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DEVELOPMENT OF AN INSTRUMENT TO MEASURE K-12 TEACHER
DEMORALIZATION IN A TEST-BASED ACCOUNTABILITY CONTEXT

A dissertation submitted in partial fulfillment of the requirements for the
degree of Doctor of Philosophy at Virginia Commonwealth University

by

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Dedication

There are several people to whom I owe an immense amount of gratitude for the love and support that they provided to me through my educational endeavors. I would first like to dedicate this work to my late husband, Matthew Carlson (1979-2010). Without his unconditional love and encouragement as a husband, friend and colleague I would not be the person I am today. As a passionate educator, he made an incredible impact on not only my life but the lives of over a thousand students whom he had the joy of teaching during his short career. I pray that this research contributes to helping improve the work life of teachers so that, in the future, educators do not think that chronic headaches and other stress-related maladies are normal.

To my parents, thank you for instilling in me the importance of education. In particular I would like to thank my mother, Bonnie Saffer, for being diligent in her efforts to expose me to a variety of experiences as a child and my father, Daniel Saffer, for pushing me to learn math even when I wasn't interested. I would also like to thank my sister, Angela Juracko, for being my cheerleader, best friend and a supportive colleague as I completed my work. Finally I would like to thank John and Chris Carlson as well as Ted and Laura Jaquez for their love, support and enthusiasm for my work.

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amazing educational experiences that they simply would not have been exposed to if it weren't for the volunteers who planned and conducted events.

My children motivate me every day to make the world a better place for them. To Evan, Chloe, Grace, Morgan and Mackenzie, thank you for lending a hand around the house and caring for each other when Mom worked to complete her journey to Dr. Mom. Evan, I appreciate the quiet moments that we shared talking about statistics and psychology and how well you cared for me by making sure that I ate and took time out to relax every now and again; I pray that you never lose your love of learning or your caring nature. Chloe, your charm and humor kept me happy and positive through stressful times; I will never forget when you wanted to help me do my homework with your purple crayon and wondered if “my doctor” would know that you lent me a hand. And Grace, my doctoral program baby, it was a pleasure being able to stay home with you while I wrote my dissertation. Despite your love of trying to shove toys up my nose while I was writing, I cherish the time that we spent together while I worked to complete my program.

And finally to my husband Christopher, words cannot express how grateful I am to have you in my life. You patiently (or sometimes not) listened to my ideas and were the best IT guy a gal could ask for when she's conducting research. When I doubted myself you believed in me and when I was worn ragged you were there to support me with unending love. I would not have been able to do this important work without you. I also want to thank you for keeping me grounded in my faith, and helping me to grow in areas outside of academia even though I have had such a narrow focus over the past few years. The faithful love and devotion you have shown me through my doctoral program is admirable... “and I thought I loved you then.”

1 Peter 4:10

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Abstract

DEVELOPMENT OF AN INSTRUMENT TO MEASURE K-12 TEACHER DEMORALIZATION IN A TEST-BASED ACCOUNTABILITY CONTEXT

By Heather A. Carlson-Jaquez, Ph.D.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University, 2016

Director: James McMillan, Ph.D., Professor, Department of Foundations of Education

The purpose of this study was to develop an instrument to measure K-12 teacher demoralization. An increasing body of literature has labeled modern education policies as having a demoralizing effect on teachers (Darling-Hammond & Rustique-Forrester, 2002; Noddings, 2004; Ryan & Brown, 2005; Nichols & Berliner, 2007; Santoro, 2011; Hargreaves, Braun, & Gebhardt, 2013). Teacher demoralization has been defined as a teacher's "inability to access the moral rewards of teaching" (Santoro, 2011, p. 3). Data was collected from a population of K-12 educators through cognitive interviews ($n=6$) and a large scale data collection analyzed with a principal component analysis ($n=430$) in an effort to determine which constructs should be included in the measurement of teacher demoralization. Feedback on the survey instrument was incorporated in an iterative process at each stage of data collection. Results revealed that the theory of teacher demoralization should include two factors: teacher dispositions and feelings of demoralization. The current study failed to find strong evidence of convergent validity with teacher burnout and self-determination need thwarting; however, results suggest that emotional exhaustion and autonomy need thwarting are moderately related to teacher demoralization. Evidence of discriminant validity in relation to teacher self-efficacy was found; however, other discriminant validity evidence was inconclusive. This study extends the literature by providing the first attempt to measure the phenomenon of teacher demoralization. Future studies should

continue to refine the instrument of teacher demoralization, and can use this instrument as one way to examine the impact of policy on teachers.

Chapter 1: Introduction

The MetLife Survey of Challenges for School Leadership (Markow, Macia, & Lee, 2013) reported that teacher job satisfaction is at a 25 year low and that the work of administrators and teachers is becoming more stressful. Further, the state of Virginia reports that job shortages have increased from four specialized subject areas in 1990 (including foreign language and special education) to ten broad areas in 2013 (including subjects labeled as critical within federal legislation such as math, science and elementary education) (Virginia Department of Education [VDOE], 2013). Despite these shortages, education is reported to be the fourth most conferred bachelor's degree and the most conferred master's degree in the U.S. (National Center for Education Statistics [NCES], 2012).

According to the Alliance for Excellence in Education [AEE] (2014), the annual attrition rate for first-year teachers has increased by more than 40% over the past two decades and is estimated to cost state economies between \$1-\$2.2 billion per state annually. Researchers estimate that 40%-50% of teachers leave the profession within the first five years, and teachers who are most likely to leave teach in high-poverty, high-minority, urban and rural schools (AEE, 2014). Together these statistics paint a picture of a workforce that has a problem: highly trained professionals with low job satisfaction are leaving the profession. Teacher attrition creates classrooms where students don't have access to highly-qualified educators in conjunction with

burdening state economies; therefore, it is a problem for which finding a solution would be beneficial for many.

Previous studies that sought to find solutions to teacher stress, job satisfaction and attrition have utilized the framework of teacher burnout; however, empirical studies built around the burnout framework have yet to find effective interventions (Maslach & Goldberg, 1998). For this reason it is beneficial for researchers to seek out new perspectives to the persistent and seemingly intensifying problems that teachers face. It may be pertinent to first understand the historical context in which the problems of teacher stress, low job satisfaction and attrition have increased over past several decades.

Study Focus and Context

Santoro (2011) defined teacher demoralization as a teacher's inability to access the moral rewards of teaching. She acknowledged that the teacher participants in her study were indeed experiencing emotional exhaustion, but unlike what would be expected in burnout they expressed a deep concern for their students. Though Santoro presented evidence in her work to justify the new construct, the line of research still needs to be developed. Among the findings presented by Santoro (2011; 2013) is a concern by teacher participants about modern reform efforts, particularly those that focus on test-based accountability policies that have rewards and sanctions attached to them. Therefore it is important for this study to understand the historical and contemporary context of education policy in which it is situated.

Education Reform and Test-Based Accountability

Standardized testing has a long history in public education in America; however, test-based accountability in education reform has gained increasing attention over the past several decades. Standardized achievement test results are used for multiple reasons, including student

progress monitoring and promotion, as a motivation tool, and as part of school and program evaluations (Hamilton, Stecher, & Klein, 2002; Hamilton, Stecher, & Yuan, 2008). For students, test data is used: to monitor academic progress; to make decisions about grade promotion, as a tool for program placement based on strengths and/or weaknesses; and in some states is a passing score is a graduation requirement. Policymakers have used these same state-mandated achievement tests to motivate teachers, schools and administrators by offering rewards such as cash bonuses and extra funding for high student scores and pass rates, and conversely imposing sanctions on schools who fail to meet minimum proficiency marks. Student achievement test scores have also been used to evaluate the effectiveness of educational quality of curriculum and special programs, which in turn has been used by stakeholders to make decisions about what schools and programs get funded, stay open and students attend.

Though accountability tests are used for multiple purposes, it is important to understand that these purposes are not always appropriate (Koretz, 2008). When using standardized tests, particularly in making high-stakes decisions, it is important to consider their reliability and validity (Koretz, 2008). Reliability is the extent to which a measurement is free of error (Koretz, 2008), whereas validity is the extent to which inferences made about the test scores are appropriate given the constructs the test was designed to measure (McMillan, 2008).

What this means is that while a particular test may be considered valid for making one inference, it may not be so for making others. For example, an achievement score may be one indicator of how much a child has learned during a school year of study; however, it would be inappropriate to use the same test to draw conclusions about the quality of his teacher unless the test was specifically designed to measure both the known characteristics of an effective teacher and student achievement. One of the prevailing critiques of the test-based accountability

movement is that student achievement scores have at times been used in unintended ways to make high-stakes decisions for schools, teachers and students (Hamilton et al., 2002; Koretz, 2008). If test-based accountability is to be the new norm in education evaluation policy, then the uses and conclusions of each test should be validated before the tests are used as policy tools (Welner, 2013).

A Brief History of Standardized Testing in Education

Though standardized tests existed before the 1960s, they became more widely used in the schools with the enactment of the Elementary and Secondary Education Act (ESEA) which notably introduced the Title I as a means of supporting low-achieving students from low socioeconomic communities along with more than forty other education programs (Heubert & Hauser, 1999; Hamilton et al., 2002). The ESEA legislation required that the Title I program be evaluated, and part of that evaluation included standardized test scores (Hamilton et al., 2002). At the same time the National Assessment of Educational Progress (NAEP) was developed as a way to monitor a random sample of academic achievement, though in its early years NAEP data was not reported at the state level (Hamilton et al., 2002).

Further fortifying the role of standardized testing in American public education, a minimum-competency testing movement grew through the 1970s; in some instances students were required to pass tests of basic skills to be promoted to the next grade or receive their high school diploma (Hamilton et al., 2002; Hamilton et al., 2008). Reports of NAEP scores and other studies provided evidence that American students were not mastering even fundamental skills and not achieving at the same level as students in other countries and therefore were at risk for falling behind academically (Hamilton et al., 2002). This prompted the release of several reports that called for education reform, perhaps most notably *A Nation at Risk* (The National

Commission on Excellence in Education, 1983). *A Nation at Risk* used “persuasive language” (Hamilton et al., 2002, p. 17) to warn citizens that on the current path American students will not be able to compete in a global market and that action must be taken to create and raise standards, create a clear purpose of education, fulfill the potential of every child, and ensure strong leadership in the schools (The National Commission on Excellence in Education, 1983).

In the 1990s the Clinton administration called for Voluntary National Testing, a system where all fourth grade students would be tested in reading and all eighth grade students would be tested in math (Heubert & Hauser, 1999). Simultaneously many states began to adopt standards-based reform policies in a second wave of education reform that was centered on data-driven instruction (Hamilton et al., 2002). Some of these state-developed programs established rewards and sanctions based upon test scores and would serve as the model for the accountability-based reform policies of the 2000’s.

The reauthorization of the ESEA, commonly referred to as the *No Child Left Behind Act* (NCLB) (U.S. Department of Education, 2002) codified into law the accountability policies that were already in place in many states; the role of the federal government in education policy was unprecedented. Dialogue surrounding policy development was focused on providing a rigorous and “world-class” standards-based education to all students regardless of race or social class, for the purpose of improving the economy and ensuring that United States students were competitive with their peers when compared to other developed countries (Hamilton et al., 2008). Key components of NCLB include mandated testing, annual performance targets and corresponding creation of cut scores for all students in grades three through eight in reading and math (Hamilton et al., 2008). For high school students, NCLB required the development of standards and testing in at least one year of math, English/language arts and science in at least one grade

level (Hamilton et al., 2002; Hamilton et al., 2008). Assessment data was required by NCLB to be aggregated at the school and state level for the purpose of reporting to education stakeholders; data was then broken down by race, gender, socioeconomic group, disability and other pertinent indicators for the purpose of monitoring and closing achievement gaps (Hamilton et al., 2002).

More modern education reform efforts, enacted during the Obama administration include *Race to the Top* (U.S. Department of Education, 2009) and another reauthorization of ESEA titled the *Every Student Succeeds Act* (ESSA) (U.S. Department of Education, 2015a). *Race to the Top* (RTTT) was a federally funded competition that rewards states and schools that adopt common standards, track longitudinal data, recruit and retain highly qualified faculty and administration, and provide evidence that the lowest achieving schools have been ‘turned around.’ Secondary to these goals, but necessary for states to claim the extra funding under RTTT, was a focus on Science, Technology, Engineering and Mathematics (STEM) education. Other priorities of the RTTT program include improved early childhood education programs, expansion of statewide systems that are used to track longitudinal data, vertical and horizontal alignment of all agencies that play a role in P-20 education, and school-level implementation of reform efforts.

The *Every Student Succeeds Act* (ESSA) reverses some of the fundamental principles of NCLB in that it returns power to state education agencies to set and maintain their own standards as well as monitor their own accountability systems (U.S. Department of Education, 2015a). This is in contrast to NCLB which was a “one-size-fits-all” approach to education reform and accountability (U.S. Department of Education, 2015a, p. 7). It should also be noted that the state of Virginia, the state in which the current study is situated, is already operating under an ESEA waiver (U.S. Department of Education, 2015). This means that Virginia already

exercises some of the flexibility made available to all states by ESSA as a result of their waiver status by standards, tests and accountability benchmarks that are specific to the state. ESSA will, however, provide the states with more latitude to implement a whole child approach to accountability practices (Darling-Hammond et al., 2016). Although ESSA is an approach to education reform and accountability that may greatly change the context of policy studies such as the current study, the temporal proximity of its passing in relation to this study means that it will not be implemented until the conclusion of the current study. It is important to note that this study has been designed with this changing context in mind.

Layers of Policy Implementation and Interpretation

Though the impetus of reform came mostly from the Federal level, policy may be difficult for educators to understand where the policy came from because of the multiple layers of implementation and interpretation. Werts et al. (2013) suggest that “intermediary layers of policy implementation, state and district” play a key role in how stakeholders develop understanding and perceptions of policy (p. 415). For example, some state education agencies now keep a “longitudinal student information system” in an effort to monitor schools, teachers and students (Werts et al., 2013, p. 399). Though this is not an explicit requirement of the federal legislation, it has empowered the state to change the message of the purpose of the policy in some cases (Werts et al., 2013).

In turn, some districts have been driven to create new policy at the local level to compel administrators and principals to develop and implement measures that are in alignment with state standardized accountability tests. These new practices include “pacing guides, benchmark assessment systems, mandated curricula, targeted professional development” (Hamilton, Schwartz, Stecher, & Steele, 2016). Hamilton et al. (2016) outline how testing at the district level

has been implemented and used in four different ways: monitoring; diagnosis and prescription; signaling; and accountability. When additional testing is used for monitoring there are typically no stakes attached, monitoring tests serve the purpose of giving teachers and administrators a snapshot of student progress. Testing that is used for diagnosis and prescription is formative and provides valuable feedback on areas of strength and weaknesses that can guide administrators and teachers towards interventions to improve student learning.

Signaling is distinct from the other purposes of testing in that it is not related to score outcomes. Rather signaling refers to the effect of what is tested communicates to members of the school community and the community at large what is the focus of the school. For example, when a school routinely tests students in the areas of math and reading, but not in social studies or science, it not only provides score related feedback but also signals that math and reading are instructional priorities. Finally, when tests are used for accountability there are typically rewards and sanctions attached to the outcomes. In some instances tests used for accountability purposes could result in mandated implementation of programs to encourage improvement; however, little is known about these programs as a form of accountability in relation to changes in instruction or student academic performance (Hamilton et al., 2016).

Intended and Positive Outcomes of Test-Based Reform

Standards-based and high-stakes testing policies were designed to hold every student and teacher accountable for the same standards in the name of equality (U.S. Department of Education, 2002) and provide the market with highly skilled employees who are globally competitive and possess 21st century skills (U.S. Department of Education, 2009). Standards were designed to both encourage teachers to engage students in complex cognitive processes and require that students master advanced content (Hamilton et al., 2002).

Contemporary policy efforts such as NCLB and RTTT employ a business approach to school reform and hold students, teachers and principals accountable by using value-added and cost effectiveness measures to gauge success (Pring, 2001). The reforms treat students as clients and audit schools and teachers with quantitative measures (Pring, 2001). Proponents of these policies argue that rewards and sanctions are essential for motivating teachers and administrators to stay focused on the central goal of instruction in core academic subjects (Hamilton et al., 2002).

Hamilton et al. (2016) note that there have been several positive outcomes from test-based accountability policies. Many schools have developed pacing guides that guide teachers to spend an appropriate amount of time on various topics within their course. Further, more time and attention is being given to instruction for tested subjects. Finally, programs have been developed to address the needs of low-achieving students and teachers have worked to improve their pedagogy. Despite these positive outcomes of the test-based accountability, there have been a multitude of critiques and unintended negative consequences of modern test-based reforms.

Critiques of Test-Based Reform

In many instances the reforms are changing the profession of teaching and teacher quality, and not always for the better (Darling-Hammond & Rustique-Forrester, 2002). Critics claim that reforms fail to account for the variety of contexts in which learning takes place, namely the varied access to social and cultural capital among school divisions (Moses & Nanna, 2007). Policies also fail to recognize the perspective that education can and should be more than a formulaic input-output endeavor; rather it should be an organic and ever changing moral practice that, in theory, should allow students to explore who they are, their role in society, and ultimately what it means to be human (Pring, 2001).

Critics of test-based accountability also state that modern reform efforts also fail to account for institutional factors that contribute to the success or failure of the institution as a whole: government, administration, teachers and students all contribute to the success and failure of schools (Olson, 2003). While teachers and schools have a responsibility to provide learning opportunities for students, and students have the responsibility to learn the curriculum, government and local administrations have the responsibility to provide policy and resources that support the pursuit of these goals (Olson, 2003). The contradiction of policy that seeks to reform the institution of education through test-based accountability is that only a segment of the institution is subject to accountability consequences. The policy itself is written such that local administrations and governments are relieved from their responsibility to provide resources to failing schools (Hargreaves, Braun, & Gebhardt, 2013). If the goal of education reform is student growth and quality instruction, then all stakeholders should be held accountable for fulfilling their obligation to the institution (Steiner, 2013).

Further, reforms have created a rift between teachers and departments of education (Scott, Stone, & Dinham, 2001). The message sent by policy is that teachers are no longer “trusted to do their jobs correctly, efficiently, effectively and...ethically”; however, departments of education are trusted to do their jobs without any form of accountability (Scott et al., 2001). Werts et al. (2013) argue that the magnitude of reform affects the impact on the policy implementers as well in that the more policy seeks to change the more teachers could see themselves as unskilled policy targets as opposed to policy actors. It could be argued then that the focus of evaluation and accountability in education should be on all parts of the institution and not limited to the students, teachers and school level implications. Potential unintended consequences of policy should also be considered if the policy is to truly be effective.

