle school (grades 6<sup>th</sup> - 8<sup>th</sup>), and senior high school, (grades 9<sup>th</sup> -12<sup>th</sup>).

**Number of years teaching.** Teachers were grouped into the following categories based on the number of years they reported being employed as a teacher, 0-9 years teaching, 10-20 years teachers, or more than 21 years teaching.

### **Dependent variables**

The dependent variables were scores on the Work Climate Questionnaire (“PAS-Work Climate” n.d.) and scores on the Work Tasks Motivation Scale for Teachers (Fernet, Senecal, Guay, Marsh, & Dawson, 2008).

**Work Climate Questionnaire.** The Work Climate Questionnaire is used to assess a respondent’s perception of a work environment with respect to how he or she feels supported by the manager, in this case, a principal. Individual’s scores from 15 questions are averaged together to result in a perceived autonomy support value.

A higher value indicates that the responder feels more autonomously supported by his or her supervisor. A lower value would indicate the responder does not feel supported by the principal (“PAS-Work Climate” n.d.).

**Work Tasks Motivation Scale for Teachers.** The Work Tasks Motivation Scale for Teachers is used to measure the level of motivation a teacher has toward several tasks involved in teaching. Responders indicate to what degree they give reason for engaging in 6 different responsibilities of teaching. The reasons listed correspond to 5 motivational levels that Deci and Ryan (2000) suggest a person can orient toward when engaging in a task. 3 items per motivational construct are averaged together to reveal the level of motivation a teacher has for a task (Fernet et al., 2008).

Both instruments are described in further detail below.

### **Procedure**

Teachers in the selected private and public elementary, middle, and high schools were contacted using a publically available internet-based email contact list found on the school websites. When the sampling plan landed on a school district that did not have publically accessible email addresses, the next school on the list, which was then the 10<sup>th</sup> high/low grouped school or the 36<sup>th</sup> medium grouped school was selected. This trend continued until landing on a school district, which provided public email addresses and the random sampling proceeded from the selected school on the list.

Teachers received an email invitation to participate in the study (See Appendix A) through a web link created using the online survey system, Qualtrics. Qualtrics is a web-based tool for creating surveys, which allow the researcher to randomize survey question distribution, store, and analyze that data. There were two waves of invitations to participate. Initial invitations to participate were sent to the entire group, and a second invitation went out several weeks later to those who had not yet responded. The second invitation occurred after the state accountability testing was completed. Participants provided consent by clicking the imbedded web link included in the email. Participants were asked to complete three questionnaires: a researcher developed demographic questionnaire, the Work Climate Questionnaire (WCQ) ("PAS-Work Climate" n.d.), and the Work Tasks Motivation Scale for Teachers (WTMST) (Fernet et al., 2008). Survey results were stored on-line through the Qualtrics system and then analyzed using a statistical program, Statistical Package for the Social Sciences (SPSS).

Email invitations totaling 1,758 were sent to teachers from 27 different public schools: 9 public schools from the high group, 9 public schools from the middle group, 9 public schools from the low group, and 31 private schools. Of the total invitations sent out (1,118 to public school teachers; 640 to private school teachers) 145 responses were received. Some surveys were returned with missing or incomplete data responses. Cases with missing data were handled in the following way. Data sets that had more than 4% of responses missing were eliminated. The data sets that had less than 4% of the information missing were

adjusted by calculating the average response by item and replacing the missing value with the average response across all responders for that item. After data adjustments, responses from a total of 90 participants were analyzed.

### **Instruments**

Three instruments were used in the study. A researcher developed demographic questionnaire, the Work Climate Questionnaire (WCQ) ("PAS- Work Climate," n.d.), and The Work Tasks Motivation Scale for Teachers (WTMST) (Fernet et al., 2008).

**Demographic questionnaire.** The demographic questionnaire was developed by the researcher to access individual information about the participant. Participants were asked to indicate gender, range of age, highest level of education completed, the type of school employed by (public or private), the school district employer, grade taught, subject taught, and number of years teaching (See Appendix B). Information about the name of the school or school district and whether the school was private or public was gathered in order to categorize the responses as coming from private or public school teacher responders and the wealth of district as determined by the aid ratio.

**The Work Climate Questionnaire (WCQ).** The WCQ (See Appendix C) consists of 15 questions that assess the perceived autonomy support provided by the responder's manager, in this case the teachers' principals or supervisors (PAS- Work Climate, n.d.). Items include questions such as, "My manager encourages me to ask questions." Responses are made on 7-point scale ranging from 1 (strongly

disagree) to 7 (strongly agree). Reliability and validity were not provided in the original document. However, a previous study conducted by Baard, Deci, and Ryan (2004), researching the predicted levels of satisfaction related to employees' autonomous causality orientations using a self-determination theory model also used the WCQ. Baard et al. (2004) adapted their WCQ survey from a comparable questionnaire that allows for variation of the target person/manager and lists a reliability of Cronbach's  $\alpha$  as 0.96 (Baard, Deci, & Ryan, 2004).

**The Work Tasks Motivation Scale for Teachers (WTMST).** The WTMST (See Appendix D) is a questionnaire designed to measure five different motivational constructs toward six different teaching tasks (Fernet et al., 2008). The scale allows responders to rate why they engage in different work tasks related to teaching based on self-perceived efficacy. The five motivational constructs: intrinsic motivation, identified regulation, introjected regulation, external regulation, and amotivation, established by Deci and Ryan (2000), explain the types of motivation a person can feel toward performing a specific task involved in his or her job. The six tasks that were grouped as the main tasks of teaching are (a) class preparation, which includes deciding on instruction topics and materials, determining the presentation styles, and establishing work procedures, (b) teaching, which includes presenting instructions, answering questions and attending to students' needs, (c) evaluation of students, which includes constructing assessments and exams, correcting tests, and giving feedback), (d) classroom management, or handling discipline, and managing students, (e) administrative tasks including recording

absences, participating in meetings with parents and principals, and school assemblies, and (f) complementary tasks consisting of tutoring, involvement in extracurricular activities, and professional development (Fernet et al., 2008). Fernet et al. (2008) suggested that not all tasks involved in teaching are done because they produce inherently enjoyable or interesting outcomes for the teacher. Some tasks required of the teacher are only completed because the school or principal requires it. The WTMST includes a total of 90 items (15 items across 6 different work tasks involved in teaching) that measure how much or how little and in what way a teacher feels motivated toward completing the listed work tasks. Each item is rated by participants on a 7-point scale ranging from 1 (does not correspond at all) to 7 (corresponds completely) (Fernet et al., 2008). For example, when responding to why one completes a class preparation task with a 7, (corresponding completely), to the statement “because I’m paid to do it,” the participant is indicating he or she feels a high level of external motivation (engaging in a task to receive an award/prize or avoid punishment) toward class preparation. A high score on a particular scale indicates the individual feels strongly about the reason they engage in a task. A high score on the intrinsic motivation scale means the individual enjoys engaging in a task and finds it inherently interesting. A high score on the identified motivation scales means a person partakes in a task because it is in accordance with his or her goals and ambitions. A high score on the introjected motivation scale means that a participant may be engaging in a task because he or she are driven by internal feelings to maintain personal self-esteem so as to not feel bad or guilty about not

engaging in a task or to feel prideful about completing a task. A high score on the external motivation scale may be evidence that a participant may partake in a task solely to receive an award or avoid punishment. Finally, a high score on the amotivation scale may signal a person has zero interest in engaging in a task and does not see a purpose for it. It is important clarify that a low score on a scale does not always imply the opposing motivation orientation toward a task, For example, a low score on an intrinsic motivation scale does not suggest the participant feels highly amotivated toward that task. Internal consistency estimates based on Cronbach's alpha for The WTMST range from 0.83 to 0.96 (Fernet et al., 2008).