Consequences of Test-Based Reform

The mandate of equal accountability requirements without the assurance of equity in resources has resulted in numerous unintended consequences for teachers and students. Researchers have documented and attributed practices such as a narrowing of the curriculum, a change in the allocation of resources, cheating and instructional triage to the increased accountability stakes. Further, problems with teacher evaluation being linked to test-based accountability practices have also been documented.

Narrowing of the Curriculum

Schools in which teachers are evaluated solely on student achievement may, consciously or subconsciously, narrow the curriculum in an effort to focus on tested subject and limit the opportunities for all children to practice complex cognitive thinking skills such as critical thinking, problem solving and creativity (Sabol, 2013). Hargreaves & Braun (2013) assert that policy in the U.S. has reduced education to valuing only that which can be easily measured. Evidence of a narrowing of the curriculum can also be seen in a reduction of non-core subjects, such as cutbacks in visual arts programs (Sabol, 2013). The reduction or elimination of these programs in lieu of cutbacks for core subjects has been documented as sending a message of marginalization to teachers of non-tested subjects (Dawson, Carlson-Jaquez, & Stringer, 2014).

Allocation of Resources and Cheating

Other consequences for teachers specifically include a lack of resources required to meet mandates which can result in decreased morale, higher stress, negative attitudes towards teaching, and high teacher attrition (Darling-Hammond & Rustique-Forrester, 2002; Jones, 2008). Test-based accountability policies that are connected to external rewards and threats can negatively affect morale, relationships within the school, and teacher perceptions of the policies

themselves (Valli & Buese, 2007; Hamilton et al., 2016). Other policies emphasize a focus on punishment when they are based upon a single set of test scores collected on a single day and fail to account for any potential improvement (Robinson, 2014) within the same exact context. Some teachers and administrators have felt so much pressure to produce passing scores that cheating scandals have resulted, namely in the cities of Atlanta and Phoenix (Robinson, 2014).

For example, schools that serve impoverished populations are likely to lack resources (e.g. updated textbooks, computers) needed to meet the new and increasing demands of policy (Darling-Hammond & Rustique-Forrester, 2002; Horn, 2004; Moses & Nanna, 2007). This particular scenario that is potentially being exacerbated by increasing policy mandates puts teachers at risk for experiencing teacher burnout; resources are not sufficient to meet the demands of the work (Maslach & Goldberg, 1998). The way teacher burnout is currently being measured, however, may not necessarily be the best way to examine the effects that policy has on teachers and the resulting impact that it is having on instruction, morale, job satisfaction and attrition.

Instructional Triage

Jennings & Sohn (2014) examined longitudinal student data in an effort to determine if there is a difference among test scores when assessments are high-stakes versus low-stakes. They found that when teachers are incentivized by accountability pressure, students who are at the 50th percentile show gains whereas students in the 10th percentile, as well as higher performing students, do not. They theorize that this may be because teachers tend to focus on “bubble” students in high-stakes accountability settings.

Bubble students are those students who are predicted to fail accountability tests but only by a small margin (Hamilton et al., 2008; Hargreaves & Braun, 2013; Jennings & Sohn, 2014).

The practice of only focusing on bubble students, in an effort to improve the school's accountability status, was termed "instructional triage" by Jennings & Sohn (2014). The problem with the practice of instructional triage is that, while the bubble students do indeed show gains on high-stakes accountability tests, the students who are not on the bubble perform worse than expected. While Jennings & Sohn (2014) did not collect data to verify the conclusion, they theorize that the results of their study suggest that resources (e.g. teacher time) are potentially being allocated disproportionately in an effort to meet accountability requirements. In practice this means that a small number of students are receiving a greater number of resources as a result of accountability policies.

Teacher Evaluation

Though teacher evaluation has traditionally served both the purpose of accountability and improving instruction, test-based accountability policies have shifted the focus of teacher evaluation to largely focusing on accountability (Robinson, 2014). Research on the impacts of student achievement consistently cite teachers as the primary school related factor that contributes to student achievement outcomes (RAND Corporation, 2012). Indeed, studies have shown that students who have ineffective teachers for two years in a row could find themselves up to a year behind their peers who have had effective teachers (Steiner, 2013).

Though teacher effectiveness is the most important school-related variable, it is pertinent to note that many Value-Added Model (VAM) evaluation systems that attempt to measure teacher effectiveness through statistical analysis discount non-teacher related factors such as socioeconomic status of the students and teachers having access to adequate resources (Robinson, 2014). It is estimated that individual and family characteristics can have up to eight times the impact of teachers, and many times these factors are outside of the control of teachers

and the school (RAND Corporation, 2012). Without encompassing a wide range of variables it is difficult to make predictions about the cause of achievement score variation with statistical analysis, and any predictions made will be prone to error (Silver, 2012). For example, effective teachers who serve an impoverished division could be labeled as ineffective, not because of their individual teaching ability but because of the student demographics in the classroom. This could potentially drive teachers who are passionate about serving impoverished populations to seek employment in middle to upper class divisions, or worse drive teachers who are passionate about teaching in impoverished divisions out of the profession completely.

Even states that have not adopted VAM systems have placed an increasing emphasis on a single set of test scores in their teacher evaluation models. For example, the Virginia Department of Education recommends that student achievement data account for up to 40% of a teacher's evaluation in a given year (Virginia Department of Education [VDOE], 2011). This recommendation does not suggest that school divisions take into account any external factors that could affect test scores over which teachers and school have no control. Steiner (2013) notes that we must be cautious of how we are using test data to evaluation teachers, citing that “we lack meaningful tools to identify and reward the most effective teachers or to ensure that the least effective improve or leave the classroom” (p. 1). Rather, he advocates that data be used in combination with other evidence to “celebrate the many teachers who excel at educating children and support those who struggle to do so effectively, which will, in a nontrivial number of cases, mean counseling them out of the profession” (p. 4).

Study Rationale and Significance

Attribution theory, specifically the locus of causality dimension, has been employed to examine differences among individuals in relation to burnout (Maslach & Goldberg, 1998).

When individuals have an internal locus they feel that their level of success is a result of personal factors, such as skill (Weiner, 1985). Conversely, they are considered to have an external locus they feel that their level of success is related to factors outside of themselves, such as luck (Weiner, 1985). Empirical evidence suggests that individuals who have an external locus of causality are more likely to feel the symptoms of burnout than teachers who have an internal locus of causality (Maslach, Schaufeli, & Leiter, 2001). Test-based accountability reform efforts complicate research efforts in this area, however, because they simultaneously impose external controls on the teacher (Ryan & Brown, 2005) while preserving the expectation that teachers maintain professional autonomy over their classroom practice (Day, 2002).

As a result some teachers who morally disagree with top-down policies and feel that their professional autonomy is taken away may feel that they are trapped or being pushed out of the profession (Day, 2002; Dunn, 2014). An emerging body of literature cites modern accountability policies as demoralizing in that they: place large amounts of pressure on teachers to have their students perform well (Darling-Hammond & Rustique-Forrester, 2002; Noddings, 2004; Santoro, 2011); create a negative dialogue about public education (Nichols & Berliner, 2005; 2007); send mixed messages about acceptable performance levels (Hargreaves et al., 2013); and use assessments that are not appropriate for all learners (Ryan & Brown, 2005).

Though researchers acknowledge the role that context plays in the stress (Lazarus, 2006), job satisfaction (Skaalvik & Skaalvik, 2011) and burnout of teachers (Maslach & Goldberg, 1998; Maslach et al., 2001), research that examines how the structure of the institution affects the individual is still relatively new (Maslach et al., 2001) and may be necessary for further educational reform (Olson, 2003). Additionally, many studies assert that the individual should act to alleviate their personal feelings of stress and burnout despite the lack of empirical evidence

to support such action (Maslach & Goldberg, 1998). Regardless, it may be difficult for teachers to individually act to alleviate their personal feelings of stress and exhaustion as they face policies that increasingly standardize, technicize and deskill their practice and disempower their profession (Apple, 2000; Pring, 2001; Abrams, Pedulla, & Madaus, 2003; Valli & Buese, 2007).

Reform efforts decrease the professional autonomy of teachers (Apple, 2000; Day, 2002); therefore, this distinction between intentional and involuntary action may be important to capture in instrument design and research methods when studying teacher work life and identity. Olson (2003) outlines the differences between involuntary action based on context and intentional action and why it may benefit researchers to make this distinction. For example, there is a distinct difference between the two statements “I am going to faint” and “I am going to rest.” Though the two statements will result in the same observable outcome of the person lying down, the former is involuntary and the situational factors are unknown; perhaps the person has low blood sugar or is experiencing side effects of extreme heat. The latter is voluntary action; the person is knowingly and purposefully declaring their intent regardless of the situation. Intent and causality in the scenario are key components required to make assessments about the situation and how to react appropriately as an external observer. Indeed, Werts et al. (2013) found that some stakeholders, including teachers, felt that they were no longer policy actors; rather they resigned themselves to simply being acted upon by policy.

As an example from the Maslach Burnout Inventory - Educators Survey (MBI-ES) (Maslach & Jackson, 1981), failure to account for context may conflate results. The item “I feel emotionally drained from my work” could possibly be the result of many duties that a teacher performs in her work. One such duty is assessment, a generally accepted component of teaching; however, test-based assessment policies changed the types and amounts of assessments that

teachers give their students. Some teachers feel pressure to move away from educating students in a way that they believe is in the students' best interest in an effort to produce high enough test scores to avoid sanctions of reforms (Day, 2002; Abrams et al., 2003). Acting in a way that is contradictory to their own convictions could be a possible cause of teachers feeling "emotionally drained" from their work, and it could be argued that because teachers are required by law to comply with mandated testing requirements this action is involuntary. In this scenario the teacher lacks intent because the pressure of policy to produce test scores exists regardless of professional and moral convictions. Without clarification on what is causing the emotional exhaustion in the survey item, it may be difficult to know if the teachers answer the question based upon what they feel they are mandated to do versus what they are able to control on their own volition.

Researchers and policymakers, then, may be falling victim to attribution error (Kennedy, 2010) if they ignore the context and intentional action of teachers when studying problems in schools. Attribution error occurs when "the influence of personal characteristics on behavior" is overestimated and "the influence of the situation itself" is underestimated (Kennedy, 2010, p. 591). This may be occurring in stress and burnout research if items on research instruments contain statements that fail to specifically differentiate whether behavior is involuntary as a result of situational factors as opposed to voluntary.

It is erroneous to ignore the institutional influence on individuals within the institution (Olson, 2003). However, some of the best stress and coping instruments that are currently being used in research fall short in that they fail to assess the context in which the person exists (Lazarus, 2006). Lazarus (2006) wrote "the trees, so to speak - they must be placed within the forest in which they live," meaning that there is a need to see the whole picture when attempting to analyze the individual (p. 22). Perhaps then it would be advantageous to employ Kaplan's

“logics in use” (as cited in Paul, 2005) to research the phenomenon of teacher exhaustion from a critical perspective. Paul (2005) summarizes Kaplan’s argument:

[Kaplan] recounts the well-known example of an inebriated man looking for his lost car keys under a street light because the area around the light was the only area where he could see. That is, we are guided by the lights of the logic we use but those lights are of little help in seeing other possible constructions (p. 6).

That is not to say that previous work on teacher burnout will be made irrelevant by a new perspective; but rather that a new approach to the study of education reforms and teacher exhaustion could widen the metaphorical light under which researchers are searching for answers to the problems of low teacher job satisfaction, burnout and attrition. Examining the effects of contextual factors on the teacher, specifically education reform efforts, may not only provide a new perspective on the problems but also could lead to new solutions (Kennedy, 2010; Santoro, 2011).

Once developed, a survey instrument to measure teacher demoralization can be used in a variety of ways. First and foremost it could be used as a tool to identify levels of teacher demoralization in a variety of environments and determine if there are certain populations of teachers or circumstances that make teachers more susceptible to becoming demoralized than others. The scale could also be used to identify teachers who are within those environments that have not become demoralized. Once identified, those teachers could be interviewed to gain perspective into how they have been able to navigate their environment without becoming demoralized. Further, the instrument could be used to inform policymakers of the consequential validity of test-based accountability policies. That is, the negative unintended consequences of the tests. These negative, unintended consequences should be weighed against the intended outcomes of the policies to determine if the policies are working in a way that is beneficial for the school systems in which they are implemented. This study is the first attempt to quantify the

phenomenon of teacher demoralization so that these practical and research implications can be further explored.

Literature Overview

The construct of teacher demoralization presented in this chapter accounts for the theorized demoralization that occurs as a result of contemporary policy, the theorized process that teachers experience as a result of policy, and an established construct of demoralization in the field of psychiatry. Informed by work in the areas of teacher demoralization and morale, clinical demoralization and burnout, the review seeks to operationalize a cohesive theory of teacher demoralization. More specifically, teacher demoralization is a construct that may be related to but is not the same as burnout. It accounts for the context of contemporary education policy, specifically high-stakes testing and other accountability mandates.

Self-Determination Theory

Self-determination theory identifies three basic intrinsic needs: relatedness, competence and autonomy (Ryan & Deci, 2012). Fulfillment of these needs is of key importance for intrinsic motivation, or motivation that is fully self-endorsed and regulated (Ryan & Deci, 2000). Researchers have provided evidence of a relationship between teachers' need fulfillment in relation to variables such as emotional exhaustion, feelings of anxiety and frustration, and work engagement (Fernet, Guay, Senecal, & Austin, 2012; Klassen, Perry, & Frenzel, 2012; Bartholomew, Ntoumanis, Cuevas, & Lonsdale, 2014; Holzberger, Philipp, & Kunter, 2014). In an examination of high-stakes testing policy using self-determination theory, Ryan & Weinstein (2009) asserted that high-stakes testing policies undermine teachers' abilities to fulfill their needs of competence, relatedness and autonomy. For this reason self-determination theory will be used as a conceptual framework to inform the development of the teacher demoralization scale.

Teacher Demoralization

Building upon Santoro's definition of teacher demoralization as occurring when teachers are unable to access the moral rewards of teaching, the literature review seeks to answer the questions what are the moral rewards of teaching and what about modern policy is making these rewards inaccessible to some teachers? Evidence is presented that teachers see their work as altruistic in nature and tend to get the most satisfaction from their work when they are able to help students succeed in various ways (Day, Elliot, & Kington, 2005). This goal is perceived by some teachers as in conflict with modern reform efforts which measure student success by sole means of standardized test scores, which may be creating a scenario of educational schizophrenia (Sanger, 2012) or job-person mismatch thus resulting in low teacher morale (Evans, 2001).

Teacher Burnout

Teacher burnout is a phenomenon that has been studied for several decades and occurs when teachers experience emotional exhaustion and depersonalization in combination with a decreased sense of personal accomplishment (Maslach & Goldberg, 1998; Maslach et al., 2001). Burnout can be caused by a job-person mismatch or other organizational issues (Maslach & Leiter, 1997). Though teacher burnout has been studied extensively and the Maslach Burnout Inventory – Educators Survey (MBI-ES) has been found to have sufficient evidence of validity and reliability (Maslach & Jackson, 1981), few empirical studies have offered effective interventions for the prevention and treatment of burnout (Maslach & Goldberg, 1998). This may be because, while burnout researchers acknowledge the role that the institution plays in the process of burnout, the measurement of burnout and the interventions that are designed to prevent and treat burnout place the onus on responsibility on the individual who is experiencing

burnout as opposed to seeking how the institution is affecting the individual (Chang, 2009; Santoro, 2011).

Clinical Demoralization

Demoralization as a construct in psychiatry began as a study in an effort to help people who experience stress as a result of a disconnect between the past and the present, or the person and the environment, function effectively (de Figueiredo, 1983; 2012). This disconnect can be so extreme that it renders the individual unable to cope and helpless, ultimately leading to a sometimes permanent changes in their self-esteem and self-efficacy (Shrader, 1984; Clarke & Kissane, 2002). Due to the significant changes that the context of teaching has undergone since the implementation of NCLB and other test-based accountability policies, as well as the potential job-person mismatches that the policies have created for some teachers, clinical demoralization may be able to inform the development of the construct of and instrument to measure teacher demoralization.

Measuring Teacher Demoralization

Several existing instruments will be reviewed to develop and provide evidence of convergent and discriminant validity for the teacher demoralization scale. A review and critique of the Maslach Burnout Inventory – Educators Survey (Maslach & Leiter, 1997), the Teachers’ Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001) and the Demoralization Scale (Clarke, 2012) will inform item design as well as provide evidence of convergent and discriminant validity. Previous qualitative work conducted by the researcher on teacher demoralization will also be reviewed and utilized in the design of the scale items (Carlson-Jaquez, Solomon, Hope, & Crowder, 2015).

Research Questions

1. How can teacher demoralization be operationalized in the context of test-based accountability policies?
2. What constructs should be included in the teacher demoralization instrument?
3. What is the content-related evidence that supports the conceptualization of teacher demoralization?
4. What is the internal structure evidence that supports the conceptualization of teacher demoralization?
5. What is the convergent and discriminant validity evidence that supports the conceptualization of teacher demoralization?

Overview of Methods

The purpose of this study is to develop an instrument to measure the construct of teacher demoralization. Instrument items will be created based upon the literature review then refined in an iterative process. Cognitive interviews will be conducted with several K-12 teachers from the state of Virginia to review the instrument and make adjustments to assure that wording of items is clear and consistent. After making the necessary adjustments based upon the cognitive interview feedback, the instrument will be piloted with a small group of K-12 public school teachers. K-12 public school educators are the target demographic for this study because their students must pass the high-stakes standardized exams or face the sanctions in force by the law of accountability policy. All K-12 educators will be invited to participate in each of the phases of the study. The rationale for this is that although not all content is tested, teachers in sanctioned schools experience the effects of the sanctions in some way. The pilot data will be checked for evidence of internal reliability and again adjustments will be made to items based upon data

analysis. When the final draft of the instrument is ready, large scale data collection will occur. The data will be analyzed by a principal components analysis. Assuming that a factor solution that is consistent with the literature can be found, the instrument will also be subject to correlational computation in an effort to provide evidence of convergent and discriminant validity.