### **Analyses**

**Primary Analysis.** This research was a between-groups post-test design. After data was gathered, analysis of variance (ANOVA) was used to analyze the results. Dependent variables were the five types of motivation: intrinsic motivation, identified motivation, introjected motivation, external motivation, and amotivation and motivational orientations towards six specific teaching tasks (class preparation, teaching, evaluation of students, class management, administrative tasks, and complementary tasks).

Independent variables were whether the teacher taught at a public or private school, the wealth of the school in which the teacher taught for public school teachers, number of years in teaching, and grade taught.



Pearson product-moment correlations were also completed to examine the relationship between perceived autonomy support and teacher motivation as well as between perceived autonomy support and wealth of the district.

**Secondary Analysis.** A secondary analysis was conducted separating the groups into the group of public school teachers who responded prior to the state accountability testing dates and the group of public school teachers who responded after the state accountability testing. Fifty-eight completed survey were returned before PSSA administrations, and thirty-two completed surveys were returned after PSSA administration. A one-way analysis of variance was conducted to examine the differences in motivation for the time of response of participants.

## CHAPTER IV

### Results

This study examined the relationship between the pressures of high-stakes testing and teacher's perceptions of autonomy support and their motivation to perform work-related tasks. Four different questions in relation to teacher motivation were explored.

(1) Does high-stakes testing affect self-reported teacher motivation in public school teachers?

(2) Do perceptions of autonomy support affect self-reported teacher motivation toward teaching tasks?

(3) Does the wealth of a district affect self-reported motivation of teachers?

(4) Due to the fact that high-stakes tests are required for public school students in grades 3 through 8, does the grade a teacher teaches in affect motivation?

(5) Does the number of years teaching affect teacher motivation, indicating possible teacher burnout?

(6) What is the relationship between teachers' perceptions of autonomy support from their principals and teachers' motivation toward teaching tasks?

(7) What is the relationship between aid ratio of a district and perceived autonomy support in teachers?

One-way analyses of variance were performed to analyze if teacher motivation is related to high-stakes accountability testing depending on whether the teacher teaches in a public or private school; if motivation is related to whether the

teacher teaches in a relatively wealthy, middle class, or poor school district; and if motivation is related to the grade the teacher teaches, and the number of years the teacher has been teaching. An additional ANOVA was performed to determine if motivation is related to whether the teacher responded to the questionnaire before or after state accountability testing. Pearson product-moment correlations were performed to analyze the relationship between teacher perceptions of autonomy support from his or her principal and teacher motivation for certain teaching tasks, and to examine the relationship between perceived autonomy support and the relative wealth of a school district.

### **Analysis of variance**

**Public or private school.** A one-way analysis of variance (ANOVA) was performed to determine if differences existed in type of motivation that private school teachers (N=36) and public school teachers (N=54) report with regard to performing tasks involved in teaching. Several significant differences were found.

A significant difference was found for external motivation toward class preparation tasks ( $F(1, 88) = 4.04, p < .05$ ). Teachers in public schools reported stronger external motivation in class preparation ( $M=12.15, SD=3.34$ ) than teachers in private schools ( $M=10.62, SD=3.79$ ). A significant difference was also found for amotivation in the evaluation of students ( $F(1, 88) = 5.69, p < .05$ ). Teachers in public schools reported higher levels of amotivation in evaluation of students ( $M=4.79, SD=2.46$ ), than teachers in private schools ( $M=3.63, SD=1.95$ ). A significant difference was also found for amotivation in class management ( $F(1,$

87)=5.72,  $p < .05$ ), with public school teachers reporting stronger amotivation for classroom management tasks ( $M=4.07$ ,  $SD=2.46$ ) than private school teachers ( $M=3.63$ ,  $SD=1.95$ ). Lastly, a significant difference was found for amotivation toward complimentary tasks ( $F(1, 86)=5.53$ ,  $p < .05$ ). Teachers in public schools reported stronger amotivation for conducting complimentary tasks such as involvement in committees and extracurricular activities ( $M=5.32$ ,  $SD=3.07$ ) than did teachers in private schools ( $M=3.92$ ,  $SD=2.24$ ). Table 1 presents the results for differences on the basis of public or private school.

Table 1  
*Analysis of Variance for Type of School (N=90)*

Source	Df	F ratio	p
Class Preparation			
Intrinsic	1, 87	.005	.942
Identified	1, 88	.657	.420
Introjected	1, 88	.177	.675
External	1, 88	4.04	.047*
Amotivation	1, 88	1.96	.165
Teaching			
Intrinsic	1, 88	3.06	.083
Identified	1, 88	.774	.381
Introjected	1, 88	.283	.596
External	1, 88	.857	.357
Amotivation	1, 88	2.60	.110
Evaluation Of Students			
Intrinsic	1, 87	1.32	.253
Identified	1, 87	2.11	.150
Introjected	1, 88	.187	.666
External	1, 88	.295	.589
Amotivation	1, 88	5.693	.019*
Class Management			
Intrinsic	1, 87	.400	.529
Identified	1, 87	3.81	.054
Introjected	1, 86	1.20	.276
External	1, 87	1.32	.254
Amotivation	1, 87	5.72	.019*
Administrative Tasks			
Intrinsic	1, 87	.064	.800
Identified	1, 87	.031	.862
Introjected	1, 87	.610	.437
External	1, 86	.048	.827
Amotivation	1, 87	2.90	.092
Complementary Tasks			
Intrinsic	1, 88	.892	.348
Identified	1, 88	.001	.977
Introjected	1, 88	.001	.976
External	1, 88	.167	.684
Amotivation	1, 86	5.53	.021*
WCQ Average	1, 86	.001	.970

**Aid ratio.** A one-way analysis of variance (ANOVA) was performed to determine if differences existed in type of motivation that public school teachers in wealthy SES (N=16), middle SES (N=20), or low SES (N=15) districts have toward specific tasks involved in teaching. Two significant differences were found when examining the relation the aid ratio of the district a teacher teaches in and their motivation toward teaching tasks.