Delimitations

This study will have several delimitations. The target sample will be current K-12 public educators in the state of Virginia. K-12 public school educators are those educators who are most likely to be affected by education policy mandates. Also, due to variations in accountability among states, the target sample will remain within one state in an effort to minimize measurement error as a result of varying accountability contexts.

Definition of Terms

Autonomy A perceived internal locus of causality; having control over one's behavior (Ryan & Deci, 2000)

Clinical Demoralization Simply referred to as demoralization in the field of psychiatry but referred to as clinical demoralization for the purposes of this study, it is "a psychological state that occurs when the meaningful connections among cognition, emotion, and volition, or between the past and the present, or between the person and the environment are perceived as threatened or disrupted" (de Figueiredo, 2012, p. 107).

Competence Feelings of gained skills and knowledge by which individuals feel effective (Ryan & Deci, 2012).

Convergent Validity Evidence When a strong correlation is found between two measures that are thought to be theoretically related (Koretz, 2008; McMillan, 2008).

Depersonalization A dimension of burnout, it is "a negative, callous, or excessively detached response to other people" (Maslach & Goldberg, 1998, p. 64).

Discriminant Validity Evidence When a weak correlation is found between two theoretically unrelated measures (Koretz, 2008; McMillan, 2008).

Emotional Exhaustion The stress dimension of burnout, it occurs when an individual's emotional and physical resources are depleted, leaving an individual feeling emotionally overextended (Maslach & Goldberg, 1998; Maslach et al., 2001).

High-Stakes Testing Standardized tests administered to students that, based on results, have “substantial consequences” for students, teachers and/or schools (Koretz, 2008, p. 47).

Measurement Error refers to anything that can cause uncertainty in the results; it is accounted for statistically and is part of determining reliability, e.g. higher error means lower reliability and lower error means higher reliability (Koretz, 2008).

Moral Work of Teaching is work that goes beyond academic achievement and contributes to the moral nature of children as they develop (Sanger & Osguthorpe, 2011).

Relatedness Feelings of security within a relationship (Ryan & Deci, 2012).

Self-Determination Theory “A theory of motivation and personality within social contexts that is concerned with the relative assimilation of goals, values, and identities” (Ryan & Deci, 2012, p. 227)

Teacher Burnout A phenomenon that consists of three dimensions: emotional exhaustion, depersonalization, and personal accomplishment. Teachers are thought to experience burnout when they indicate high levels of emotional exhaustion and depersonalization and low levels of personal accomplishment (Maslach & Goldberg, 1998; Maslach et al., 2001).

Teacher Morale is “a state of mind determined by the individual's anticipation of the extent of satisfaction of those needs which s/he perceives as significantly affecting her/his total work situation.” (Evans, 1997, p.832)

Teacher Demoralization (Santoro definition) A phenomenon that occurs when teachers are unable to access the moral rewards of teaching (Santoro, 2011).

Teacher Demoralization (revised) A phenomenon that occurs when policy has a deleterious effect on an individual teacher's motivation and affect.

Personal Accomplishment A dimension of burnout, it is an individual's feelings of reduced efficacy (Maslach et al., 2001).

Policy Rules and regulations that govern the work of teachers.

Reliability is “the extent to which participant...scores are free from error.” (McMillan, 2008, p. 149).

Validity “The extent to which inferences are appropriate and meaningful” (McMillan, 2008, p. 144).

Chapter 2: Literature Review

Methodology of the Literature Review

The researcher conducted a multi-stage systematic search for literature focused on teacher demoralization and teacher morale with a primary focus on studies conducted within the United States after the authorization of the No Child Left Behind Act (NCLB) of 2001. Keyword combinations included in the search included “teacher demoralization,” “demoralization” and “teacher morale.” Due to the diverse nature of the literature search, several databases were searched to ensure a thorough review of the literature. These databases include: JSTOR; ERIC; Social Sciences Citation Index (Web of Science); Sage Publications; ProQuest; MEDLINE/PubMed (NLM); SciVerse ScienceDirect (Elsevier); Wiley Online Library; SpringerLink; Taylor & Francis Online; and PsycARTICLES (American Psychological Association).

All literature reviewed in this study met most of the criteria for acceptable research as set by the American Education Research Association (American Educational Research Association [AERA], 2006). These categories included in the standards are: problem formulation; design and logic of the study; sources of evidence; measurement and classification; analysis and interpretation; generalization; ethics in reporting; and title, abstract, and headings. By nature of exploratory work, many of the articles cited in the literature review were qualitative and as a

result not generalizable. Aside from this caveat, the literature reviewed met the other qualifications of acceptable research.

The “teacher demoralization” keyword search yielded 40 results, four of which were kept for review as they met the criteria of being timely (post NCLB) and focused on K-12 educators. The purpose of using post NCLB literature for this review is because NCLB was a major shift of the role of the federal government involvement in public education policy. The keyword search for “demoralization” yielded 422 initially; however, only sources relevant to the initial conceptualization of demoralization, the measurement of clinical demoralization, or the application of the construct of demoralization to occupations were selected for review (12 total). Finally the term “teacher morale” yielded 45 results; however, only six were published post NCLB and used K-12 teachers as participants. Though teacher burnout is not the main focus of this study, an overview is offered as a foundation for divergent validity evidence. It should be noted that other literature reviewed was included on the suggestion of committee members, scholars who offered guidance and advice throughout the study and through the reference lists of the literature found in the initial search.

Self-Determination Theory

Self-determination theory (SDT) is a theory of motivation which identifies reasons for action based on three human needs: relatedness, competence and autonomy (Deci, Vallerand, Pelletier, & Ryan, 1993; Ryan & Deci, 2000). People often choose to engage in activities in which they feel secure, in situations where they feel that they belong and are connected with others (Ryan & Deci, 2000). They also engage in activities in which they feel effective because those activities support a positive sense of identity (Ryan & Deci, 2012). Autonomy gives individuals a sense of control over their identity in that they are able to develop and express their

personal feelings and values (Ryan & Deci, 2012). When motivation is self-determined it is driven by choice, this is not the case when motivation is driven by compliance (Deci et al., 1993). For the purpose of the current study, self-determination theory will serve as a theoretical basis for convergent validity evidence and development of the construct of teacher demoralization.

Intrinsic and Extrinsic Motivation

Within the SDT framework, researchers have outlined why individuals adopt identity traits (Ryan & Deci, 2012). Intrinsic motivation is described as happening when individuals engage in behaviors because they see the tasks as fulfilling and interesting (Miserandino, 1996; Deci et al., 1993; Ryan & Deci, 2003). Deci et al. (1993) call intrinsic motivation the epitome of self-determination because intrinsically motivated behaviors “emanate from the self and are fully endorsed” (p. 328). Conversely, when individuals are motivated by external forces they are considered to be extrinsically motivated.

There are four types of extrinsic motivation: external regulation, introjected regulation, identified regulation and integrated regulation (Deci et al., 1993; Ryan & Deci, 2000). Each type can be placed on a continuum from the most externalized form of extrinsic regulation to the most internalized (Ryan & Deci, 2000). Figure 2.1 illustrates the continuum of extrinsic motivation as well as a summary of the basic components of each type.

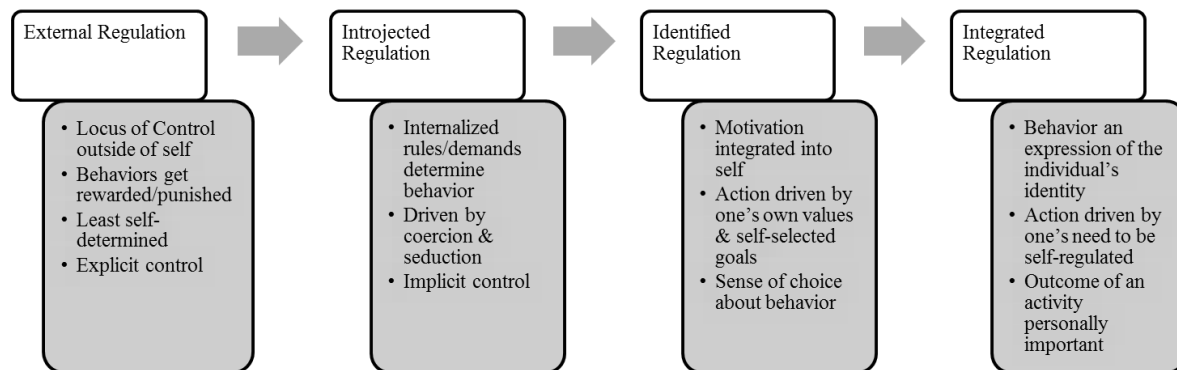


Figure 2.1 Extrinsic Motivation Continuum and Components. Based on (Deci et al., 1993; Ryan & Deci, 2000; 2012)

On the far left of the continuum is external regulation. It is wholly outside of the self, the least self-determined and is present when the person has a complete lack of autonomy (Deci et al., 1993; Ryan & Deci, 2012). External regulation occurs when rewards and punishments are present (Deci et al., 1993). For example, teachers who receive cash bonuses for student performance on tests or governments takeover schools that fail to meet mandated test score benchmarks are externally regulated.

Introjected extrinsic motivation involves following rules over which there are little choice in order to meet external pressures (Deci et al., 1993). If a teacher instructs all students, regardless of current academic level, to the state mandated standards that they will be tested on to comply with the state and federal regulations, they may be doing so because they feel coerced to do so by policy. In this example there is no explicit direction from the state or administration to teach in this way; however, the teachers know that the students will be tested on the material at the end of the year and therefore some teachers may feel pressured to teach materials that are inappropriate for the student's current level of instruction. Though introjection implies that the task has been internalized to some extent, it is considered extrinsic motivation because the

teacher does not truly have a choice of how to teach the child in the way that he or she feels is appropriate because of the pressure of the test (Deci et al., 1993).

External regulation and introjected regulation are the least autonomous forms of extrinsic motivation (Deci et al., 1993) and are most relevant to the current study. Several studies have shown correlations between autonomy loss and negative outcomes such as anxiety and anger (Miserandino, 1996; Assor, Kaplan, Kanat-Maymon, & Roth, 2005; Klassen, Perry, & Frenzel, 2012) as well as disengagement from classroom tasks for students (Miserandino, 1996; Assor et al., 2005). For this reason, it may be in the best interest of schools to determine ways to promote and support autonomy not only for students but also for teachers.

As a person begins to accept a given behavior as part of who they are and what they value, regulation becomes identified (Deci et al., 1993). Identified regulation is internalized because the person feels a sense of control and choice over the behavior (Deci et al., 1993). An example of identified regulation is a teacher valuing a professional development workshop because they see the value that it can bring to their work with their students. The teacher may be willing to work hard in the professional development because the value of learning the subject is understood, but the motivation is still extrinsic because it serves an external purpose of improving his or her work.

The most internalized form of extrinsic motivation is integrated regulation (Deci et al., 1993; Ryan & Deci, 2000). When motivation is integrated, it means that the behavior “is an expression of who the individual is – of what is valued by and important to the individual” (Deci et al., 1993, p. 330). For some teachers, simply going to work every morning may be a form of integrated regulation. They love being a teacher; it is an important part of their identity. The

behavior may still be a form of extrinsic motivation as opposed to intrinsic; however, because it is also how they earn their living.

Needs Fulfillment in the Profession of Teaching

Four recent studies have used the self-determination framework to examine the potential effects that need fulfillment or thwarting can have on teachers. Fernet, Guay, Senecal, & Austin (2012) conducted a study that examined autonomous motivation and job demand versus resources with 806 French-Canadian teachers in public elementary and secondary schools. They found that negative changes in autonomy are related to emotional exhaustion, the largest component of burnout. They also noted that, despite environmental demands to improve performance, teachers' psychological wellbeing suffered as self-determination was threatened.

In a set of three studies that were published together, Klassen, Perry & Frenzel (2012) examined teacher perceptions of autonomy support and teacher relatedness with colleagues and students. They also examined the model of how relatedness may predict teaching engagement and emotional exhaustion. In the first study they found a positive relationship among teacher relatedness with students and work engagement and a negative relationship among teacher relatedness with students and emotional exhaustion. The second study provided evidence that when teachers' basic needs of autonomy, relatedness and competence are met they are more likely to be engaged in their work and less likely to feel anxiety, anger, and emotional exhaustion. Study three results supported that teacher relatedness with students is correlated to higher levels of teacher engagement and positive emotions, thus supporting the findings in studies one and two.

Bartholomew et al. (2014) studied the relationship of job pressure, need thwarting, burnout and somatic complaints (stress and anxiety) with 364 physical education teachers.

Pressures in their study included pressure to conform teaching methods to others as well as constant evaluations based on student performance. Like Fernet et al. (2012) their findings indicated that autonomy thwarting was a strong predictor of burnout. Bartholomew et al. (2014) also found that competence thwarting was strongly related to teacher stress and anxiety.

Holzberger et al. (2014) conducted a study with 155 mathematics teachers and their students in an effort to explore the relationship between teachers' intrinsic needs, self-efficacy and instructional behaviors. Notable findings from their study include that teachers' intrinsic need satisfaction is positively related to teacher-student relationships and classroom management as rated by their students. They also found that high teacher self-efficacy in a low needs satisfaction environment may lead a teacher to feelings of frustration; teachers in this particular study with high self-efficacy did not seem able to compensate for the environment failing to satisfy their intrinsic needs of autonomy, competence and relatedness. These findings are notable because many studies focus on teacher self-efficacy while ignoring the environmental variables of their school, and the authors note that this may be distorting empirical results.

Taken together, the four studies begin to outline a model of teacher stress and burnout that includes mediating variables of basic intrinsic needs as outlined by self-determination theory. Decreased autonomy was related to feelings of frustration or emotional exhaustion in all four of the studies reviewed. In two of the studies, relatedness with students was found to be related to better work engagement and decreased emotional exhaustion. Finally, in three of the studies the need of competence being met was related to decreased feelings of anxiety and frustration.

Need fulfillment and the role of intrinsic and extrinsic motivation may have many implications for educators in the context of high-stakes testing. Ryan & Brown (2005) note that

NCLB is an attempt to motivate teachers with a misapplication of behaviorism. NCLB applies rewards and consequences to desired outcomes as opposed to desired behaviors. For example, NCLB applies rewards and consequences to student test scores (outcomes) whereas behaviorism would suggest that the consequences be applied to the desired behaviors (students studying, effective teaching strategies e.g.). Not only are unwanted behaviors such as cheating and teaching to the test reinforced for some teachers as a result of this misapplication of behaviorism, but it has also served to undermine teacher autonomy for some teachers (Ryan & Weinstein, 2009).

It is the undermining of the basic needs of autonomy, relatedness and competence that may be at the root of teacher demoralization. Using self-determination theory as an overarching conceptual framework, this review will examine multiple perspectives on teacher demoralization in an effort to better conceptualize the construct. It is pertinent to incorporate multiple perspectives into the literature review for an instrument development study because the construct should be clearly defined and differentiated from other similar constructs when the instrument is developed. It is theorized, based upon the review of the literature that the principal component analysis results will be related to need fulfillment as outlined in self-determination theory.

Demoralization: The Education Perspective

Although Santoro (2013) documented emotional exhaustion in her study of teachers who have decided to leave the profession, she also documented teachers' concern for the students that they left. This concern for others is in direct contrast to the depersonalization factor of burnout theory, which happens when teachers emotionally detach themselves of concern for the person or people they are caring for as a way to cope with the stress of the occupation (Maslach & Goldberg, 1998). Dunn (2014) also found that teachers, who felt pushed out of the profession by

policy decisions, remained in the profession because of strong student and colleague relationships. Werts et al. (2013) also documented that the outcome of frustration and distrust created by policies was not always disengagement.

Further, Santoro (2011) argues that teachers are unfairly pathologized when burnout is used as the sole framework to explain what happens when teachers experience maladaptive levels of stress. Therefore the stress related phenomenon that teachers are experiencing under modern reform policies may be better explained by the construct of teacher demoralization.

Defining Teacher Demoralization

Santoro (2011) appears to be the first to define demoralization as a construct within the education literature. Her definition is stated simply: “the inability to access the moral rewards of teaching” (p. 3). Demoralization has been described as the result of external forces that make it difficult or impossible to access the moral rewards of the work (Santoro, 2011). Unlike burnout, demoralization does not assume that the problem is within the individual teachers who experience exhaustion; rather it is a result of a change to the practice of teaching that prohibits teachers from experiencing the rewards of the profession (Santoro, 2011). Though teacher demoralization has been discussed and defined in the literature, there are few empirical studies that examine the phenomenon (Santoro, 2011; Dunn, 2014). It is hypothesized by some researchers; however, that having access to the moral rewards of teaching may contribute to the ability to retain master teachers, particularly in high-poverty settings (Santoro, 2011; 2013; Santoro & Morehouse, 2011; Dunn, 2014).

In a study of teachers who once taught in high-poverty schools but decided to leave the profession, Santoro & Morehouse (2011) found:

The principled leavers...first compromised the way they believed they should teach in order to negotiate ways to teach well within the system and serve their

students. After accommodating their visions of good teaching to remain working with a high-poverty population, they arrived at a juncture at which their work was incompatible with their visions for good teaching, working with students, and their own sense of the good life (p. 2681).

When teachers are forced to alter their practice by situational contexts such as mandates created by federal and state education policies, and those changes are so drastic that they can no longer view their work as good, they are at risk for becoming demoralized (Santoro & Morehouse, 2011). In these scenarios, the teachers' need for autonomy is being thwarted by policy; their behavior is completely externally regulated. Santoro's definition of demoralization, however, begs the question: what are moral rewards of teaching and what about modern policy is making these rewards inaccessible to some teachers? Because teacher demoralization has not yet been fully explored in the literature, this review borrows from philosophy and teacher morale literature to seek the answers to these questions.

The (Moral) Rewards of Teaching

Research examining what teachers consider to be the good and moral work of teaching is sparse. Sanger & Osguthorpe (2011) constructed a definition of the moral work of teaching based on the work of educational philosophers such as Dewey & Noddings:

Education (and schooling as a means to it) serves more expansive ends than scores of academic achievement, and thus the contributions that teachers make to the moral life of classrooms, to the moral lives that our P-12 students lead, and to the character of our society, are critical (p. 570).

Moral work then can be thought of as work that goes beyond academic achievement and contributes to the moral nature of children as they develop.

Despite the lack of empirical literature on the moral work of teaching, studies that examine the type of work that brings satisfaction to teachers may reveal how teachers view their work as moral and good. Actively working with students are among the topics found to be the most rewarding for teachers and contribute to job satisfaction (Jackson & Belford, 1965).