A significant difference was found among teachers' intrinsic motivation toward classroom management ( $F(2, 48) = 3.56, p < .05$ ). Tukey HSD was used to determine the nature of the differences between the aid ratios. Teachers from middle class school districts (aid ratios of 0.4 - 0.6;  $M=8.85, SD=4.91$ ) report higher levels of intrinsic motivation for managing a classroom than do teachers from wealthier public school districts (aid ratios of 0.1 - 0.3;  $M=5.00, SD=2.87$ ). A second significant difference was found among teachers' identified motivation toward managing classroom behavior and rules ( $F(2, 48) = 3.58, p < .05$ ). Tukey HSD was used to determine which teachers' responses were significant. Teachers from wealthier districts report higher identified motivation to manage students' behavior ( $M = 8.38, SD = 4.12$ ) than do teachers from the least wealthy public school districts (aid ratios of 0.7 and above;  $M = 7.93, SD = 4.64$ ). Table 2 presents results for differences on the basis of aid ratio.

Table 2  
*Analysis of Variance for Aid Ratio (N=54)*

Source	Df	F ratio	p
Class Preparation			
Intrinsic	2, 47	.410	.666
Identified	2, 48	1.43	.249
Introjected	2, 48	1.20	.309
External	2, 48	1.11	.337
Amotivation	2, 48	.322	.726
Teaching			
Intrinsic	2, 48	.524	.596
Identified	2, 48	1.61	.210
Introjected	2, 48	.735	.485
External	2, 48	.354	.703
Amotivation	2, 48	.047	.954
Evaluation of Students			
Intrinsic	2, 48	2.51	.092
Identified	2, 47	2.37	.105
Introjected	2, 48	.526	.594
External	2, 48	.021	.979
Amotivation	2, 48	.988	.380
Class Management			
Intrinsic	2, 48	3.56	.036*
Identified	2, 48	3.58	.036*
Introjected	2, 47	.245	.784
External	2, 48	.045	.956
Amotivation	2, 48	1.46	.242
Administrative Tasks			
Intrinsic	2, 47	2.40	.102
Identified	2, 47	1.73	.188
Introjected	2, 47	.089	.915
External	2, 47	.005	.995
Amotivation	2, 47	.100	.905
Complementary Tasks			
Intrinsic	2, 48	.053	.948
Identified	2, 48	.087	.917
Introjected	2, 48	1.62	.209
External	2, 48	3.11	.054
Amotivation	2, 48	.965	.388
WCQ Average	2, 47	.021	.979

**Grade taught.** A one- way analysis of variance (ANOVA) was performed to examine differences in type of motivation for different teaching tasks depending on the grade taught: elementary (Kindergarten - 5<sup>th</sup>, N=17), middle (6<sup>th</sup> - 8<sup>th</sup>, N=22), and high school (9<sup>th</sup> - 12<sup>th</sup>, N=51). A significant difference was found for amotivation with regard to administrative tasks and grade level taught ( $F(2, 86) = 3.10, p < .05$ ). Tukey HSD was used to determine the nature of the differences between grade levels. This analysis revealed that teachers teaching high school report lower levels of amotivation for administrative tasks ( $M = 4.47, SD = 2.81$ ) than teachers who teach elementary grades ( $M = 6.56, SD = 3.39$ ). Table 3 presents results for differences on the basis of the grade a teacher teaches.



Table 3

*Analysis of variance for Grade Taught (N=90)*

Source	Df	F ratio	p
<b>Class Preparation</b>			
Intrinsic	2, 86	.131	.877
Identified	2, 87	1.44	.242
Introjected	2, 87	.177	.112
External	2, 87	1.85	.163
Amotivation	2, 87	1.94	.150
<b>Teaching</b>			
Intrinsic	2, 87	.163	.850
Identified	2, 87	1.08	.343
Introjected	2, 87	.371	.691
External	2, 87	.400	.671
Amotivation	2, 87	.744	.478
<b>Evaluation of Students</b>			
Intrinsic	2, 87	.115	.891
Identified	2, 86	.059	.943
Introjected	2, 87	.244	.784
External	2, 87	.374	.689
Amotivation	2, 87	.686	.506
<b>Class Management</b>			
Intrinsic	2, 86	1.95	.149
Identified	2, 86	.697	.501
Introjected	2, 85	.083	.921
External	2, 86	.581	.561
Amotivation	2, 86	.862	.426
<b>Administrative Tasks</b>			
Intrinsic	2, 86	1.23	.298
Identified	2, 86	1.21	.303
Introjected	2, 86	1.252	.291
External	2, 85	1.99	.142
Amotivation	2, 86	3.10	.050*
<b>Complementary Tasks</b>			
Intrinsic	2, 87	1.33	.271
Identified	2, 87	.671	.514
Introjected	2, 87	.142	.868
External	2, 87	.154	.858
Amotivation	2, 86	1.025	.363
WCQ Average	2, 85	2.782	.068

**Number of years in teaching.** A one-way analysis of variance was performed to determine if differences exist in teachers' motivation toward teaching tasks based on how many years the individual has been teaching. Two significant differences were found. A significant difference was found in identified motivation for class preparation tasks ( $F(2, 87) = 4.06, p < .05$ ). Tukey HSD revealed that teachers teaching for less than 9 years reported to engage in class preparation because it is important and allows them to carry out what they feel is important toward teaching more than teachers who have been teaching for over 21 years ( $M = 15.30, SD = 1.28; M = 13.69, SD = 2.55$ , respectively). A second significant difference was found in intrinsic motivation for managing classroom behavior ( $F(2, 88) = 6.23, p < .05$ ). Tukey HSD analysis revealed that teachers who have been teaching for over 21 years have more intrinsic motivation for classroom management than do teachers who have been teaching for 10 to 20 years ( $M = 10.50, SD = 4.37; M = 6.24, SD = 3.67$ , respectively). Table 4 presents results for differences on the basis of the number of years in teaching

Table 4  
*Analysis of variance by Number of Years Teaching (N=90)*

Source	Df	F ratio	p
Class Preparation			
Intrinsic	2, 86	.805	.451
Identified	2, 87	4.06	.021*
Introjected	2, 87	.071	.932
External	2, 87	1.06	.351
Amotivation	2, 87	2.58	.081
Teaching			
Intrinsic	2, 87	.436	.648
Identified	2, 87	1.18	.313
Introjected	2, 87	.116	.890
External	2, 87	.172	.842
Amotivation	2, 87	.680	.509
Evaluation of Students			
Intrinsic	2, 87	.760	.471
Identified	2, 86	.197	.821
Introjected	2, 87	1.02	.363
External	2, 87	.655	.522
Amotivation	2, 87	.242	.786
Class Management			
Intrinsic	2, 88	6.23	.003*
Identified	2, 86	.497	.610
Introjected	2, 85	.385	.682
External	2, 86	.142	.868
Amotivation	2, 86	.184	.833
Administrative Tasks			
Intrinsic	2, 86	1.49	.232
Identified	2, 86	.912	.406
Introjected	2, 86	.146	.864
External	2, 85	1.39	.254
Amotivation	2, 86	.098	.906
Complementary Tasks			
Intrinsic	2, 87	.621	.540
Identified	2, 87	.373	.690
Introjected	2, 87	1.14	.325
External	2, 87	.417	.661
Amotivation	2, 86	.235	.791
WCQ Average	2, 85	.766	.468

### **Additional Analysis**

**Time of response.** Because the sample was obtained in two waves, with a second request issued after the state accountability tests were completed, it was determined an additional one-way analysis of variance would be performed to determine if differences existed in teacher motivation as a function of completing the surveys before or after the Pennsylvania State Standardized Assessments (PSSAs) were given. Two significant differences were found. Specifically, a significant difference was found in introjected motivation toward preparation for class ( $F(1, 52) = 9.21, p < .05$ ). Public school teachers who responded after the administration of PSSAs reported feeling motivated to carry out class preparation tasks in order to not feel bad about not doing it, more than public school teachers who responded to the survey before the administration of the PSSAs ( $M = 11.76, SD = 3.99$ ;  $M = 7.77, SD = 4.81$ , respectively). A second significant difference was found in amotivation for performing administrative tasks ( $F(1, 51) = 4.16, p < .05$ ). Teachers who responded before the administration of the PSSAs reported higher levels of amotivation to carry out administrative tasks ( $M = 7.01, SD = 3.25$ ) than did teachers who responded after the PSSAs were given ( $M = 5.07, SD = 3.31$ ). Table 5 presents results for differences on the basis of the when a public teacher responded to the survey.

Table 5  
*Analysis of variance for Time of Response (N=54)*

Source	Df	F ratio	p
<b>Class Preparation</b>			
Intrinsic	1, 51	.057	.813
Identified	1, 52	.432	.514
Introjected	1, 52	9.21	.004*
External	1, 52	.176	.676
Amotivation	1, 52	.085	.772
<b>Teaching</b>			
Intrinsic	1, 52	.544	.464
Identified	1, 52	.013	.911
Introjected	1, 52	1.76	.190
External	1, 52	1.66	.203
Amotivation	1, 52	.001	.982
<b>Evaluation of Students</b>			
Intrinsic	1, 52	1.10	.302
Identified	1, 51	.028	.867
Introjected	1, 52	.773	.383
External	1, 52	.760	.387
Amotivation	1, 52	1.10	.306
<b>Class Management</b>			
Intrinsic	1, 52	.805	.374
Identified	1, 52	1.27	.266
Introjected	1, 51	2.30	.136
External	1, 52	1.22	.274
Amotivation	1, 52	1.91	.172
<b>Administrative Tasks</b>			
Intrinsic	1, 51	1.65	.205
Identified	1, 51	2.74	.104
Introjected	1, 51	1.88	.177
External	1, 51	.628	.432
Amotivation	1, 51	4.16	.047*
<b>Complementary Tasks</b>			
Intrinsic	1, 52	.167	.684
Identified	1, 52	2.28	.137
Introjected	1, 52	.671	.416
External	1, 52	1.05	.311
Amotivation	1, 51	1.42	.249
WCQ Average	1, 51	.050	.824

## **Bivariate correlations**

**Perceived autonomy support and motivation.** Pearson product-moment correlations were used to examine the relationship between the levels of motivation teachers have toward specific teaching tasks and how much they feel their autonomy is supported by their supervisor. Several significant positive and negative correlations were found. Significant positive correlations were found between autonomy support and intrinsic motivation for class preparation ( $r = .241, n = 87, p = .034$ ), between autonomy support and teachers' intrinsic motivation for evaluating students ( $r = .293, n = 88, p = .006$ ), and between autonomy support and intrinsic motivation for administrative tasks ( $r = .310, n = 87, p = .003$ ). Significant negative correlations were found between autonomy support and teachers' amotivation for evaluating students ( $r = -.296, n = 88, p = .005$ ), between autonomy support and teachers' amotivation for administrative tasks ( $r = -.275, n = 87, p = .010$ ), and between autonomy support and teachers' amotivation toward class management tasks ( $r = -.255, n = 87, p = .017$ ). Table 6 presents results for the relationship between perceived autonomy support and teaching tasks.

Table 6

*Pearson Correlation for Autonomy Support and Teaching Tasks*

<i>Class Preparation</i>						
	WCQ	Intrinsic	Identified	Introjected	External	Amotivation
WCQ	---	.241*	.141	.018	.164	-.110
<i>Teaching</i>						
	WCQ	Intrinsic	Identified	Introjected	External	Amotivation
WCQ	---	.195	.032	.204	.151	-.184
<i>Evaluation of Students</i>						
	WCQ	Intrinsic	Identified	Introjected	External	Amotivation
WCQ	---	.293**	-.014	.035	.034	-.296**
<i>Classroom Management</i>						
	WCQ	Intrinsic	Identified	Introjected	External	Amotivation
WCQ	---	.113	-.016	.053	.034	-.255*
<i>Administrative Tasks</i>						
	WCQ	Intrinsic	Identified	Introjected	External	Amotivation
WCQ	---	.310**	.122	.188	-.054	-.275**
<i>Complimentary Tasks</i>						
	WCQ	Intrinsic	Identified	Introjected	External	Amotivation
WCQ	---	.079	.092	.001	.087	-.040

**Perceived autonomy support and aid ratio.** A second bivariate correlation was performed to examine the relationship of teachers' perceived autonomy support and the relative wealth of district (aid ratio). No significant correlations were found. Table 7 presents results for relationship between perceived autonomy support and aid ratio.

Table 7

*Pearson Product- Moment Correlations for Autonomy Support and Aid Ratio*

	Aid Ratio	WCQ Ave
Aid Ratio	----	-.025



## **Chapter 5**

### **Discussion**

Based on Deci and Ryan's (2000) Self-Determination theory suggesting that relatedness, competency, and autonomy are critical in the development and maintenance of intrinsic motivation in a person, this study attempted to examine the effects of high-stakes testing (HST) on teacher motivation, a practice that past research has shown to minimize intrinsic motives (Niemiec & Ryan, 2009). The second major area of concern of this paper researched was how perceived autonomy support is related to teacher motivation.