Teachers report finding satisfaction in their work when they are able to build relationships with students and help them succeed (Jackson & Belford, 1965; Scott et al., 2001; Jones, 2008), particularly with those students on which it seems everyone else has given up (Jackson & Belford, 1965). These findings support the previously presented need for teacher relatedness with students (Klassen et al., 2012).

Teachers also receive professional satisfaction when they are able to educate the whole child (Jackson & Belford, 1965), meet individual student needs in a way that leads them to use higher-order analysis (Jackson & Belford, 1965; Santoro, 2011), connect student learning with experiences (Santoro, 2011), experience unexpected classroom events (Jackson & Belford, 1965), teach students problem solving (Santoro, 2011) and inspire students to work beyond the curriculum (Jackson & Belford, 1965). Aside from working with students, teachers gain professional satisfaction when they are able to be creative in their teaching and find new ways to reach students (Santoro, 2011), but do not enjoy when education is reduced to a technical procedure (Santoro, 2013). Job satisfaction also correlates to a supportive environment, reduced time pressure and the ability of teachers to develop mutual goals (Skaalvik & Skaalvik, 2011).

Specifically mentioned by Jackson & Belford (Jackson & Belford, 1965), predating modern reforms, was that the teacher participants did not discuss objective measures and group achievement, noting that standardized test results were delivered when it was too late to do anything to help the students change. One teacher participant from their study even admitted to being upset about having to spend an hour (per year) of instructional time on the test! Jackson & Belford (1965) wrote of testing:

Evidence of teaching effectiveness ought to be interchangeable with evidence of learning effectiveness. But, as most educators know, things are not that simple. The criteria of good teaching are not necessarily synonymous with the criteria of scholastic attainment (p. 276).

Instead of valuing achievement test results as measures of learning, the teacher participants saw them as measures of native ability and were untrusting of tests that were under control of authorities because the tests were so disconnected from the objectives and routines of the classroom. Dunn (2014) documented teacher frustration from too much time being spent on testing under modern policies, providing evidence that the Jackson & Belford findings on this specific issue may still be relevant. In particular, when tests are connected with a system of rewards and consequences they may be experienced by teachers as controlling and therefore undermine intrinsic motivation of teachers (Ryan & Brown, 2005).

Evans' Model of Teacher Morale and Job Satisfaction

The construct of teacher morale has been an elusive one due to lack of conceptual clarity and methodological rigor (Evans, 1997). Evans' (2001) work sought to clarify a model of teacher morale and clearly define key terms within the literature. It should be noted that Evans concluded from her work that teacher morale is impacted less by overarching issues in education such as society's respect for the profession and policy and more by local variables such as school leadership and curriculum decisions (Evans, 2001); however, this finding was based upon work conducted in the UK in the late 1990s and early 2000s, pre-NCLB in the United States. Though the context of teaching and learning has been documented to have changed post-NCLB, her model of teacher morale and job satisfaction can be used to inform the development of the construct of teacher demoralization in two ways. First it provides some conceptual clarity that was previously lacking in the literature and second it provides some historical context for pre-accountability era work environments. Her work illustrates that the profession of teaching has always struggled with issues of morale; however, test-based accountability policies may have intensified the problems for teachers.

Defining Morale and Satisfaction

Teacher morale is “a state of mind determined by the individual’s anticipation of the extent of satisfaction of those needs which s/he perceives as significantly affecting her/his total work situation” (Evans, 1997, p. 832). Though satisfaction is a component of Evans’ conceptualization of teacher morale, she makes the distinction that job satisfaction is “a state of mind encompassing all those feelings determined by the extent to which the individual perceives her/his job-related needs to be being met” (Evans, 1997). Whereas morale in Evans’ (1997) model is a future oriented construct, job satisfaction is present oriented.

Job-Related Ideal

Evans’ model of teacher morale proposes that morale is experienced at an individual level; however, acknowledges that the institution has a profound effect on an individual’s morale (Evans, 2001). Evans’ (2001) suggests that teachers have a job-related ideal that may vary from teacher to teacher and will affect their satisfaction and morale. This job-related ideal is comprised of two components: relative perspective and professionalism orientation. Relative perspective is comprised of all of the prior knowledge, dispositions and experiences that teachers bring to their current positions (Evans, 2001). For example, if a teacher experienced a teaching position that they perceive as less satisfying in the past and their current position in an improvement over that position then their relative perspective would serve to increase their job-related ideal, they would be more satisfied in their work and have higher morale.

The second component of job-related ideal, professionalism orientation, refers to a teacher’s approach to their work. Teachers are thought to have either an extended or a restricted orientation to their work (Evans, 1997). Teachers who have restricted orientations to their work rely on experience and intuition; they value the day to day classroom-based perspective of

teaching (Evans, 2001). In contrast, teachers who have an extended orientation to their work value “the theory underpinning pedagogy” and they generally take on “a much more reasoned and analytic approach” (Evans, 2001, p. 293). One orientation does not necessarily result in higher satisfaction and morale, rather Evans (2001) suggests that a match between the job and the person is important for harmonious environments that encourage uncompromising contexts and therefore are more likely to result in higher satisfaction and morale.

Job-Person Match

Evans (2001) identified six areas of job-person match through her work and described compromising contexts as ones in which individuals are asked to act in a way that is incompatible with their happiness. The six areas are outlined in Table 2.1. Of special note are the two job-person match areas that are also identified as areas of job-person fit in the burnout literature. Specifically the burnout perspective offers that a lack of community can contribute to feelings of emotional exhaustion for teachers, which simply described is a lack of connection to others (Maslach & Leiter, 1997) and can be paralleled with both interpersonal relations and collegiality in the morale literature.

The second job-person fit area identified in the burnout literature that can be compared with a job-person match area is conflicting values. In the burnout literature conflicting values are job requirements that conflict with personal values (Maslach & Leiter, 1997). This area of fit can be paralleled with the self-conception and self-image job-person match in the morale literature, in that they both tap into the dilemma that a person faces when the requirements of a job are in conflict with personal values. Given that both the burnout literature and the teacher morale literature include themes of community and value conflict as potential areas of job mismatch for teachers, an exploration of how those two themes play out in the goals of modern reform efforts

and teacher goals as recorded in the literature will inform the development of the teacher demoralization construct.

Table 2.1
Areas of Job-Person Match

Match Areas	Compromising Context Examples
Equity & Justice	The teacher perceives that situations and circumstances of their work situation are unfair.
Pedagogy	The teacher disagrees with the quality of teaching methods, curriculum, student-teacher relations in their school, and the policy and culture in relation to teaching and learning in which their school is situated.
Organizational Efficiency	The teacher perceives the organization to be run in contrast to their efficiency ideals.
Interpersonal Relations	Interpersonal relationships within the workplace do not match the teacher's ideal views of workplace relationships.
Collegiality	Collaboration expectations among faculty do not match the expectations of the teacher.
Self-Conception and Self-Image	The nature of the work required by the job is in conflict with the teacher's ideals of how they should act to fulfill their professional identity and beliefs about the profession.

Adapted from Evans, 2001

Teacher Goals and Reform Goals

Scott et al. (2001) contend that “teachers are motivated by altruism and activism in the sense of a desire to make a difference by aiding individual children” and that this goal is a direct contrast to the controlling nature of contemporary reforms (p. 14). Whereas contemporary reforms focus on improving education for economic advantages, most teachers enter the profession to serve children’s personal welfare (Pring, 2001; Scott et al., 2001). As a result, some administrators and teachers are placed in a position where they are required to implement changes that they do not support and are in direct contrast with their personal goals for their work (Scott et al., 2001). Attracting teachers to the profession with the moral dimensions of teaching, as most pre-service teachers are (Sanger & Osguthorpe, 2011), but then imposing

policies that eliminate the moral work of teaching is a formula for teacher demoralization (Santoro, 2011).

Policies that are in direct conflict with the moral work of teaching are those which do not match the beliefs and values of the teachers and make them feel as if they are harming their students (Santoro, 2013) and could potentially have lasting effects on the identity development of the teacher (Flores & Day, 2006). Specifically, policies and mandates that limit the values that can be pursued in teaching are listed as limiting the moral work of teachers (Sanger, 2012). These policies include those that ask teachers to focus on making Annual Yearly Progress (AYP), mandated common standards and scripted lessons (Santoro, 2011).

These policies are potentially harmful to teachers experiencing satisfaction of the moral work of teaching. For example, a policy focus on pass rate data may possibly lead to overlooking the teacher-student relationship and the “whole child” in lieu of viewing the child as a data point. Mandated common standards and scripted lessons not only restrict teacher creativity in some instances, but it may also eliminate knowledge and skills that the teacher feels is valuable for a given student, as well as the teacher’s ability to meet individual needs. For example, a special education student in third grade may still be reading at a Kindergarten level but the mandated common standards calls for them to be instructed and tested on the third grade level. For a teacher to meet the needs of the student he or she would need to go against mandated policy, hence the conflict is established. Experiencing such scenarios may leave the teacher feeling conflicted: do they participate in practices that they believe are harming the student or do they leave the children that they wanted to serve (Santoro, 2013)? Ultimately, these teachers become frustrated and start to not like the people that they have become (Santoro, 2013). Dunn (2014)

captured this in one teacher participant's thoughts: "I can't afford to stay in teaching, and I can't afford to leave. And it's not just about my money, it's about my morale and morals" (p. 2).

Possibly exacerbating this disconnect between teacher goals and policy goals is how reforms are eroding teacher professionalism and the moral dimension of teaching through several factors, including increased tasks that are unrelated to working with students (e.g. paperwork, rules and regulations, pass rate pressure) (Pring, 2001; Scott et al., 2001). Santoro (2013) recounted an anecdote from a teacher participant whose principal failed to inform the faculty that grades were due earlier than expected. That teacher was not necessarily upset by the time pressure, rather she felt that the principal's actions did not account for the time and thought that she, as a professional, spent on calculating student grades. Time pressure alone has been found to contribute to low satisfaction (Skaalvik & Skaalvik, 2011), but for this teacher the time pressure demand was demoralizing to her as a professional (Santoro, 2013).

Other contributing factors to eroding professionalism include relatively low pay for the increased workload and decreased professional autonomy due to institutional components who have power to control the institution yet are not trained to work with children (e.g. politicians, the press) (Scott et al., 2001). When a teacher does not feel that he or she has a voice in establishing goals and values for his or her classroom and work it can yield reduced feelings of belonging, which also serve as a contributing factor to decreased job satisfaction (Skaalvik & Skaalvik, 2011). Abrams et al. (2003) reported that teachers felt that they were required to teach in ways that contradicted their ideas of sound and effective pedagogy as a result of state-wide testing programs. With this known, it may be worth further exploring the impact that this contradiction is having on teachers.

Sanger's Educational Schizophrenia

The notion of educational schizophrenia (Sanger, 2012) has been used to illustrate why teachers struggle to find good in their work under current policy. Sanger (2012) draws upon Stocker's critique of ethical theories, which essentially asserts that modern ethical theories do not account for motive. Sanger (2012) parallels Stocker's modern ethical theory with a critique of the current educational reform movement in that this ideology, namely academic achievement being the sole outcome of education, fails to account for the values and motives of individuals within the profession.

Sanger (2012) describes educational schizophrenia as "a deeply personal 'malady of the spirit' resulting from a bifurcation between teachers' own motives and values, and the prescribed reasons they are 'supposed to' guide their practice by" (p. 299). He notes that when pre-service teachers are asked why they chose the profession their reasons are altruistic, similar to the findings of previously cited studies (Jackson & Belford, 1965; Scott et al., 2001). Despite their altruistic motives for entering the profession, they often justify teaching children values as a means to the end of raising test scores (Sanger, 2012). Reforms often ignore the core values that motivate teachers to seek out a career in the profession (Day et al., 2005). As a result, teachers may temporarily attend to the demand of the reform; however, if the core values of teachers (the altruistic motives for entering the profession) are not acknowledged then it may be difficult for teachers to maintain a commitment to the profession (Day et al., 2005).

For example, a pre-service teacher may state that teaching children cooperation is a good thing to do because cooperation is necessary for creating a positive learning environment, which they feel will in turn increase academic achievement. Though there is nothing overtly wrong with this rationale, there are other 'non-academic' reasons why a teacher would want his or her

students to learn how to cooperate with others. Pertinent to PreK-12, knowing how to cooperate with others may lead to better peer relationships, but may also be viewed as worthwhile moral goal of education. Perhaps, for example, a teacher observes that his or her students are lacking social skills. As noted earlier, many educators express their goal of meeting student needs and educating the whole child; working on cooperation skills within the classroom then would be of value because it meets the social needs of the students, regardless of whether or not academic achievement increased as a result. It is only with some coaxing that pre-service teachers come to realize that academic learning as the sole outcome of education is in conflict with their motives to do moral work (Sanger, 2012).

Sanger (2012) also argues that contemporary policies that measure the quality of education with standardized tests are incompatible with pursuing sincere caring relationships with students because they narrow the goals of education. This is important because not only do these caring relationships bring professional satisfaction to teachers; they also serve to humanize the institution of school (Jackson & Belford, 1965; Valli & Buese, 2007). As an illustration, teachers in several studies noted that they are opposed to implementing mandated practices that not only contradict what they know to be best for their students, but in some cases are actually harming them (Scott et al., 2001; Valli & Buese, 2007; Santoro, 2013). As a result, it may be the case that some teachers are at risk for demoralization because they are continually asked to violate their ideal professional selves in order to carry out mandated policies.

Refining Teacher Demoralization

For the purpose of this study, it is important to have a clearly defined construct of teacher demoralization before attempting to measure it. Therefore it is necessary to expand upon Santoro's (2011) definition of demoralization, "the inability to access the moral rewards of

teaching” (p. 3). An examination of the literature has shown that some teachers may be having a difficult time accessing moral rewards, or job satisfaction from factors unrelated to academic success of their students, as a result of their personal beliefs and goals being in conflict with policy goals and systemic procedures. Further, it may be possible that test-based accountability policies are undermining or even thwarting their basic psychological needs from being met at work. At the heart of demoralization is the interaction that is occurring between the policy that governs the work of the teacher and the effect that it has on the teacher’s motivation and affect. For the purpose of this study teacher demoralization will be defined as a phenomenon that occurs when policy has a deleterious effect on an individual teacher’s motivation and affect. The teacher demoralization scale will seek to measure the extent of that effect.

Teacher Burnout

It is important for this study to understand the difference between burnout and teacher demoralization, therefore the following section is presented as an overview of the construct of burnout for the purposes of discriminant validity as opposed to a full review of the burnout literature. Burnout is a psychological syndrome that can occur in individuals who experience chronic emotional and interpersonal stress in their work (Maslach et al., 2001). Many studies have explored models of burnout, factors that contribute to burnout and interventions to treat and prevent burnout, yet interventions to prevent and treat burnout have yet to be supported empirically shown to be effective (Maslach et al., 2001).

Burnout Defined

The construct of burnout consists of three dimensions: emotional exhaustion, depersonalization, and personal accomplishment (Maslach & Goldberg, 1998; Maslach et al., 2001). The stress dimension of burnout, labeled emotional exhaustion, occurs when an

individual's emotional and physical resources are depleted which leaves an individual feeling emotionally overextended (Maslach & Goldberg, 1998; Maslach et al., 2001). Depersonalization is the interpersonal dimension of burnout and is defined as "a negative, callous, or excessively detached response to other people" (Maslach & Goldberg, 1998, p. 64). The third dimension, professional accomplishment, refers to an individual's feelings of reduced efficacy (Maslach et al., 2001).

Current research supports a process model of burnout, whereby diminished personal accomplishment and emotional exhaustion develop simultaneously while depersonalization is a byproduct of increasing emotional exhaustion (Leiter, 1993). This model proposes that people either "move toward increased professional efficacy or toward burnout as a function of their personal reaction to persistent aspects of their work environment" (Leiter, 1993, p. 246). It may be possible then for teachers to experience emotional exhaustion without becoming burnt out, assuming that they feel efficacious in their work (Chang, 2009).

Coping Skills and Burnout Prevention

Because stress is the antecedent to emotional exhaustion, and burnout is treated as a "nondistinct stress-related phenomenon" (Farber, 2000, p. 676), the literature suggests that teachers take personal steps towards coping with stress symptoms. An outline of these strategies can be found in Table 2.2. Despite coping strategies for teacher stress being prolific in the literature, many of them have not been empirically tested nor will they be effective until the institution of the school changes to prevent the causes of burnout (Farber, 2000).

Table 2.2

Suggested strategies for coping with burnout stress

1. Make time for yourself.
 2. Make time for exercise.
 3. Get enough sleep, and eat a healthy diet.
 4. Make some time for family and friends as a support system.
 5. Practice meditation and solitude.
 6. Indulge your sense of humor and determine to include some "fun" in your teaching every day.
 7. Determine to display a positive attitude and let things go that are out of your control.
-

Adapted from (Maslach & Goldberg, 1998; Farber, 2000; Richards, 2012)

Maslach & Goldberg (1998) even note the paradoxical nature of these strategies, citing that majority of the burnout literature suggests that situational and organization factors contribute more to burnout than individual factors. This is particularly relevant under modern education reforms that typically leave teachers powerless to change the circumstances that create unhealthy levels of stress (Gallagher, 2004; Richards, 2012). Scott et al. (2001) note that no amount of positive thinking, praise, “working smarter not harder” and other coping strategies can cure the decline in respect and trust for teachers that has come as a result of reforms.

Factors Contributing to Burnout

Many studies have examined the potential factors that contribute to burnout. Maslach & Goldberg (1998) report that job demands and lack of resources are of particular importance, listing potential antecedents such as work overload and personal conflict, as well as a lack of: control coping, social support, skill use, autonomy and decision involvement. Chang (2009) synthesized several empirical study results to create a similar and comprehensive list of potential factors that contribute to burnout: lack of social support from colleagues and administrators; low student/school socioeconomic status; organizational rigidity; work overload; lack of resources; low salaries; insufficient teacher training; lack of teacher participation in decision making; overcrowded classrooms; and poor working conditions. Of the factors identified in the literature,

many are environmental and beyond of the control of the teachers. The disconnect in the literature then is that burnout factors are thought to be mostly environmental, yet burnout is measured on an individual emotions level (Chang, 2009) and suggested interventions place the onus of action for change on individual teachers (Santoro, 2011).