The first research question addressed whether there was an effect of HST on teacher motivation by examining the differences in responses of teachers from public and private schools in Pennsylvania on the Work Tasks Motivation Scale for Teachers. Only public schools in Pennsylvania are required by law (Simpson et al., 2004) to administer accountability tests to their students. Private schools administer standardized tests to their students too, but they are not required to meet annual yearly progress (AYP) goals or face harsh consequences if those goals are not met. The pressure to meet AYP goals and avoid consequences has been suggested by the literature to have negative effects on the motivation teachers have toward their work. Several significant differences in responses of teachers in private and public schools were found. Public school teachers in this sample reported higher external motivation toward class preparation tasks than did private school teachers, suggesting that the reasons why public school teachers engage in this task

may be because they are paid to do it or because their school obliges them to do it. This finding also may be related to the idea that teachers feel restricted in the topics they can present due to the pressure to cover primarily what is on the accountability tests. Pelletier and Sharp (2009) support this reasoning when stating that limiting a teacher's freedom in determining a curriculum will undermine teacher motivation. From this result, we can see that public school teachers, more than private school teachers, report feeling externally motivated for deciding on instruction styles, instead of intrinsically motivated to prepare classroom instruction, what SDT theory proposes is the most effective stimulation in humans. When a teacher is intrinsically motivated toward a task as important as determining and using classroom instructional practices, psychological well-being and desirable characteristics in a teacher are promoted because he or she is more likely to use his or her knowledge and creativity to employ innovative ways to teach material to students (Roth et al., 2007).

Another difference was found in how public school teachers feel about the evaluation of their students. Public school teachers in this sample reported amotivation, or not seeing a purpose or the relevance of evaluating students through constructing assessments, and correcting and entering student grades more than did private school teachers. This could be the case because public school teachers may feel the most significant way their students are "judged" is from their scores on the standardized accountability test, thus making all other incremental classroom assessments seem less important. Or, as William (2010) points out,

teachers may be more concerned with the “report card” of the schools performance on the state accountability tests, than on the evaluation of students because the results of the PSSA is what directly affects the teachers, not the students classroom success.

Public school teachers from this sample also feel amotivated toward classroom management tasks. This means that public school teachers are not motivated to enforce rules and manage student interruptions and conflicts. A teacher has the ability to lead a classroom environment in a way he or she sees fit. However, pressures from administration about what should be taught in the classroom with the intended outcome being higher student test scores could be leading a teacher to feel less ownership of his or her classroom. As Deci and Ryan (2000) denote, feeling able and successful in an endeavor, such as managing a classroom, contributes to one of the basic human psychological needs--competency. The need for competency is the reason a person will strive to accomplish goals in order to feel talented and proud. Results from Goddard et al. (2006) and Fernet's et al. (2012) studies support Deci and Ryan's (2000) claim that competency is necessary for positive psychological health through their findings; it is when an environment constrains the means for a person to feel competent, like intruding on a teacher's classroom management freedom, that the teacher can begin to feel burnout and unmotivated.

Public school teachers also report being amotivated to engage in complimentary tasks, which are categorized as tutorial guidance, involvement in

committees and extracurricular activities with students. When teachers feel autonomously supported and intrinsically motivated they have more enthusiasm and determination to provide the best service to their students (Deci et al., 1982), which conceivably would include such complimentary tasks as those listed above. However, as Goddard et al. (2006) points out, when teachers begin to feel constrained and restricted within the work environment possibly due to pressure from high-stake tests, they can begin to feel amotivated. This lack of motivation in one area of teaching may carry over to feeling less motivated to engage in work tasks outside the classroom as well, such as extra involvement in committees and extracurricular activities. The pressures to meet high-stakes standards may take away teachers' time to be involved in complimentary tasks and responsibilities because they are consumed with preparing instructional strategies that are centered around making sure the students are ready for the test, or simply drained of the energy for such complimentary teaching tasks because of the pressure to make sure students perform to expectations on accountability tests.

Interestingly, the differences found between public and private school teachers all indicate that public school teachers indicate feeling either more amotivated or more extrinsically motivated to perform typical teaching tasks. There were no differences at the more intrinsic end of the motivation continuum that Deci and Ryan (2000) define, suggesting that teachers regardless of their position in a private or public school experience similar feelings of introjected, identified and intrinsic motivation for teaching tasks.

High school teachers in this sample reported less motivation to participate in meetings, record and transmit absences, and/or build disciplinary files than elementary teachers. High school teachers self-reported more amotivation toward administrative tasks than elementary teachers, meaning these teachers do not see the purpose in performing such tasks, or do not understand why they are responsible for such tasks. Literature presented by Deci and Ryan (2000) indicates that when teachers perceive their work to be meaningful and interesting, they feel more motivated to engage in the task. Deci and Ryan (2000) also suggest that relatedness is a critical psychological need that if not met may impair the psychological health of a functioning self-determined person. Could it be that the nature of high school teaching, where teachers are disciplinary experts as opposed to being generalists as elementary teachers are, can lead to isolation and undermine the sense of being a part of a group effort?

Fernet et al. (2012) studied how motivational factors were related to teacher burnout and depletion of energy sources. Fernet et al. (2012) comments that research findings point out that teachers are more susceptible to burnout than any other profession, possibly due to job demands, work overload, strict school policies, such as meeting state test standards, and student behavior problems. However, findings from this research revealed that teachers who have been teaching for over 21 years report feeling more intrinsic motivation toward class management than did teachers who were only teaching for 10 to 20 years. This would seem to

contradict Fernet's et al. (2012) finding that suggests that being forced to deal with student behavior problems over the years contributes to teacher burnout, but in fact suggests that teachers have more intrinsic motivation with more years teaching. This could also be explained by the years of experience a veteran teacher has dealing with student's classroom behavior. As Deci and Ryan (2000) state, three basic needs are necessary when facilitating intrinsic motivation: relatedness, competency, and autonomy. More experience implementing and applying classroom rules and techniques that have been tweaked and re-worked until found effective, would allow a seasoned teacher to feel competent and successful when managing classroom behavior, a need that contributes to higher intrinsic motivation.

Additionally, results examining the effects of the number of years in teaching on motivation indicated that teachers from this sample who have been teaching for fewer years, specifically zero to nine years, reported engaging in class preparation tasks because they felt it was important and allowed them to do their job (identified motivation) more than did teachers who have been teaching for over 21 years. The question that should be raised here is why do veteran teachers have less internally driven reasons for engaging in tasks that allow them to successfully complete their job? What happens over time to diminish the more intrinsic desire to complete these essential teaching tasks? According to Goddard et al. (2006), beginning teachers may be disappointed when they realize they do not have as much freedom to utilize innovative and creative teaching practices recently learned in their pre-

service training, possibly, because they feel restricted in what they can teach, or pressured to teach only what is on the accountability tests.

Examining how the wealth of the school district might affect self-reported motivation of public school teachers revealed more detail about public school teachers' motivation for classroom management. Recall this analysis was completed on public school teachers only as there are no wealth indicators available for private schools. Results suggest that teachers in the middle aid ratio districts (aid ratio = 0.4 - 0.6) have higher intrinsic motivation toward classroom management tasks. Additionally, public school teachers from this sample in wealthy districts report they engage in classroom management tasks because they feel it is important for the academic success of their students and those tasks allow them to attain work objectives they consider important, indicating identified motivation. As mentioned above, the atmosphere of an environment, whether individuals feel supported and connected to those around them, can greatly contribute to how motivated individuals feel toward a task (Deci & Ryan, 2000). Public school teachers in healthier economic areas, as indicated by aid ratios falling in the middle and wealthy income brackets, who report intrinsic and identified motivation for classroom management tasks may be feeling higher levels of motivation that are related to innate personal goals and a general feeling of interest toward such tasks because conditions in their schools may stimulate more preferable levels of motivation. Previous literature from Deci et al. (1982) claim that a favorable, supportive environment will contribute to higher levels of intrinsic motivation in a person.

However, these results indicate that a favorable environment may not be the sole reason. It appears that the type of support may be related to intrinsic motivation, meaning that the material support that comes with district wealth may be as important as professional and psychological support. Further research could explore in more detail the effects of socioeconomic status of a district.

Differences in teachers' responses about motivation toward teaching tasks depending on if the teacher responded before the administration of the Pennsylvania State Standardized Assessments (PSSA) or after were analyzed. This was done to determine if the removal of HST pressures would have an effect on teacher motivation. The results revealed differences between these two groups of public school teacher responders for introjected motivation toward class preparation tasks and amotivation for administrative tasks. Interestingly, public school teachers in this sample who responded *after* the Pennsylvania state accountability assessments were given felt more motivation to carry out class preparations tasks in order to not feel bad about not doing it. This finding signifies that public school teachers are carrying out tasks associated with classroom preparation, not because they find it pleasant and interesting to do, which would indicate intrinsic motivation, but because they would feel bad about not doing it. Niemiec and Ryan (2009) suggest that it could be a controlling environment, pressuring the teachers toward specific topics and instruction styles in order to meet standards that could be leading to decreasing intrinsic motivation. The expectation here was that after the PSSAs were over, teachers' motivation would



shape into intrinsic motivation because the pressures to meet AYP goals would be relieved and teachers could return to instructional styles more aligned with personal choices. However, as Niemiec and Ryan (2009) point out feelings of anxiety, pressure, and boredom caused by a controlling environment may permanently replace autonomous feelings of enthusiasm and genuine interest with more extrinsically motivated orientations. This may in part explain teacher responses for identified motivation in class preparation tasks after the PSSAs.

Teachers in this sample who responded before the PSSAs were given reported not being motivated to participate in administrative tasks, such as going to meetings with parents, principals, or administration more than did than did teachers who responded after the tests. This could indicate that teachers feel that participating in supplementary tasks might take away instruction time in the classroom that could be spent preparing students more for the tests.

The results indicate that the presence of high-stakes testing and subsequent consequences may have an effect on teacher motivation as observed with the differences found between public and private school teacher responses, differences between elementary and high school, and differences between new and veteran teacher responses, as well as responses to the survey coming before or after the PSSAs.

The second area explored in this paper was the effect of perceived autonomy support on teacher motivation. Deci and Ryan (2000) state that people are more likely to feel intrinsically motivated if other people in that environment support

their needs, which can be done by acknowledging an individual's feelings, opinions, and taking the time to understand another's perspective. It is important that people feel they have a choice in their endeavors; otherwise their level of motivation can be affected. This research is suggesting that a teacher's administrative support fosters intrinsic motivation toward doing the required tasks of teaching. The results of this study indicate that perceived autonomy support is positively correlated with intrinsic motivation for class preparation, for evaluating students, and for administrative tasks. When teachers feel they are supported by their principals in their job responsibilities, intrinsic motivation for class preparation, evaluation of students, and administrative tasks increases. Conversely, when teachers do not feel supported by their principals, they in fact feel no motivation for completing the task of evaluating students, managing classroom behavior, and participating in administrative tasks. This means that when principals and administrators create a supportive environments and demonstrate that they value teachers' work, teachers are more likely to feel connected to their work environment, satisfying Deci and Ryan's (2000) relatedness need, which makes it more likely for intrinsic motivation toward teaching. When principals fail to nourish teachers' need for autonomy, teachers report feeling no motivation toward several important work tasks. This raises the broader question of whether it is the pressures to meet high-stake standards or the lack of autonomy support that is resulting in lowered motivation.

Self-Determination Theory says people will accept and value practices as their own from those they feel connected to and liked. It is a snowball effect; when

teachers feel supported by their principals, they in turn recognize and understand the positive impact of feeling supported, which can help teachers to identify their role in a student's academic life as important and provide the best instruction to students (Reeve et al., 2002). Therefore, when teachers feel supported by their principal, they will be more supportive toward their students, which should be the aim of administrators and policy makers when intending to motivate teachers to provide optimal education. The evidence from this finding presents that a supportive environment that fosters autonomy support produces higher intrinsic motivation in a teacher, which is a more effective and positive characteristic of a teacher.

No significant relationships were found on the basis of aid ratio of a district. This indicates that the wealth of a district, whether a district is poor, or rich, is unrelated to how teachers perceive they are supported.

### **Limitations of the study**

While the results of this study are informative for administrators, principals, and policy makers when supporting decisions to utilize strict sanctions and rewards on teachers, several limitation of this study should be noted. Results are based on a relatively small sample of public and private school teachers in Pennsylvania. Despite researcher efforts to attain a larger sample size, only a total of 90 complete surveys were returned, with only 54 participants from public schools and 36 participants from private schools. Participation from teachers in the study was completely voluntary, which may have affected the randomization selection of

teachers. Participants who opted out of the study may have had the lowest motivation of all the teachers surveyed because they did not feel inspired to participate in research examining this topic at all. Responses from those who failed to return the survey may have been significantly different from those teachers who did return the packet.

A second limitation of the current study is related to the attribution of high-stakes testing as the cause in lower public school teacher motivation in certain areas. This study does not examine personality factors as a possible influence on teachers' motivation toward work-related tasks. It cannot be stated with certainty that it is only the presence of high-stakes testing pressures that affects teacher motivation. Differences in what are required of private and public school teachers or the initial reasons teachers were originally drawn to teach in either a public or private school may have also contributed to motivational differences.

### **Future Research**

Future research could examine differences in teacher personality factors related to motivation. Lingering questions about why public school teachers reported lower motivation for several work tasks could be further explained through personality characteristics of an individual. For instance, why did a teacher choose to teach in a public or private school and does this contribute to the level of motivation he or she has in teaching? Further research investigating why teachers' responses in motivation differed for certain tasks in the grade a teacher teaches, the number of years teaching, and/or aid ratio would help to clarify if it was solely

the presence of high-stakes testing in public schools or if there were other contributing factors. Additionally, future research could be more conclusive with a larger, more representative sample.