A Missing Piece

Though burnout researchers acknowledge that environmental factors play a role in the process of burnout (Leiter, 1993; Maslach & Goldberg, 1998; Maslach et al., 2001), Chang (2009) commented that burnout research has been “limited to teachers’ feelings of emotional exhaustion,” which fails to account for circumstances that influence the discrete emotions that can lead to emotional exhaustion (p. 195). This may be why individual intervention strategies to treat and prevent teacher burnout have been found ineffective when empirically studied (Maslach & Goldberg, 1998). Examination of the interaction between the teacher and the situational contexts of their work, specifically the institution of school in light of modern reforms, may lead to more effective strategies for treatment and prevention of burnout (Maslach & Goldberg, 1998; Farber, 2000). Indeed, the factors that make many teaching jobs stressful are social, political and/or economic in nature (Maslach & Goldberg, 1998).

Organizational burnout research has examined links between organizational variables and teacher burnout. For example, Anderson & Iwanicki (1984) studied teacher need fulfillment in the context of Maslow’s Hierarchy of Needs and feelings of burnout. They found that the need for self-actualization (achieve peak satisfaction and personal success) and self-esteem (self-respect and respect from others) were significantly related to feelings of burnout. Notably, they did not find that teacher’s need for autonomy were related to feelings of burnout; however, their research was conducted around the time of the release of *A Nation at Risk* and therefore teachers

were not yet subject to test-based accountability measures and the resulting practices. Their findings do indicate, however, that teachers may be susceptible to feelings of burnout if they feel that their needs are being undermined by organizational factors.

Several studies have examined the relationship of role conflict and role ambiguity among burnout subscales. These factors are of particular interest for the current study as they could be related to Sanger's (2012) educational schizophrenia. Specifically, Schwab & Iwanicki (1982) found that role conflict and role ambiguity account for a significant amount of variance for the emotional exhaustion and depersonalization components of burnout. Similarly, Crane & Iwanicki (1986) found that role conflict and ambiguity explained a significant amount of variance for the subscales of emotional exhaustion and depersonalization. Finally, Jackson, Schwab & Schuler (1986) found that role conflict was strongly associated with emotional exhaustion. Taken together these findings support the notion that role conflict is a contributing factor to emotional exhaustion, if not personalization as well.

Byrne (1994) also examined the impact of organizational factors on teacher feelings of emotional exhaustion, depersonalization and personal accomplishment including the factors of role conflict and ambiguity. Examples of role ambiguity included in Byrne's study were "required restructuring of curricula and pedagogical approaches in accordance with changing government mandates, and...the perception of being held in low esteem by students, parents, administrators, and the general public" (Byrne, 1994, p. 648). Examples of role conflict were "quantity of work to be done and quality of work realistically possible within time constraints, and meeting the demands of overly large classes comprising students of diverse ability levels and meeting the needs of individual students." (Byrne, 1994, p. 648) While Byrne (1994) concluded that that she had no evidence of role ambiguity, as defined and measured in her study, predicted

feelings of burnout for teachers. Role conflict, however, did appear to predict components of burnout.

This may hold true in today's schools as well, assuming that teachers are aware of the requirements that they are being asked to fulfill but have a moral disagreement with those requirements. Table 2.3 contains the five items that Byrne used to measure role conflict, as they were developed by Pettegrew & Wolf (1982). The nature of these items will be considered during the construction of the teacher dispositions scale to measure demoralization due to their potential relationship to Sanger's moral schizophrenia; however, they do not completely tap into a teacher's potential dilemma that they may feel assuming that the prescribed nature of their work is in disagreement with their personal philosophy of education.

Table 2.3
Stress Measures: Role Conflict Subscale

Code
1. I receive conflicting demands from two or more people or groups in the school setting.
2. I have to buck a rule or policy in order to carry out an assignment.
3. I have a hard time satisfying the conflicting demands of students, parents, administration and teachers.
4. I am given school-related duties without adequate resources and materials to carry them out.
5. There is a difference between the way my administrative head thinks things should be done and the way they should be done.

(Pettegrew & Wolf, 1982)

In an effort to incorporate situational factors into the burnout framework, Farber (2000) identified and described three types of burnout that should be considered distinct: wear out; classic burnout; and under challenged. He classifies the three types by the individual's reaction to the stress. A teacher experiences wear out when he or she gives up and feels depleted as a result of an excessive amount of stress with too little gratification. Classic burnout is when the individual works "to the point of exhaustion, in pursuit of sufficient gratification...to match the extent of stress experience" (Farber, 2000, p. 677). Finally, under challenged is described as

when the work is mundane and unrewarding. Though Farber's work sought to further refine the construct of burnout for the purpose of treatment, his work has yet to be applied to measurement for the purpose of research.

Measuring Burnout

Perhaps the most commonly used instrument to measure teacher burnout is the Maslach Burnout Inventory - Educator's Survey (MBI-ES) (Maslach & Jackson, 1981). Since its creation several new iterations have been developed to make the instrument more sensitive to the population that it is intending to measure. Pertinent to this review, Maslach & Jackson (as cited in Byrne, 1993) altered their general burnout measure by replacing the previously used term 'recipient' to 'student' when referring to the population that the participants serve. Example items for the MBI-ES can be found in Appendix A.

Though the sample items for burnout may measure components of demoralization, their failure to account for context may conflate results. For example, the first item could be interpreted as "I feel emotionally drained from my work" because of student behavior issues or the feeling of being emotionally drained could be a result of the teacher experiencing moral schizophrenia or subjective incompetence. Similarly, researchers have recorded teacher statements about being forced to treat students as numbers (Carlson-Jaquez, Crowder, Hope, & Solomon, 2016), or in the context of the burnout items "impersonal 'objects'." Without clarification on the item, it may be difficult to know if the teachers answered the depersonalization item based upon what they feel that they are asked to do as a teacher versus what they do on their own volition.

A Gap in the Literature

As a result of this possible conflation of measurement, combined with the evidence that exists that teachers are experiencing emotional exhaustion without the key burnout component of depersonalization, this study proposes that a new scale is needed to capture the phenomenon that is occurring in the context of test-based accountability policies. Test-based accountability policies have created a new context in which teachers are experiencing emotional exhaustion (Santoro, 2011). Teaching has always been a stressful profession, and burnout has been a phenomenon of concern for teachers for decades (Maslach & Goldberg, 1998), but teachers in modern contexts are showing a deep concern for students when they experience emotional exhaustion (Santoro, 2011). This is in contrast to previous studies on burnout where teachers depersonalize students, or detach themselves from care of students, as a coping mechanism (Maslach & Goldberg, 1998). Further, burnout interventions place the onus of action on the individual teacher and no empirical studies have yielded effective interventions (Maslach & Goldberg, 1998).

The development of the teacher dispositions scale to measure teacher demoralization, if successful, will enable future studies to explore the phenomenon of teacher demoralization. As researchers better understand the phenomenon of teacher demoralization they may be able to make recommendations to school administrators and policy makers to minimize negative consequences to teachers. Though an instrument to measure teacher demoralization does not exist and the construct itself is fairly new to the field of education, a construct of clinical demoralization exists within the field of psychiatry and can be used to inform the development of the teacher demoralization scale.

Initial Scale Development & Expert Review

The mixed-methods approach used in this stage of scale development was the first steps in creating an instrument with evidence of content validity (Haynes, Richard, & Kubany, 1995). Following the initial literature review of demoralization, job satisfaction and test-based testing literature, a draft set of twenty-seven items was created in spring of 2014. The scale was presented with a preliminary conceptualization of teacher demoralization and offered to the experts for review. Experts were asked to rate how much they felt the questions measured the given conceptualization. The first fifteen items of the scale focused on the influence of federal and state policies that guide the work of the teacher. The second set of twelve items focused on the effect of local school division policies that guide the work of the teacher. Six classroom management self-efficacy questions were also included in an effort to collect preliminary evidence of discriminant validity, under the assumption that teacher demoralization as operationalized was not the same as classroom management self-efficacy. The scale sent to experts for review can be found in Appendix B.

The first step in gathering content validity evidence was to send the first draft of items to the experts in the field for review to collect feedback on the scale and preliminary evidence of content validity. Five experts were invited to review the scale by email in April of 2014 and completed the review via Survey Monkey. Four experts in the fields of educational philosophy and high-stakes testing accepted the offer. They first reviewed the conceptualization of demoralization and were invited to ask questions or offer suggestions. Then reviewers were then presented the items in a randomized order and asked to rate each item on how much they agree that the item measured the construct of demoralization on a Likert scale of 1 to 5 with 1 being strongly agree and 5 being strongly disagree. Preliminary results suggested that the experts

agreed that the demoralization items measured demoralization ($M = 2.18$, $SD = .89$) when compared to the teacher self-efficacy items ($M = 4.04$, $SD = .69$). The findings provide preliminary evidence of content validity as well as discriminant validity. After each item experts were also given the opportunity to comment on the item. This evidence was used to inform further development of the instrument.

The set of suggestions offered in the expert review were aimed mostly towards the conceptualization. Expert feedback focused on the complexity and ambiguity of the “moral rewards of teaching” and how the moral rewards would be unique to the individual teacher. Reviewers called for conceptual elaboration and structure. One reviewer also noted that teachers have always felt pressure in their profession but NCLB seems to have done nothing to support the teacher/student relationship. Rather it has shifted the entire focus of education to testing. This focus, as the entire expert panel noted at one point in their commentary, has established a values conflict for many teachers.

Also of interest to the study, reviewers noted that a focus on emotions may help resolve issues of item interpretation. For example, some teachers may like that federal and state policies dictate what they do in their classrooms so just asking the question as to whether or not the policies are controlling may not be a good indicator of demoralization; however, asking if a teacher is frustrated by controlling policies may be a better indicator of demoralization. As a result of the expert review, the conceptual framework was revised based on additional information found in the literature. As a result of the recommendations of the experts who reviewed the scale the constructs of moral schizophrenia and clinical demoralization were incorporated into the conceptualization of teacher demoralization.

Clinical Demoralization: The Psychiatry Perspective

Unfortunately most of the research on the moral work of teaching relies on anecdote and argument, thus requiring empirical study (Sanger & Osguthorpe, 2011). Just as educational schizophrenia is described by Sanger (2012) as a malady of the spirit, the definition of “demoralize” includes the deprivation of a person’s spirit. This deprivation of spirit has also been studied by the field of psychiatry. Though the psychiatric applications of demoralization often occur in conjunction with mental & physical illnesses (including schizophrenia) (de Figueiredo, 2012), research suggests that members of a group may be more vulnerable to becoming demoralized when social change that affects the values and beliefs of the group occurs quickly (de Figueiredo, 1983).

The psychiatric construct of demoralization has previously been applied to occupations in the medical industry where researchers have observed symptoms of clinical demoralization in doctors and other healthcare professionals who face conflicts between their personal and professional values and ethics as a result of the institution of healthcare (Gabel 2011; 2012; 2013). In a similar fashion, this study seeks to apply the construct of demoralization to the occupation of education. The evidence that demoralization may occur under conditions of rapid social change that affects the values and beliefs of the group can be paralleled with both Santoro’s (2011) conceptualization of teacher demoralization and Sanger’s (2012) educational schizophrenia, and may serve to inform the development of a scale to measure teacher demoralization. Assuming a scale could be constructed with sufficient reliability and evidence of validity, it could then be used to conduct empirical investigations.

The study of demoralization in psychiatry began in an effort to discover ways in which people who are under stress can be helped such that they can function effectively (de Figueiredo,

1983). Demoralization was defined as “a psychological state that occurs when the meaningful connections among cognition, emotion, and volition, or between the past and the present, or between the person and the environment are perceived as threatened or disrupted.” (de Figueiredo, 2012, p. 107). This disruption causes the person to have a frightening experience that leaves him or her unable to cope and at a loss for what to do, which ultimately can affect the person’s self-efficacy and esteem and can forever change a person’s personality (Shrader, 1984; Clarke & Kissane, 2002). Such disruptions are possibly exacerbated by rapid social change driven by technology and advancements in media (Shrader, 1984).

People who are demoralized feel that they are losing or have lost an important component of their self-concept, and though demoralization has often been studied within the context of comorbidity it can happen without the presence of any other disease or disorder (Clarke & Kissane, 2002). The following sections outline how the literature on high-stakes testing, evaluation policies and teacher demoralization parallel the psychiatric construct of demoralization and provide evidence that suggests how the use of the psychiatric literature base informs the construction of a teacher demoralization scale.

Inadequacy Complex

It is theorized that the core cause of demoralization is a chronic self-ideal discrepancy termed the Inadequacy Complex (Shrader, 1984). That is, a person’s conception of who he is (the actual self) is not aligned with who he feels he ought to be (the ideal self). People receive messages about who their ideal self should be by engaging in dialogue with external voices in the world around them (Hermans, 1996).

Though there is evidence that societies have historically had models and standards for behavior, the information age has served to exponentially increase the tension between the actual

and ideal self by increasing both the amount of vicarious experiences that can inflate the ideal self and first-hand experiences that can often serve to deflate the actual self (Shrader, 1984). This tension can be visualized as a tug of war between of actual and ideal self, one side being fueled by an individual's dialogue with societal expectations and the other side deriving its strength from deflating first-hand experiences (Shrader, 1984). The result of this fracture between the actual and ideal self can and often does change one's personality (Shrader, 1984).

For some teachers contemporary policy is one of the largest contributing factors to their professional identity (Solomon, Carlson-Jaquez, Hope, & Crowder, 2015). Policy that attempts to draw conclusions about teacher effectiveness from student standardized test scores in essence is sending messages to teachers about their professional role and worth, in other words what it means to be a teacher and whether they are good or bad at their job. Though most teachers interviewed by Solomon et al. (2015) acknowledged the limitations of using tests for this purpose, they also expressed emotions of anger, frustration, sadness and fear as a result of student test scores that do not meet or exceed the established benchmark.

Dunn (2014) also documented the tug of war that teachers feel with policy and discussed these factors as ones that either push a teacher out or pull the teacher in to the profession. Examples of push factors are "monetary factors, top-down policies, lack of control over the career and a moral disagreement with policies" (Dunn, 2014, p. 9). Factors that are said to pull teachers in include "students, colleagues, a commitment to the profession and worry and unease about pursuing a new career in difficult economic times" (Dunn, 2014, p. 13). Given these findings, it may be beneficial to use the psychiatry perspective of demoralization to investigate contemporary educators and the problems of low job satisfaction, burnout, and attrition.

Subjective Incompetence

Though demoralization has been found to share common symptoms with depression, subjective incompetence is said to be the key difference among the diagnoses (Clarke & Kissane, 2002). Subjective Incompetence (SI) is a self-perceived inability to perform tasks and express feelings appropriately during a stressful situation that results in persistent fears about what may happen in the future (de Figueiredo, 2012). It is possible for a person to be under distress but not feel incompetent, and vice versa. For example:

A university professor who is about to give a first lecture to an unfamiliar audience may become anxious (i.e. distressed) but not demoralized. When forced by circumstance to lecture to a familiar audience on a topic unrelated to his specialty, he may feel incompetent but not demoralized. When he is challenged and proved ignorant of a topic he never mastered in his own specialty, he [may feel] distressed and...incompetent, i.e. demoralized (de Figueiredo, 1983).

It can then be understood that demoralization occurs when a person is both under stress and feels incompetent in a situation.

Measuring Teacher Demoralization

This review has outlined various constructs and components that are thought to be related or contribute to teacher demoralization. For many of these constructs, instruments have already been created and studies have shown them to have evidence of reliability and validity. It is theorized that teacher demoralization is a separate but related phenomenon. The following sections outline these instruments and offer discussion on how they are theoretically different from demoralization and its predicted components. These components include subjective incompetence and the demoralization symptoms of disheartenment, dysphoria, helplessness, sense of failure, and a loss of meaning.

Measuring Subjective Incompetence

In the education literature, subjective incompetence could be likened to a teacher experiencing both stress and low teacher self-efficacy. It is well documented that teachers are prone to experience stress as a result of multiple factors related to their profession (Kyriacou & Sutcliffe, 1977). More recently, researchers have reported on teacher stress in the context of and as a result of education reform policies (Richards, 2012; Dawson et al., 2014). Though the teacher stress literature is beyond the scope of this review, it should be noted that stress is a well-documented and problematic phenomenon in the profession of teaching (Kyriacou & Sutcliffe, 1977; Blase, 1986; Kyriacou, 1987; Richards, 2012).

Tschannen-Moran, Woolfolk Hoy & Hoy (1998) reconciled previous literature to propose a model of teacher efficacy that includes both an analysis of teaching task and an assessment of personal teaching competence. The analysis of teaching task involves an assessment of the task in context whereby the challenges of teaching are weighed against the resources available to overcome those challenges and aid the learning process (Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). The assessment of personal teaching competence is the teacher's judgement of his or her personal abilities versus limitations or short comings in the given context (Tschannen-Moran et al., 1998). Again a full review of the teaching efficacy literature is beyond the scope of this review; however, the concept of teacher efficacy can be used to inform a concept of teacher subjective incompetence as well as provide a model from which an instrument to measure subjective incompetence can be created.

A widely used instrument to measure teacher efficacy is the Ohio State Teacher Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), more recently referred to as the Teachers' Sense of Efficacy Scale (TSES). The TSES includes three subscales: efficacy for instructional

strategies; efficacy for classroom management; and efficacy for student engagement. Much like the MBI, however, this instrument was not designed to measure institutional variables that could be contributing to a teacher's sense of competence. Though researchers disagree on the level of specificity needed to measure teacher self-efficacy, there is consensus in the definition in that it is both context and subject-matter specific (Tschannen-Moran & Woolfolk Hoy, 2001).

Therefore it may be necessary to refine teacher efficacy items to include the specific context in which the question is being asked.

Consider an item from the TSES: "How well can you implement alternative strategies in your classroom?" (Tschannen-Moran & Woolfolk Hoy, 2001, p. 800). This item may be interpreted by teachers in two different ways given the current educational climate. The first would be to assume that teachers have the autonomy to implement alternative strategies in the classroom. Therefore if a teacher's response is low on the Likert scale then he or she does not feel efficacious in his personal abilities to implement alternative strategies. Conversely, it could be the case that the teacher answered the question while considering the current environment in which he teaches where he is not given the autonomy to implement alternative strategies. In other words, he teaches in an environment where teachers are handed mandated lesson plans and are not given the flexibility to use strategies that are not on the scripted plan.