Previous research supports the idea that when teachers experience the benefits of autonomous supports, they in turn are more likely to facilitate autonomous learning in students (Pelletier et al., 2002). This research does not examine perceived autonomous support of students, only teachers. Future research could provide information to teachers about how personal attitudes toward teaching impacts students' work. Future research could expand on the current research by correlating how teacher motivation relates to fostering intrinsic motivation in students to learn.

### **Summary**

The central idea behind administering high-stakes testing in schools is that rewards and sanctions can be used to motivate teachers to reach higher levels of quality instruction in service to the nations' students. However, as the literature has shown, stimulating and strengthening intrinsic motivation in a person may have more impact on behavior than the use of external pressures. In order to facilitate intrinsic motivation to accomplish goals and tasks, perhaps we should focus on creating an autonomy supportive environment for a teacher, rather than imposing sanctions and rewards, which only fosters extrinsic motivation. The results from this study suggest there is some relationship between high-stakes testing and decreased teacher motivation.

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## Appendix A

Email to Teacher:

Dear Pennsylvania schoolteacher,

I am a graduate student conducting research in teacher motivation in light of the emphasis placed on accountability testing as a means of demonstrating student learning. I am writing to ask you to participate in my research study. If you agree to participate, you will be asked to complete two questionnaires about motivation and how you feel supported as a teacher. You will also be asked to complete a questionnaire that provides me with demographic information. Responding to these questionnaires should take no longer than 15 minutes.

Your answers to the surveys will be completely confidential and there will be no way to link your responses to you. Your participation in this study is completely voluntary. You may refuse to participate or withdraw in the study at any time without penalty. There are no potential risks to participating in this study, however, participation in this study will contribute to the better understanding of how accountability testing affects teacher motivation. Any questions can be directed to me at [mtm026@bucknell.edu](mailto:mtm026@bucknell.edu) or my research supervisor, Professor Candice Stefanou at [cstefano@bucknell.edu](mailto:cstefano@bucknell.edu) at Bucknell University supervising this study.

If all questions have been answered, by clicking on the link below you are consenting to participate in this study. Thank you for your time and consideration.

## Appendix B

## Demographics

Please select the following option that pertains to you:

1. What is your gender?  
Male                  Female
2. What is your age?  
22-25  
26-30  
31-40  
41-50  
51-60  
60 and over
3. What is the highest level of education you have completed?  
4-Year College (Bachelors)  
Master's Degree  
Doctoral Degree
4. What type of school are you employed by?  
Public School  
Private School
5. What school district are you employed in?
6. What grade do you teach?  
Pre-Kindergarten  
Kindergarten  
First-Third  
Fourth-Fifth  
Sixth-Eighth  
High school
7. What subjects do you teach?  
Check all that apply.  
English/Language Arts  
Mathematics  
Sciences  
History/Social Sciences  
World Languages  
Religion  
Arts/Music/Performing Arts  
Physical Education  
Other
8. How many years have you been teaching?  
0-2  
3-5  
6-10  
10-20  
21-30  
31-40  
40 and above

## Appendix C

### Work Climate Questionnaire (WCQ)

This questionnaire contains items that are related to your experiences with the person who is your most immediate supervisor. Supervisors have different styles in dealing with teachers, and I would like to know more about how you have felt about your encounters with your supervisor. Your responses are confidential. Please be honest and candid.

	Strongly Disagree			Neutral			Strongly Agree					
	1	2	3	4	5	6	7					
1. I feel that my supervisor provides me with choices and options.	1	2	3	4	5	6	7					
2. I feel understood by my supervisor.						1	2	3	4	5	6	7
3. I am able to be open with my supervisor at work.						1	2	3	4	5	6	7
4. My supervisor conveys confidence in my ability to do well at my job.						1	2	3	4	5	6	7
5. I feel that my supervisor accepts me.						1	2	3	4	5	6	7
6. My supervisor made sure I really understood the goals of my job and what I need to do.						1	2	3	4	5	6	7
7. My supervisor encourages me to ask questions.						1	2	3	4	5	6	7
8. I feel a lot of trust in my supervisor.						1	2	3	4	5	6	7
9. My supervisor answers my questions fully and carefully.						1	2	3	4	5	6	7
10. My supervisor listens to how I would like to do things.						1	2	3	4	5	6	7
11. My supervisor handles people's emotions very well.						1	2	3	4	5	6	7



---

1 I feel that my supervisor cares about me as a person. 1 2 3 4 5 6 7  
2.

---

1 I don't feel very good about the way my supervisor talks to me. 1 2 3 4 5 6 7  
3.

---

1 My supervisor tries to understand how I see things before 1 2 3 4 5 6 7  
4. suggesting a new way to do things.

---

1 I feel able to share my feelings with my supervisor. 1 2 3 4 5 6 7  
5.

---

## Appendix D

*Different reasons may explain why teachers engage in their work tasks. The following statements represent some of these reasons. Using the scale below, please indicate for each statement to what degree they correspond to one of the reasons for which you are doing the following work tasks.*

**Why are you doing this work task?**

**CLASS PREPARATION**

(e.g., deciding on instruction topics and material, determining the presentation forms and sequences, and establishing the work procedure)

Does not correspo nd at all	Corresp ond very little	Corresp ond a little	Correspo nd moderatel y	Corresp ond strongly	Corresp ond very strongly	Correspo nd completel y
1	2	3	4	5	6	7

1. Because it is pleasant to carry out this task. 1 2 3 4 5 6 7
2. I don't know, I don't always see the relevance of carrying out this task. 1 2 3 4 5 6 7
3. Because I like doing this task. 1 2 3 4 5 6 7
4. Because my work demands it. 1 2 3 4 5 6 7
5. Because I find this task important for the academic success of my students. 1 2 3 4 5 6 7
6. Because the school obliges me to do it. 1 2 3 4 5 6 7
7. I used to know why I was doing this task, but I don't see the reason anymore. 1 2 3 4 5 6 7
8. Because it is important for me to carry out this task. 1 2 3 4 5 6 7

9. Because I find this task interesting to do. 1 2 3 4 5 6 7
- 10 I don't know, sometimes I don't see its purpose. 1 2 3 4 5 6 7
- 11 Because I would feel guilty not doing it. 1 2 3 4 5 6 7
- 12 Because if I don't carry out this task, I will feel bad. 1 2 3 4 5 6 7
- 13 Because this task allows me to attain work objectives that I consider important. 1 2 3 4 5 6 7
- 14 Because I'm paid to do it. 1 2 3 4 5 6 7
- 15 To not feel bad if I don't do it. 1 2 3 4 5 6 7

### ***Why are you doing this work task?***

#### **TEACHING**

(e.g., presenting instruction, answering questions, and listening to the students' needs)