Another common instrument used to measure teacher self-efficacy is the Teacher Efficacy Beliefs System – Self (TEBS-Self) (Dellinger, Bobbett, Olivier, & Ellett, 2008). The TEBS-Self was developed as a result of the need for a self-efficacy instrument that is grounded in the context of the teacher's specific classroom and incorporates both the theory of self-efficacy and research on effective teaching and learning (Dellinger et al., 2008). Though the TEBS-Self does more closely address the context of specific classrooms, items still can be

ambiguous when administered to teachers in a test-based accountability policy setting. For example, the item “Right now in my present teaching situation, the strength of my personal beliefs in my capabilities to implement teaching methods at an appropriate pace to accommodate differences among my students...” can be interpreted in two ways. A teacher could answer by just taking into account his or her ability to pace instruction for students. Conversely, if a teacher considers a potentially controlling policy such as ridged pacing guides, his or her answer might vary greatly but have little to do with the teacher’s ability to pace instruction when given the autonomy to do so. This ambiguity is another example of potential attribution error, where researchers may assert that the teachers have low self-efficacy, but in reality what has been measured is a teacher’s lack of autonomy.

As stated by Gallagher (2004) individuals, particularly those within the institution, have a tendency to see institutions (e.g. schools) “as nameless and faceless...operating outside the bounds of our comprehension, never mind our efficacious action” (p. 354). If teachers are indeed experiencing subjective incompetence and becoming demoralized as a result, then it follows that efficacy to function as a self-ideal teacher in the context of modern reforms may be affected. The construct of subjective incompetence then can be thought of a teacher’s inability to fulfill a self-ideal identity as a result of context. It would be predicted then that teacher demoralization is a unique construct from teacher self-efficacy.

For the purpose of this study, a current self-efficacy scale will be used as discriminant validity evidence. Though the TESB-Self more closely examines context which may be more appropriate for use in this study, it has yet to be fully developed by researchers (Dellinger et al., 2008). For this reason, and because of the similarity in potential attribution error of both scales, the more thoroughly researched TSES will be used.

Measuring Demoralization Symptoms

People become demoralized when they have lost or feel they are losing something that is critical to their sense of self; however, this construct has been difficult to capture (Clarke & Kissane, 2002). In an effort to more accurately measure the construct of demoralization, Clarke & Kissane (2002) further elaborated on the definition to include outward symptoms: “a persistent inability to cope, together with associated feelings of helplessness, hopelessness, meaninglessness, subjective incompetence and diminished self-esteem” (p. 733).

Clarke (as cited in Clarke, 2012) outlines demoralization as a process that begins when a person is placed in a stressful situation. In the next step feelings of apprehension, panic, and threat lead the person to not knowing what to do. The feelings of helplessness or inability to cope when help is unavailable, then lead to a loss of hope. If the situation continues unresolved then it may affect the person’s self-esteem and leave them feeling incompetent. That feeling of incompetence then leads the demoralized person to feel as if he or she has failed to meet personal expectations and the expectations of others which leaves the individual feeling lonely, shameful, and disconnected. It is at this point when the demoralized people feel a loss of meaning and purpose, and ultimately despair.

In an effort to further elaborate on the construct of demoralization as well as create an instrument to measure it, Kissane et al. (2004) created a 34-item instrument of demoralization and examined the instrument’s factor structure with a population of palliative care patients. Their factor analysis yielded a five factor solution consisting of 24 items, accounting for 67.1% of the total variance, that had a strong overall reliability ($\alpha = .94$). Factors included: disheartenment ($\alpha = .89$); dysphoria ($\alpha = .85$); helplessness ($\alpha = .84$); sense of failure ($\alpha = .71$); and a loss of meaning ($\alpha = .87$). Potential responses for each item can be rated *never*, *seldom*, *sometimes*,

often, and all of time. Examples of items from the general demoralization scale for each factor can be found in Table 2.4.

Table 2.4
Sample Items for the Demoralization Scale

Helplessness

- I feel that I cannot help myself
- I feel hopeless

Disheartenment

- I feel distressed about what is happening to me
- I feel discouraged about life

Sense of Failure

- I cope fairly well with life
- I am proud of my accomplishments

Loss of Meaning

- My role in life has been lost
- There is no purpose to the activities in my life

Dysphoria

- I am angry about a lot of things
 - I feel guilty
-

From Clarke, 2012

The demoralization scale created by Kissane et al. (2004) has been tested for validity by two separate research teams in two different settings. The first was conducted by Mullane, Dooley, Tiernan, & Bates (2009) with a group of 100 advanced cancer patients in Ireland. While Mullane et al. (2009) found strong internal reliability (see Table 2.5) and a five factor solution that explained 65.72% of the variance, similar to that of Kissane et al. (2004). Despite these findings, the study failed to replicate the divergent validity found by Kissane and colleagues. Mullane et al. (2009) concluded that, for the Irish population, demoralization was highly correlated with the similar construct of depression and further studies that sought evidence of validity should be conducted.

The second study, conducted by Mehnert, Vehling, Hocker, Lehmann & Koch (2011), utilized a sample of 516 advanced cancer patients in Germany. Results from this study once again included strong internal reliability (see Table 2.5) but returned a four factor solution that

explained 59% of the variation. Unlike the study conducted by Mullane et al. (2009), Mehnert and colleagues did find evidence of divergent validity when compared to the similar construct of depression. These findings are in line with Kissane et al. (2004). While the validation findings are mixed for the demoralization scale, the internal reliability is consistently strong. This is most important for the current study because it provides evidence that the items on which the teacher demoralization scale will be based are theoretically similar to one another. Furthermore, the lack of validity evidence is not as important for the current study because the construct of teacher demoralization is not theorized to be a separate construct from depression, rather it is theorized to be a distinct phenomenon from teacher burnout.

Table 2.5
Chronbach's Alpha of the Demoralization Scale from validation studies

	Mullane et al. (2009)	Mehnert et al. (2011)
Overall Reliability	0.93	0.84
Helplessness	0.86	
Disheartenment	0.72	0.88
Sense of Failure	0.84	0.76
Loss of Meaning	0.83	0.88
Dysphoria	0.74	0.80

Evidence of Demoralization Factors for Teachers

In a study designed to examine teacher identity in the context of high-stakes testing, Carlson-Jaquez, Solomon, Hope & Crowder (2015) observed that teachers experienced and expressed symptoms of clinical demoralization. Themes of demoralization were expressed by the participants and then linked to high-stakes testing policies and practices in the existing literature. From this data the researchers began to draft recommendations for scale items based upon their current definition of each factor as it applies to teachers. Factor definitions, links to the literature and sample items from their study are presented in Appendix C. The following sections provide a

brief narrative of how the high-stakes testing literature can be connected to each factor of teacher demoralization.

Helplessness

Central to the construct of demoralization is a sense of helplessness, that is a feeling of being trapped and not knowing how to escape or cope (Clarke & Kissane, 2002). Some teachers, may “put up with a poor school system and unfriendly community” (Kennedy, 2010, p. 596) in an effort to cope with their current employment because they may feel that they are not able to secure employment in another field. Even if teachers do know how to escape or cope, the controlling nature of policies (Ryan & Weinstein, 2009) may limit their ability to do so (Valli & Buese, 2007). Teachers who desire autonomy but are denied it under accountability policy (Nichols & Berliner, 2005; Moses & Nanna, 2007; Dunn, 2014), may be left to feel helpless when it comes to coping with whatever stress reforms may bring. Werts et al. (2013) documented that some teachers in their study felt like outsiders when it came to development of policy, that policy was created to target them as unskilled workers, and that they had no ability to affect change within the system as a result.

Disheartenment

At the core of disheartenment are feelings of discouragement and isolation (Kissane, Wein, Love, Lee, Kee, & Clarke, 2004). With the implementation of accountability mandates, teacher workload has increased, intensified and expanded while teachers have been asked to relate to their students differently (Valli & Buese, 2007). The role of the teacher has changed to one that seeks to solely increase academic achievement (Valli & Buese, 2007) in a business model of increased productivity (Pring, 2001). This model neglects to account for the caring nature of the profession (Pring, 2001). For some, the mandates have been so demanding that

thoughts, their energy, and their love of teaching has been depleted (Valli & Buese, 2007). As a result, teachers are discouraged (Valli & Buese, 2007) and frustrated (Werts et al., 2013) and may be at risk for becoming disheartened.

Santoro (2013) captured one research participant as stating that to her the current conditions were disheartening, and that bureaucracy on all levels was saying that *she* was the problem. Though she was motivated to be there for the students, she ultimately left the profession. Another study used cluster analysis to identify three groups of teachers that approach teaching and education reform in different ways; the largest group of teachers, at 40%, were labeled by the researchers as “disheartened,” while the other two groups were labeled “contended” and “idealists” (Johnson, Yarrow, Rochkind, & Ott, 2009). Werts et al. (2013) documented a tone of frustration in their open-ended survey responses from teachers and corresponding focus groups, and within that theme of frustration they noted a feeling of alienation which aligns well with the Kissane et al. (2004) operationalization of disheartenment which includes isolation.

Sense of Failure

Due to current accountability policy, teachers are often blamed for lack of student achievement, which in turn increases pressure and stress on the teachers and lowers teacher morale (Jones, 2008). Werts et al. (2013) found that teachers in their study felt that the policy purposefully set them up to fail. One teacher in particular expressed that students and teachers both felt like giving up; expectations are high and no matter how well the students perform it wasn't good enough (Werts et al., 2013).

In the state of Virginia it is recommended that up to 40% of a teacher's evaluation is based upon achievement outcomes as measured by standardized tests when possible, making it

the most weighted category in the recommended evaluation guidelines (VDOE, 2011). For some teachers, the entire 40% of their evaluation could be based upon a single state end of course examination or a single growth measure test. This recommendation, among other messages about the importance of testing data, sends the message to teachers that they are most successful if their students perform well on standardized tests; however, teachers still express that the skills measured on standardized tests do not capture the most important aspects of their job (Solomon et al., 2015; Carlson-Jaquez et al., 2016).

As a result, teachers who may feel successful in meeting the needs of their students in a given year may still be subject to the label of failure on their evaluation due to low pass rates. For example, consider a teacher whose evaluation is based upon a single end of course exam. This teacher may teach students of varying ability, including students who came to her below grade level in all subjects at the beginning of the year. The student may show tremendous growth but still end the year below their current chronological grade level. Conversely, in a school where a growth model is used a teacher who has several high achieving students may start the year with them scoring in the 95th percentile at the beginning of the year. When the children take subsequent exams that should show growth, the child's score has little room to grow on that particular exam because they started the year at such a high level and there are limitations to what the exam can measure.

In both examples the teacher might be labeled as a “failure” despite her efforts to remediate or enrich the child's education. Both examples also illustrate limitations to using a single test score or a single set of test scores to evaluate success or failure of teachers based upon student academic achievement. Due to the weight of the student academic achievement portion of the teacher evaluation, even if teachers try to ignore the messages that they receive about

successful teachers producing high pass rates their evaluation and ultimately their livelihood depend on their evaluations.

Loss of Meaning

Another symptom of demoralization occurs when a person experiences “a breakdown in the assumptive world” and that breakdown results in a loss of meaning (Clarke & Kissane, 2002, p. 736). For teachers, their professional assumptive world includes personal experiences, values and beliefs about the nature of education. For teachers, these personal experiences, values and beliefs are part of their identity even in their pre-service identity as a result of their school experience and their motivation to enter the profession of teaching (Day et al., 2005). The breakdown for some could be the conditions in which they find themselves in light of education reform efforts.

The high-stakes testing movement creates a climate where teachers may be encouraged to: focus their efforts on “bubble kids” (students who are at-risk for failing the test but have potential to pass) while ignoring students who are unlikely to pass the test (Jones, 2008; Jennings & Sohn, 2014); “teach to the test” while diminishing non-tested content (Jones, 2008; Jennings & Sohn, 2014); use scripted plans and that do not allow for individualized instruction in response to student needs and interests (Apple, 2000); and narrow the curriculum to focus on tested content (Nichols & Berliner, 2005; Sabol, 2013; Hargreaves et al., 2013). As presented previously, many of these outcomes are in direct contrast to the components of work that teachers find most satisfying. It is possible then that a teacher’s moral values and beliefs would be contradicted by their experiences as a result of education reforms.

As written and enforced currently, reforms force teachers to take a business approach towards their philosophy of education; that is they are forced by circumstances to increase

efficiency to improve outcomes (Pring, 2001). In doing this teachers may experience a loss of meaning in their work. Many teachers contend that their students are more than just a number (Solomon et al., 2015); however, accountability practices such as value-added models of teacher evaluation hinge on a single set of test scores and complex statistical analyses that are difficult to understand to make high-stakes decisions (Koretz, 2008; Yeh, 2012). Further complicating the issue, value-added models are unreliable measures of evaluation and should not be used to make high stakes decisions yet are used as such in a variety of ways, including the hiring and firing of teachers (Yeh, 2012). This context then creates an environment where, if the teacher rejects the pressure of high stakes testing in an effort to maintain their morality as a teacher, he or she may be in danger of losing their livelihood. Put simply, teachers must choose to comply with mandates with which they do not morally agree or face losing their job.

Horn (2004) argues that reform efforts have taxed teachers so extensively in their day to day responsibilities that they are unable to do much more than streamline their efforts in order to survive. As a result some schools and teachers have turned to the practice of data-driven instruction, a model of which purports to summarize data (or hard numbers) into information (a summary of those numbers into a report of student performance) that is transformed into knowledge (a plan of action to improve student performance on the given assessment) (Mandinach, 2012). While this data-focused approach has been endorsed by the federal government in the American Recovery and Reinvestment Act (2009), in practice it may have served to reinforce the practice of reducing high-stakes decisions to test scores (Darling-Hammond & Rustique-Forrester, 2002). As a result, teachers may experience a loss of meaning in their work because the focus of their work has shifted to numbers as opposed to working with students (Carlson-Jaquez et al., 2016).

Dysphoria

Related to the inadequacy complex is a chronically dysphoric mood (Shrader, 1984), a feeling that the grass is greener on the other side of the fence so to speak. Dysphoria is defined as a “state of unease or generalized dissatisfaction with life” (Oxford Dictionaries, 2015). The dysphoria component of demoralization then can be thought of as teacher job satisfaction, or rather dissatisfaction. Santoro (2011) conceptualizes demoralization as a continual frustration in the pursuit of good work, therefore when measuring dysphoria in education it will be important to capture this unease and dissatisfaction as it relates to teaching. Related to frustration, Santoro (2011) has also found that some teachers are leaving because they no longer find value in their work. Kennedy (2010) has documented what she refers to as reform fatigue, where teachers are closing their classroom doors and acting as they feel is necessary to meet the needs of their students (Kennedy, 2010).

Summary

Teacher morale and job satisfaction are problems that were studied before the test-based accountability era but lacked conceptual clarity until just a few years before the passing of the NCLB legislation. Despite the conceptual clarity that has been established in more modern research, empirically studied interventions to alleviate the effects of low morale, job satisfaction, high teacher stress, burnout and attrition have been largely ineffective. This may be a result of researchers ignoring various environmental factors that may contribute to the problems. As introduced in the conceptual framework, humans have basic needs of autonomy, competence and relatedness. If high-stakes testing policies are thwarting the ability of teachers to fulfill these needs then it is possible that they are having a demoralizing effecting on teachers. Table 2.6

outlines the basic principles of teacher demoralization, morale, and burnout as well as clinical demoralization that inform the development of the scale to measure teacher demoralization.

Demoralization has been cited as the reason for the negative effects of high-stakes accountability policies and the resulting personal and professional value conflicts they have created for some teachers. These effects should be more thoroughly examined, however, before any further conclusions are drawn. This study seeks to develop a universal instrument of teacher demoralization based upon the framework of the clinical demoralization scale. By shifting the focus of measurement onto the emotional symptoms of clinical demoralization as opposed to the causes of low morale or job satisfaction, the researcher aims to account for the individual experience teacher demoralization while simultaneously capturing the universal phenomenon that teachers may be experiencing as a result of test-based accountability policy.

Table 2.6

Teacher Demoralization and related constructs overview

Theory	Definition	Distinguishing Characteristics
Teacher Demoralization	A phenomenon that occurs when policy has a deleterious effect on an individual teacher's motivation and affect (definition revised for the current study).	Teacher demoralization is similar to burnout because teachers experience emotional exhaustion during both; Santoro (2011) and Dunn (2014) argue that demoralization is distinct because teachers in their studies expressed a deep concern for their students, thus lacking the depersonalization component required for burnout.
Teacher Morale	"A state of mind determined by the individual's anticipation of the extent of satisfaction of those needs which s/he perceives as significantly affecting her/his total work situation" (Evans, 1997, p. 832).	Evans (1997) makes a point to differentiate job satisfaction from morale in her conceptualization of teacher morale. She makes this distinction by delineating that teacher morale is future oriented whereas job satisfaction is present oriented.
Teacher Burnout	Burnout is a psychological syndrome that can occur in individuals who experience chronic emotional and interpersonal stress in their work. It is experienced as three dimensions: emotional exhaustion, depersonalization and professional accomplishment (Maslach & Goldberg, 1998; Maslach et al., 2001).	The phenomenon of burnout has been studied in a variety of fields for several decades. The dimensions of emotional exhaustion, depersonalization and professional accomplishment have been confirmed with strong evidence of reliability and validity on the Maslach Burnout Inventory - Educators Survey. Several studies of occupational burnout have provided evidence that role conflict contributes to feelings of emotional exhaustion and depersonalization.
Clinical Demoralization	Demoralization occurs when a person experiences stress as a result of a disconnect between themselves and the environment (de Figueiredo, 1983; de Figueiredo, 2012). This disconnect can be so extreme that it renders the individual unable to cope and helpless, and can lead to a permanent change in their self-esteem and self-efficacy (Shrader, 1984; Clarke & Kissane, 2002).	Clinical demoralization has most often been studied as a comorbid phenomenon, but Gabel (2011; 2012; 2013) has recently applied the construct to workers in the healthcare occupation in the context of healthcare reform. Empirical studies are needed to explore the plausibility of the application of clinical demoralization to occupational psychology. Clinical demoralization has been measured using five subscales: hopelessness; loss of meaning; disheartenment; sense of failure; and dysphoria. While the scale has been validated in one study from Germany (Mehnert et al., 2011), another study conducted in Ireland was not able to find convergent validity between clinical demoralization and depression (Mullane et al., 2009).

Chapter 3: Methodology

This study extends previous work on teacher demoralization (Santoro, 2011; Carlson-Jaquez et al., 2015; Carlson-Jaquez et al., 2016) by making a first attempt to quantify the phenomenon of teacher demoralization. It was the purpose of this study to explore and refine the construct, develop a measure and conduct a principal components analysis in an effort to create a survey instrument with supporting evidence of validity and reliability. The methodology sought to answer the following questions:

1. How can teacher demoralization be operationalized in the context of test-based accountability policies?
2. What constructs should be included in the teacher demoralization instrument?
3. What is the content-related evidence that supports the conceptualization of teacher demoralization?
4. What is the internal structure evidence that supports the conceptualization of teacher demoralization?
5. What is the convergent and discriminant validity evidence that supports the conceptualization of teacher demoralization?

Type of Study

This study sought to develop an instrument to measure teacher demoralization that meets the criteria of quality assessments for psychology according to the Standards for Educational and

Psychological Testing (American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education, 2014). Specifically, scale items were thoughtfully developed based upon existing research literature and carefully vetted by means of cognitive interviews and a pilot study with current K-12 educators in an effort to develop a cohesive set of items with an acceptable reliability of $\alpha \geq .70$ or greater (Cicchetti, 1994). Further, multiple forms of validity evidence were collected during the large scale data collection and presented, including internal, convergent, discriminant and content-related (Cicchetti, 1994).

Procedures and Data Collection

Prior to data collection this research was approved by the Virginia Commonwealth University Institutional Review Board (IRB) and was found to be consistent with the rules and the regulations of the institution.

Cognitive Interviews

The initial iteration of the teacher dispositions scale (see Appendix D) was subject to review by current K-12 teachers by means of individual cognitive interviews. Cognitive interviews provide many advantages in the development of scale development, among them is that the cognitive interview illuminates mental processes that respondents use when they are answering questions. This illumination is important to instrument development because it allows the researcher to detect both covert and overt problems with any items while simultaneously providing information to the researcher on how participants are comprehending the questions, making decisions about how to answer, and the process that participants are going through to complete the survey (Willis, 1994). The cognitive interview also provides the researcher with

valuable data that can both deepen the understanding of teacher demoralization and assure that the phenomenon is captured in the proposed items.

The researcher invited participants to participate in the cognitive interviews based upon recommendation of colleagues and schedule each interview at the convenience of the participants in a location where they feel comfortable speaking freely about their work experiences. Upon completion of the cognitive interview the researcher provided participants with her contact information as well as her dissertation chair and the VCU IRB contact information in the instance that the participant has any further information to add to the study or felt that he or she has been harmed through the participation in the study.

Participants were purposefully recruited for the study to represent all grade levels (elementary, middle and high school) and well as a broad representation of teaching settings (rural, suburban and urban schools). Teachers were asked to read each item and interpret that item as stated in the interview protocol (Appendix E). The remainder of the protocol was followed and answers were recorded for each participant. The researcher took detailed notes as the interview occurred and asked for the teacher's feedback when items were unclear or confusing. Interviews lasted approximately one hour each and were recorded on the researcher's laptop and stored on a flash drive in a secure location for the purpose of review if necessary. After each interview session the researcher made adjustments to the survey instrument based upon the teacher's feedback in an iterative fashion before conducting subsequent interviews, with the exception of the first two interviews due to their relative temporal proximity. At the conclusion of the cognitive interviews, recordings were transcribed for the purpose of analysis. It was at this time that all potentially identifying information was removed.

Pilot Study

The next step in the instrument development process was to pilot the instrument with changes incorporated from the cognitive interviews (Appendix F). This data collection served multiple purposes: to check the instrument for any potential biases, to check the internal reliability of the instrument, and to make any necessary changes to the process or instrument before the final form of the instrument was distributed for data collection (Kelly & Denney, 1969). The instrument was sent to 50 teachers who are colleagues of the researcher but are not familiar with the details of the study. They were asked to complete the teacher disposition scale and demographic items only. After the pilot data were checked for bias and internal reliability, final adjustments were made to the scale before launching the full data collection.

Data for the pilot study and the large scale data collection were collected using the online survey tool REDCap. REDCap was chosen because of the level of security that it provides in data collection and storage when data is collected via the internet. For the pilot study the researcher utilized a purposeful sampling method to gather preliminary data on the scale. The researcher reached out to colleagues in her professional network who were not familiar with her research and invited them to participate in the pilot study. If agreeable, she sent them the pilot study email protocol that included the survey link (see Appendix G). The pilot version of the teacher dispositions scale included a referent question after each item that asked teachers to choose which level or levels of policy they were considering when they answered the question. The referent question was “The policy which I used to answer the previous question was (check all that apply)” and the answer choices were: Federal, State, and School or School Division.

Full Data Collection

For the full data collection the researcher sent the email protocol to leaders of participating professional organizations. The email protocol included a summary of the purposes of the study, a statement regarding IRB approval, participant protection and consent as well as a link for online completion of the survey. The email was then forwarded by leaders of the professional organizations to members, inviting them to participate in the study. Data collection remained open for two weeks in an effort to ensure that a sufficient number of complete responses were collected. After approximately 200 responses were collected the order in which the surveys were administered was changed in an effort to account for instrument order effects. It was also at this time that the MBI-ES was removed from the set of surveys due to the cost to administer the surveys.

Several instruments were included in the full data collection in an effort to collect as much evidence of convergent and discriminant validity as possible. In addition to the most current iteration of the teacher disposition scale items (see Appendix H), items from the TSES (see Appendix I), the MBI-ES (see Appendix A), and the Basic Need Satisfaction at Work (BNSW) scale (see Appendix J) were collected. Though unique identifiers were not collected (e.g. teacher name, name of school), demographics such as grade level position (elementary, middle or high school), high-stakes tested content teach (yes/no), and whether a teacher teaches at a Title I school (a proxy for socioeconomic status of school, answered yes/no) will be collected in an effort to screen for potential self-section sampling bias as well as provide a rich data set for potential future analysis (Appendix K). Participants had the option to receive a unique code if they needed to stop taking the survey and wanted to return to finish it at a later time. In an effort to assure that only educators completed the survey, the link was only be

distributed to educators via direct email and e-newsletters that are sent to educators directly. In other words, the survey link will not be made available to the general public via the web.

Population and Sampling

Cognitive Interviews

Purposeful sampling was employed for the cognitive interview process. Colleagues of the researcher were asked to refer potential participants to the study based upon schools in which they teach. Targeted settings were rural, suburban and urban settings at the elementary, middle and high school levels. Cognitive interviews continued until the scale was properly vetted such that participants had little to no feedback, which occurred after six teachers were interviewed, an acceptable minimum for cognitive interviewing (Miller, Chepp, Willson, & Padilla, 2014). Teachers interviewed taught various subjects and the group experience ranged from 2 to 20+ years. Elementary educators were both general educators, whereas the middle school participants taught special education and math, and the high school participants taught social studies and special education. Grade levels in which the participants teach, as well as their school settings are illustrated in Figure 3.1. The numbers 1-6 indicate the order in which the interviews were conducted and the feedback was incorporated into the survey instrument.

	Rural	Suburban	Urban
Elementary		6	2
Middle School	5	1	
High School	3		4

Figure 3.1 Cognitive Interview Participants: Grade Level, School Setting and Interview Order

Pilot Study

A purposeful sampling method was also used in an attempt to account for differences in a variety of teaching contexts (McMillan, 2008). The researcher invited 50 colleagues from a variety of settings (rural, suburban, and urban as well as elementary, middle and high) to

complete the pilot instrument in an effort to account for differences in teaching contexts. Thirty-four of the fifty teachers invited responded to the survey. The purpose of the pilot study was to check the scale for reliability and check individual items for potential bias; therefore, the lower threshold for the pilot study was 25 participants (Hertzog, 2008).

Participants for the pilot study included 34 teachers who completed the teacher disposition scale in full. Of the 34, most identified as female (74%) and met the definition of highly qualified (97%) as outlined in the No Child Left Behind Act (U.S. Department of Education, 2002). Despite an attempt at purposeful sampling over half of the teachers who responded taught in a suburban setting (53%); 38% taught in a rural setting and only 12% taught in an urban setting. Similarly, most respondents were middle school teachers (53%), followed by elementary teachers (29%) and high school teachers (12%). This response rate may be indicative of a self-selection bias in the teachers and will be considered during analysis of the full data set.

Further, over half of the responding teachers held a masters degree (53%) whereas the remainder held a bachelors degree (44%) or a Ph.D. (3%). Teachers also indicated that slightly less than half taught in high-stakes tested content areas (45%) and 53% were not in a Title I school, a statistic that is typically indicative of a low socioeconomic population within the school. Finally, most teachers taught in schools that were fully accredited (58%), whereas only 6% indicated that their school was not accredited at all. Others indicated various levels of accreditation with warning (30%) or not knowing the accreditation status of their school (6%).

Full Data Collection

Teachers who belong to professional organizations in a South Eastern state were invited to participate in the large scale data collection stage of this study. Utilizing a partnership with professional organizations allowed a method of sampling that encompassed a wide variety of

teaching environments and personal teacher backgrounds. The participating professional organization currently has a membership of over 50,000 teachers and school support professionals.

Teachers included in the study were from a wide range of backgrounds, content areas and levels of experiences. The population was similar to the pilot study in gender, experience, and school division type, as well as Title I and accreditation status of the schools where the teachers were employed. A breakdown of specific percentages of each category can be seen in Table 3.1. Of particular note, the distribution of experience of the teachers was similar for the pilot population and the full data collection, with the majority of respondents having twenty or more years of teaching experience. Also notable is that the majority of respondents (51%) taught in suburban settings; however, the percentage of urban teachers who responded to the full data collection invitation were slightly higher (17%) than in the pilot study (12%).

Differing from the pilot study population were the highest level of degree of the teacher respondents and the grade levels in which they teach. Most teachers who contributed to the full data collection population held masters degrees (70%). The distribution of teachers that contributed to the full data set were also more evenly distributed in the grade level in which they taught than they were when compared to the pilot study population.

Table 3.1
Participant Demographic Percentages

		Pilot Population	Full Data Collection Population
Gender	Male	26	19
	Female	74	81
Experience*	>5	11	11
	Five - 9	20	14
	Ten - 14	14	21
	Fifteen- 19	23	19
	20+	29	34
School Division*	Rural	38	33
	Suburban	53	51
	Urban	12	17
Grade Level*	Elementary	29	35
	Middle	53	24
	High	12	23
Highest Degree	Bachelors	44	27
	Masters	53	70
	PhD	3	3
High-Stakes Content	Yes	45	62
	No	55	38
Title I	Yes	47	43
	No	53	49
	Unsure		8
Accredited*	Yes	58	66
	1st year		10
	2nd year	30	7
	3rd year		7
	Not Acc.	6	2
	Unsure		8
Highly Qualified	Yes	97	95
	No	3	5

*Percentages may not sum to 100% because of rounding or missing data.

The best way to determine sample size for factor analysis is high communalities

(MacCallum et al., 1999); however, there is no way to know the communalities until after data

collection is complete and data analysis begins; therefore, communalities cannot be the sole factor in determining sample size. What is known for this study as a result of design is that there will be a small number of factors (maximum of five) and just a few indicators for each factor (predicted maximum of four per factor); therefore, the target sample size was 300 participants (MacCallum et al., 1999).

Although instructional staff in non-tested areas (e.g. physical education and music) may not be evaluated by student performance on high-stakes and other test-based accountability measures, they may be subject to ramifications of school accountability failures (Sabol, 2013; Robinson, 2014). These consequences can be seen in evidence of marginalization of their content when it comes to allotted class time and other resources (Sabol, 2013; Robinson, 2014). For example, a music teacher who is part of a faculty of a school that is not meeting accountability mandates for Algebra may be asked to teach Algebra for 15 minutes a day in lieu of the full class period being used for music instruction. Teachers in non-tested subjects may also have testing data tied to their evaluation (Robinson, 2014). For this reason all instructional staff (teachers) were invited to participate in the study, regardless of whether or not they teach a subject that is directly affected by test-based accountability policy.

Instructional support staff and other school staff who do not hold professional certifications were excluded. The rationale for exclusion is that although these staff members may also feel job related pressures as a result of test-based accountability policies, the current study focuses on K-12 teachers. The inclusion of support staff could potentially conflate results of the study at this time, but should be considered in future work.

Data Analysis

Data analysis occurred as each stage of the study was complete. This method was chosen so that the researcher could make adjustments to the Teacher Dispositions Scale before the next round of data collection occurred. It was the goal of the researcher to refine the scale at each level of data collection per instrument development procedures so that the instrument would be more developed when large scale data collection occurred.

Cognitive Interviews

The first level of analysis of the cognitive interviews occurred while they were being conducted. As teachers explained their thought process or confusion regarding individual items the researcher made adjustments to the survey. During the second level of analysis, the researcher coded transcribed interviews in an effort to both refining survey questions for clarity and understanding, but also to confirm that the underlying theory of teacher demoralization was represented in the survey. Based upon the work of previously conducted qualitative studies on teacher demoralization (Santoro, 2011, 2013; Carlson-Jaquez et al., 2015; Carlson-Jaquez et al., 2016), a hypothesis coding method was utilized. Hypothesis coding is a deductive method of qualitative analysis by which codes are predetermined by theory (Saldaña, 2009). Codes for these analyses were predetermined based upon the theoretical frameworks of self-determination theory, teacher burnout, and teacher demoralization within the context of policy implementation and can be found in Table 3.2. The data were purposefully not examined for specific symptoms of clinical demoralization because the items were written using the clinical demoralization language, this would provide cuing that could result invalid results. A second level coding method called theoretical coding (Saldaña, 2009) was then used to reconstruct the theory of teacher demoralization based up on the overarching themes of the interviews.

Table 3.2
Predetermined codes for hypothesis coding

Code	Definition
Policy Agreement	Statement about the extent to which the teacher agrees with established policies and the way that they are implemented.
Moral Rewards	Statements about work that teacher finds rewarding.
Emotional Exhaustion	Statements about the emotions and resulting fatigue/stress that teachers feel.
Depersonalization	Statements that indicate that the teacher does not care about students.
Personal Accomplishment	Statements that indicate the extent to which teachers feel that they are effective in the classroom.
Autonomy	Statements about the amount of control the teacher has over the way to complete the work that is asked of them.
Competence	Statements about feelings of competence in relation to work.
Relatedness	Statements regarding work relationships (both student-teacher and colleague).

Pilot Study

Data were first checked for the absence of outliers, linearity, and missing data based upon demographic factors. Data were then examined for reliability of subscales and the overall reliability of the complete survey. Changes were made to the survey based upon reliability results. Further changes were made to the survey to improve the overall experience for the participant, including lightening the cognitive load by limiting each subscale to four questions based upon reliability analysis as well as changing the valence of some items from negative to positive. Finally, policy referent questions were examined in an effort to illuminate patterns in which policy teachers were referring to as they answer each question.

Full Data Collection

Data were first checked to assure that it meets the assumptions of a principal components analysis, including: absence of outliers, linearity, normality and homoscedasticity (Tabachnick &

Fidell, 2013). A principal components analysis with varimax rotation was performed using SPSS. Principal components analysis is a recommended first step in factor analysis as a way to determine the maximum number and nature of the factors (Tabachnick & Fidell, 2013). Varimax rotation was used to maximize the variance among factor loadings for ease of result interpretation (Tabachnick & Fidell, 2013). Criteria for retaining factors included: eigenvalues greater than one; a scree plot; and total variance explained (Tabachnick & Fidell, 2013). Factor loadings were examined and a coefficient determination of .55 was applied to items. The final factor solution considered both statistical results and a theoretical rationale. Because an acceptable factor solution was found, a Multitrait-Multimethod Matrix (MTMM) (Campbell & Fiske, 1959) was constructed in an effort to provide statistical evidence of construct validity. The MTMM is an accepted way to present concurrent evidence based on relationships to other variables (McMillan, 2008).

Figure 3.2 is a sample illustration of the MTMM matrix that was be constructed as part of the data analysis process. The “R” diagonal represents evidence of reliability. Hypothesized statistical evidence of divergent validity is represented by a (D) and hypothesized statistical evidence of convergent validity is represented by a (C). Theorized evidence of convergent and discriminant validity are based upon the literature review and highlighted for ease of interpretation. For example, the needs satisfaction items and the emotional exhaustion subscale of the burnout scale should be moderately correlated to the teacher demoralization items (.5 or higher) and therefor provide evidence of convergent validity. In contrast, the self-efficacy scale as written should not be correlated to the teacher demoralization scale because it does not account for test-based accountability context and therefore should provide evidence of discriminant evidence (not statistically significant or .29 or lower). Final results will be

dependent on the results of actual correlations. It should be noted that the teacher demoralization scale is represented in the table as a three factor solution; however, this is simply for illustrative purposes and may need to be adjusted after the factor solution is found.

Delimitations

The data collected and resulting instrument will be relevant to the population sample with which it was developed and so care should be taken that this study and the implications of its findings are delimited to this population. This population will be K-12 teachers in a South Eastern state in the United States who are functioning under the No Child Left Behind Act (U.S. Department of Education, 2002). Before the instrument is used to measure demoralization with another population of teachers within another context care should be taken to collect evidence of reliability and validity evidence to assure that conclusions and implications are empirically sound.

	Teacher Demoralization 1 (Helplessness)	Teacher Demoralization 2 (Disheartenment)	Teacher Demoralization 3 (Failure)	Self-Efficacy Instructional Strategies	Self-Efficacy Classroom Management	Self-Efficacy Student Engagement	Burnout Emotional Exhaustion	Burnout Depersonalization	Burnout Professional Accomplishment	Need Satisfaction Autonomy	Need Satisfaction Relatedness	Need Satisfaction Competence
Teacher Demoralization 1 (Helplessness)	R											
Teacher Demoralization 2 (Disheartenment)		R										
Teacher Demoralization 3 (Failure)			R									
Self-Efficacy Instructional Strategies	D	D	D	R								
Self-Efficacy Classroom Management	D	D	D		R							
Self-Efficacy Student Engagement	D	D	D			R						
Burnout Emotional Exhaustion	C	C	C				R					
Burnout Depersonalization	D	D	D					R				
Burnout Professional Accomplishment									R			
Need Satisfaction Autonomy	C									R		
Need Satisfaction Relatedness		C									R	
Need Satisfaction Competence			C									R

Figure 3.2 MTMM Matrix for Teacher Demoralization Scale

Chapter 4: Results

Results are presented as the data was collected, with the cognitive interview data being evaluated first, then the pilot data, then the full data collection. Data were analyzed at each stage as it was collected so that adjustments could be made to the developing survey instrument at each step. The purpose of this method was to apply the findings of the prior steps to the current iteration of the survey instrument. Resulting changes to the instrument at each step are documented throughout this section.