Does not correspond at all	Correspond very little	Correspond a little	Correspond moderately	Correspond strongly	Correspond very strongly	Correspond completely
1	2	3	4	5	6	7

1. Because the school obliges me to do it. 1 2 3 4 5 6 7
2. Because if I don't carry out this task, I will feel bad. 1 2 3 4 5 6 7
3. Because it is important for me to carry out this task. 1 2 3 4 5 6 7
4. Because I find this task interesting to do. 1 2 3 4 5 6 7
5. I don't know, sometimes I don't see its purpose. 1 2 3 4 5 6 7

6. Because it is pleasant to carry out this task. 1 2 3 4 5 6 7
7. To not feel bad if I don't do it. 1 2 3 4 5 6 7
8. Because my work demands it. 1 2 3 4 5 6 7
9. Because I would feel guilty not doing it. 1 2 3 4 5 6 7
10. Because I find this task important for the academic success of my students. 1 2 3 4 5 6 7
11. Because I like doing this task. 1 2 3 4 5 6 7
12. I used to know why I was doing this task, but I don't see the reason anymore. 1 2 3 4 5 6 7
13. I don't know, I don't always see the relevance of carrying out this task. 1 2 3 4 5 6 7
14. Because I'm paid to do it. 1 2 3 4 5 6 7
15. Because this task allows me to attain work objectives that I consider important. 1 2 3 4 5 6 7

***Why are you doing this work task?***

**EVALUATION OF STUDENTS**

(e.g., constructing assessments and exams, correcting, entering marks, giving remarks to the parents)

Does not correspond at all	Correspond very little	Correspond a little	Correspond moderately	Correspond strongly	Correspond very strongly	Correspond completely
1	2	3	4	5	6	7

1. Because I'm paid to do it. 1 2 3 4 5 6 7

- 
2. Because I find this task interesting to do. 1 2 3 4 5 6 7
- 
3. I don't know, sometimes I don't see its purpose. 1 2 3 4 5 6 7
- 
4. Because it is pleasant to carry out this task. 1 2 3 4 5 6 7
- 
5. Because I would feel guilty not doing it. 1 2 3 4 5 6 7
- 
6. Because the school obliges me to do it. 1 2 3 4 5 6 7
- 
7. Because I like doing this task. 1 2 3 4 5 6 7
- 
8. To not feel bad if I don't do it. 1 2 3 4 5 6 7
- 
9. I used to know why I was doing this task, but I don't see the reason anymore. 1 2 3 4 5 6 7
- 
10. Because I find this task important for the academic success of my students. 1 2 3 4 5 6 7
- 
11. Because if I don't carry out this task, I will feel bad. 1 2 3 4 5 6 7
- 
12. Because this task allows me to attain work objectives that I consider important. 1 2 3 4 5 6 7
- 
13. I don't know, I don't always see the relevance of carrying out this task. 1 2 3 4 5 6 7
- 
14. Because my work demands it. 1 2 3 4 5 6 7
- 
15. Because it is important for me to carry out this task. 1 2 3 4 5 6 7
-

### ***Why are you doing this work task?***

#### **CLASSROOM MANAGEMENT**

(e.g., handling discipline, applying the rules, and managing students' interruptions and conflicts)

Does not correspond at all	Correspond very little	Correspond a little	Correspond moderately	Correspond strongly	Correspond very strongly	Correspond completely
1	2	3	4	5	6	7

1. Because I would feel guilty not doing it. 1 2 3 4 5 6 7
2. Because this task allows me to attain work objectives that I consider important. 1 2 3 4 5 6 7
3. Because it is important for me to carry out this task. 1 2 3 4 5 6 7
4. Because if I don't carry out this task, I will feel bad. 1 2 3 4 5 6 7
5. I don't know, sometimes I don't see its purpose. 1 2 3 4 5 6 7
6. Because the school obliges me to do it. 1 2 3 4 5 6 7
7. Because it is pleasant to carry out this task. 1 2 3 4 5 6 7
8. To not feel bad if I don't do it. 1 2 3 4 5 6 7
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13 Because I find this task important for the academic success of my students. 1 2 3 4 5 6 7

14 Because my work demands it. 1 2 3 4 5 6 7

15 I don't know, I don't always see the relevance of carrying out this task. 1 2 3 4 5 6 7

### ***Why are you doing this work task?***

#### **ADMINISTRATIVE TASKS**

(e.g., recording and transmitting absences, building disciplinary files, and participating in meetings with the parents and principals to study disciplinary cases, meetings with teachers, meetings with the administration, meetings with the union, and school assemblies)

Does not correspond at all	Correspond very little	Correspond a little	Correspond moderately	Correspond strongly	Correspond very strongly	Correspond completely
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1. Because my work demands it. 1 2 3 4 5 6 7

2. I don't know, sometimes I don't see its purpose. 1 2 3 4 5 6 7

3. Because if I don't carry out this task, I will feel bad. 1 2 3 4 5 6 7

4. Because I like doing this task. 1 2 3 4 5 6 7

5. Because I find this task important for the academic success of my students. 1 2 3 4 5 6 7

6. I used to know why I was doing this task, but I don't see 1 2 3 4 5 6 7



the reason anymore.

7. Because it is important for me to carry out this task. 1 2 3 4 5 6 7
8. Because I would feel guilty not doing it. 1 2 3 4 5 6 7
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- 10 Because I'm paid to do it. 1 2 3 4 5 6 7
- 11 Because I find this task interesting to do. 1 2 3 4 5 6 7
- 12 To not feel bad if I don't do it. 1 2 3 4 5 6 7
- 13 Because this task allows me to attain work objectives that I consider important. 1 2 3 4 5 6 7
- 14 I don't know, I don't always see the relevance of carrying out this task. 1 2 3 4 5 6 7
- 15 Because it is pleasant to carry out this task. 1 2 3 4 5 6 7

### ***Why are you doing this work task?***

#### **COMPLEMENTARY TASKS**

(e.g., tutorial guidance, involvement in committees, extracurricular activities, continuous improvement training, and extraclass monitoring)

Does not correspond at all	Correspond very little	Correspond a little	Correspond moderately	Correspond strongly	Correspond very strongly	Correspond completely
1	2	3	4	5	6	7

1. Because it is important for me to carry out this task. 1 2 3 4 5 6 7

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2. Because I find this task important for the academic success of my students. 1 2 3 4 5 6 7
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3. I don't know, sometimes I don't see its purpose. 1 2 3 4 5 6 7
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4. Because if I don't carry out this task, I will feel bad. 1 2 3 4 5 6 7
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13. Because my work demands it. 1 2 3 4 5 6 7
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14. Because I find this task interesting to do. 1 2 3 4 5 6 7
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15. Because it is pleasant to carry out this task. 1 2 3 4 5 6 7
-