Cognitive Interviews

Cognitive interviews served a dual purpose in this study. The first purpose was to gain practitioner feedback on the scale items in an effort to assure that teachers were interpreting items consistently. Adjustments to the survey instrument based upon teacher feedback and when the adjustments occurred are outlined in Appendix L. The transcribed interviews with teachers were then analyzed for content in an effort to provide evidence that the questions elicited the theory as it was conceptualized by the researcher. A secondary purpose was to build upon the theoretical construct of teacher demoralization. Although all of the hypothesized codes were used in the analysis, the only strong theme that emerged from this small sample was various disagreements with some policy that resulted in negative emotions for teacher.

Even though interviewed teachers responses on the quantitative TDS varied greatly, all of the cognitive interview participants expressed a disagreement with policy, at least to some

extent. Some teachers disagreed with policies because they felt that teacher evaluation policies were unfair to both the teacher and the student. The teachers noted the power of test-based accountability policies in shaping the professional lives of teachers and the resulting negative emotions towards the policies. The rural high school teacher felt that the teacher evaluation policies are unfair because the testing expectations don't match a realistic expectation of learning for her students:

These are the policies that I have to account for my yearly evaluation and there are just some of them that I can't meet for the SOL tests [as a special educator]. So I feel that that is unfair. *Rural High School Teacher*

The same sentiment of disagreement as a result of mismatched expectations of accountability versus what accountability tests measure was echoed by the urban elementary school teacher:

It's not about the kids anymore. Everybody's child is unique and everybody's child is different, and in fact they throw in that differentiation word but when it comes to the test, is there a test for this learner? Is there a test for that learner? No, because you don't want more work. It's like nobody wants to go the extra mile for the kids, but it's really sad... *Urban Elementary School Teacher*

Some of the teachers also expressed that they feel the lack of acknowledgement of growth and aspects beyond academics in some accountability tests is unfair, and portrays the teachers who value these aspects as a failures:

I think that there's a lot of things like the <state accountability tests> that just come, like the test rates, and I don't think that's necessarily fair...I'm not just teaching kids English, I'm teaching them how to be a good person, and there's a lot of things that I teach that aren't necessarily measures on standardized tests so it makes me sad...maybe I have a student that's a low reader but they've made a really great gain, just because they failed their <state accountability test> means that we didn't hit the mark and at the same time that defines us as teachers. *Rural Middle School Teacher*

A child may be behind in reading and they will always be viewed as behind and you as a teacher will always be viewed as bad for not magically making that child [succeed] and closing the gap. But what we're not celebrating is the amazing progress that that child has made. *Suburban Elementary School Teacher*

For most of the teachers interviewed, there was an expression of negative emotion as a result of their disagreement with policy, primarily because the policy does not acknowledge the aspects of their careers that they value. The urban high school teacher expressed strong negative emotions as a result of this disagreement:

I do everything in spite of the policies, and maybe that's because I'm not aware of positive ones that I really feel attached to, or maybe it's because of my school that doesn't exist as much as it might in other schools, but um, I feel like it's pretty easy for me to say that the proper attention that I want to give to my students is directly at odds with my teaching. What an educator is to them [policy makers] is someone who can gain the results that they are looking for, to me that has nothing to do with being an educator, being an educator means understanding the unique position of your students, each one of them, and being able to accommodate them with class, giving them autonomy, providing them with structure and space to operate in where they're free and motivated hopefully. Encouraged to be motivated to explore their interests, my definition of an educator I feel like is very different from what the system is saying. *Urban High School Teacher*

Most of the time I feel like educational policies that I did not consider the weight of when I entered into the profession make me do things that are bad. Not really bad to people, but limiting the growth of the young human beings, whose families are paying to have them educated with taxes, with money I'm taking. So um, it makes me feel, it does make me feel guilty and I'm constantly trying to combat it. *Urban High School Teacher*

In these quotes, the urban high school teacher discusses his conceptualization of teaching, how it is directly at odds with policy, and the emotions that he feels as a result.

Pilot Study

Initially, the database was checked for patterns of missing data. Based on this analysis there were no major concerns for the pilot data. Each subscale was then analyzed for reliability. As a result of this analysis, the researcher removed several items. Three items were removed from the scale in an effort to improve the reliability of each subscale. Those items are Helplessness number four and Sense of Failure numbers four and five (reference Appendix F for pilot scale before stated items were removed). The researcher then removed items for the purpose of making each subscale a total of four items. Items removed were Dysphoria number 4;

Disheartenment numbers 3 and 6; and Loss of Meaning number 2. This was done out of consideration for participants in an effort to reduce cognitive load when completing the survey and had minimal impact on the reliability of each subscale. Initial and subsequent reliabilities for each subscale and the overall scale can be found in **Error! Reference source not found..**

Table 4.1
Pilot Study Reliability Results Before and After Revisions

Scale Name	Initial <i>n</i> of Items	Initial Alpha (α)	Resulting <i>n</i> of Items	Alpha (α) After Removal of Items
Dysphoria	5	0.86	4	0.85
Disheartenment	6	0.77	4	0.78
Helplessness	5	0.62	4	0.66
Sense of Failure	6	0.64	4	0.79
Loss of Meaning	5	0.78	4	0.76
Combined Scale	27	0.88	20	0.86

Referent data were also collected during the pilot study after each question as a way to determine which levels of policies were most salient for teachers when they completed the survey. Table 4.2 illustrates percentages of policy referents, as reported by participants, broken down per item as well as compiled overall. Highest percentages of referents were highlighted to illuminate a pattern; however, it should be noted that, because teachers were allowed to use their own experience and perspective to answer the questions, the referents were spread across all three levels of policy to some extent for each question. These data show that, although the highest percentage of policy referents were to state policy, teachers also were considering federal and local policies when they completed the survey.

Though these data were helpful in determining how teacher participants were approaching the survey, referent questions after each item were removed before launching full data collection out of consideration of participant's time and cognitive load because it may be too cumbersome for participants to answer in the context of the larger study. In lieu of asking for

the policy referent after each question, a single matrix that asked teachers about the frequency of referents to levels of policy was added to survey for full data collection.

Table 4.2
Percentage of Policy Referents for Select Items

Item	Federal	State	Local
Helplessness 1	49	74	74
Helplessness 2	69	86	54
Helplessness 3	51	63	89
Helplessness 5	74	74	63
Disheartenment 1	69	86	66
Disheartenment 4	80	77	49
Disheartenment 5	57	71	77
Loss of Meaning 1	69	80	63
Loss of Meaning 3	63	69	71
Loss of Meaning 4	63	80	63
Dysphoria 1	77	83	63
Dysphoria 2	66	74	69
Dysphoria 3	51	66	71
Dysphoria 5	51	71	63
Overall Referent Percentages	63	75	67

Full Data Collection

The full data set was analyzed in three steps. First the data set was cleaned and checked for missing data. The TDS was also checked at this time to make sure that the data met the assumptions of factor analysis. In the second step, the TDS was subject to a principal components analysis and a solution was reached. The third and final step examined all of the survey instruments in an attempt to provide evidence of convergent and discriminant validity.

Data Cleaning

The TDS data were first examined for patterns in overall means, standard deviations, and frequencies. These findings are represented in Table 4.3 and Table 4.4. An assessment of the data suggested that skewness may be a concern. Though the data are normally distributed in some instances, some items were found to be significantly skewed. Notably, most items with a

positive valence appear to be significantly positively skewed. Despite this finding, no linear transformations were performed. This is because the sample size was large enough ($n=430$) to mitigate the level of skewness in the data. Transformation is not always necessary, and often looked upon negatively (Tabachnick & Fidell, 2013). Finally, subscale scores were calculated for the MBI, TSES and the BNSW scales.

Descriptive Statistics: TDS

Table 4.3 illustrates the means and standard deviations for each item in the TDS. Notably, there are three items where the mean is below two, which is interpreted as rarely on the five point scale. These items are “Current policies enable me to change my working conditions for the better” ($M = 1.95, SD = .72$); “I feel that current policies create a calm work environment” ($M = 1.82, SD = .74$); and “I feel good about how my profession is treated by policy makers” ($M = 1.69, SD = .70$). These three item means describe a teacher population that has an overall negative disposition towards policy.

Conversely, there are four items in which the means are over 3.5, which can be interpreted as approaching four, “most of the time,” on the five point scale. These items include “I feel disheartened by how education policies define my profession” ($M = 3.83, SD = .82$); “Under current policies, my role as an educator has been lost” ($M = 3.53, SD = .84$); “I am frustrated by policies with which I must comply” ($M = 3.67, SD = .79$); and “Administrators view me as a successful teacher only if my students meet the requirements of accountability tests” ($M = 3.60, SD = 1.04$). These four item means describe a teacher population that are experiencing symptoms of clinical demoralization, including: disheartenment; loss of meaning; dysphoria in the form of frustration; and a sense of failure.

Table 4.3

Mean and Standard Deviations for Teacher Dispositions Scale Items

	<i>N</i>	Mean	Std. Deviation
I feel that policy directives are improving our education system.	465	2.38	0.67
Policy initiatives allow me to have control over my work.	464	2.08	0.68
I feel disheartened by how education policies define my profession.	465	3.83	0.82
Under current policies, my role as an educator has been lost.	465	3.53	0.84
I am frustrated by policies with which I must comply.	466	3.67	0.79
High-stakes accountability empowers me to improve instruction for my students.	463	2.00	0.88
I believe that policy expectations make me a better teacher.	465	2.11	0.80
Current policies enable me to change my working conditions for the better.	466	1.95	0.72
I feel good about how my profession is treated by policy makers.	466	1.69	0.70
I agree with the way policies direct me to teach.	465	2.00	0.70
I feel that current policies create a calm work environment.	465	1.82	0.74
Education policies trust me to act as a professional.	463	1.99	0.96
Under current policies, I am unable to do my job in the way that I was trained.	464	3.30	1.05
My professional responsibilities, as outlined by policy, are in agreement with my personal philosophy of teaching.	464	2.31	0.75
I am happy about most things in my profession.	453	2.90	0.76
Parents view me as a successful teacher only if my students meet the requirements of accountability tests.	450	2.96	0.99
My colleagues view me as a successful teacher only if my students meet the requirements of accountability tests.	448	2.73	1.04
Administrators view me as a successful teacher only if my students meet the requirements of accountability tests.	448	3.60	1.04
I feel encouraged by how my profession is viewed in the community in which I work.	451	2.52	0.92
If my students fail accountability tests, I feel as if I have failed as a teacher.	451	3.09	1.13

*Scale: 1 – Never; 2 – Rarely; 3 – Sometimes; 4 – Most of the time; 5 - Always

Table 4.4
Frequency Counts for TDS Scale

	Frequency				
	Never	Rarely	Sometimes	Most of the time	Always
I feel that policy directives are improving our education system.	34	235	183	12	1
Policy initiatives allow me to have control over my work.*	80	276	100	7	1
I feel disheartened by how education policies define my profession.*	5	28	89	263	80
Under current policies, my role as an educator has been lost.	4	35	194	173	59
I am frustrated by policies with which I must comply.	2	19	177	199	69
High-stakes accountability empowers me to improve instruction for my students.*	140	216	82	18	7
I believe that policy expectations make me a better teacher.*	100	234	112	16	3
Current policies enable me to change my working conditions for the better.*	118	263	73	12	0
I feel good about how my profession is treated by policy makers.*	199	221	39	6	1
I agree with the way policies direct me to teach.*	106	262	90	6	1
I feel that current policies create a calm work environment.*	160	242	52	9	2
Education policies trust me to act as a professional.*	157	201	68	26	11
Under current policies, I am unable to do my job in the way that I was trained.	27	71	155	157	54
My professional responsibilities, as outlined by policy, are in agreement with my personal philosophy of teaching.	59	222	163	19	1
I am happy about most things in my profession.	10	124	221	96	2
Parents view me as a successful teacher only if my students meet the requirements of accountability tests.	30	117	169	111	23
My colleagues view me as a successful teacher only if my students meet the requirements of accountability tests.	52	143	143	92	18
Administrators view me as a successful teacher only if my students meet the requirements of accountability tests.*	22	38	123	179	86
I feel encouraged by how my profession is viewed in the community in which I work.	57	173	155	60	6
If my students fail accountability tests, I feel as if I have failed as a teacher.	49	70	175	106	51

*Skewed item ($p < .05$).

Referent Question

Similar to the pilot study, teachers were again asked to indicate the frequency with which they referred to each level of policy while answering the questions. For the full data collection “local” was divided into “school division” and “school” in an attempt to increase the sensitivity of the measure and reduce error. *Figure 4.1* shows the frequency by which teachers referred to each level of policy for this data collection. As indicated below, state and school division policies are the referent for teachers more frequently than school and federal policies for this population.

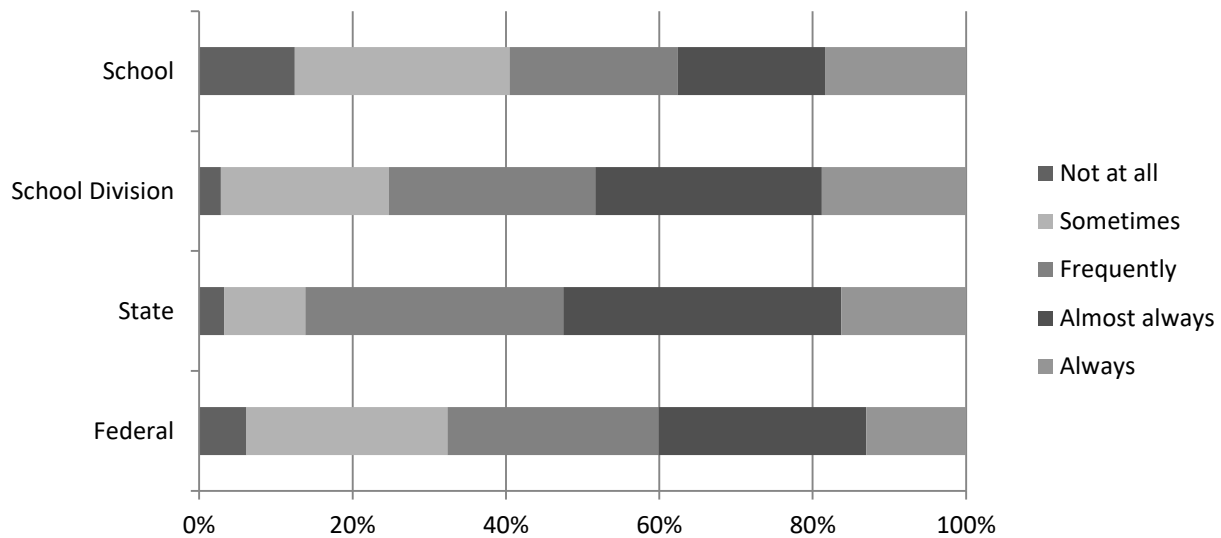


Figure 4.1 Frequency of policy reference, full data collection

Principal Components Analysis

Using the TDS ($n=430$), a principal components analysis with Varimax rotation was performed in SPSS 22. Varimax rotation produces a solution with orthogonal factors in an effort to maximize the variance in the solution and simplify the factors (Tabachnick & Fidell, 2013). An examination of the inter-item correlation matrix (Table 4.5) revealed that items which asked teacher participants about being viewed as a successful teacher in relation to accountability tests were not related to other items in the scale. These item numbers are highlighted in gray. Though

other items appeared to potentially be problematic, the failure items appeared to be consistently so. To further confirm the lack of relationship among the failure items and the remaining factors, subscales resulting from a preliminary three factor solution were analyzed to determine their relationship. Success items were found to be weakly associated with one of the factors, $r(444) = .17, p < .05$, and not significantly related to the other $r(443) = -.04, p = n.s.$. For this reason the failure items were dropped from the analysis.

Table 4.5
Inter-Item Correlation Matrix

Item # (See Appendix F)	1	2	3	4	5	6	11	12	13	14	15	17	18	20	21	23	24	25	26	27	
1	1.000																				
2	.480	1.000																			
3	-.337	-.319	1.000																		
4	-.386	-.363	.558	1.000																	
5	-.443	-.374	.560	.653	1.000																
6	.367	.296	-.205	-.146	-.189	1.000															
11	.509	.312	-.209	-.254	-.327	.451	1.000														
12	.467	.391	-.223	-.233	-.327	.393	.551	1.000													
13	.464	.376	-.327	-.300	-.355	.355	.391	.527	1.000												
14	.544	.381	-.305	-.390	-.380	.366	.499	.443	.526	1.000											
15	.401	.315	-.306	-.306	-.272	.364	.328	.425	.469	.407	1.000										
17	.372	.422	-.251	-.260	-.301	.422	.359	.422	.483	.437	.438	1.000									
18	-.149	-.167	.196	.283	.280	-.169	-.071	-.100	-.123	-.142	-.071	-.149	1.000								
20	.529	.365	-.336	-.430	-.433	.332	.373	.430	.458	.530	.406	.418	-.147	1.000							
21	.363	.343	-.330	-.379	-.389	.309	.249	.366	.335	.310	.271	.256	-.234	.440	1.000						
23	-.001	-.050	.028	.165	.100	.055	.075	-.019	.009	.023	.027	.038	.089	.050	-.056	1.000					
24	.011	-.011	.028	.141	.073	.085	.115	.028	-.043	-.023	.028	.034	.132	.040	-.038	.510	1.000				
25	-.117	-.162	.082	.164	.180	-.120	-.066	-.114	-.071	-.099	-.117	-.164	.126	-.112	-.229	.386	.410	1.000			
26	.211	.191	-.177	-.178	-.178	.249	.194	.348	.357	.219	.268	.216	-.120	.282	.398	-.105	-.145	-.161	1.000		
27	-.068	-.008	.009	.092	.115	.051	.026	.025	.000	-.004	-.020	.012	.128	-.013	-.016	.261	.276	.163	-.063	1.000	

The value of KMO measure of the sampling adequacy of the correlation matrix without the failure items was .852, which is strong. Criteria for retaining factors included: (1) eigenvalues greater than one, (2) a scree plot (see Figure 4.2), and (3) total variance explained. Items were systematically removed, one at a time, based on an evaluation of factor loadings, including removal of any items that were cross-loaded evenly onto two or more factors or items that had low coefficients of determination (below .55), until an acceptable solution was reached. According to all three criteria, two factors were retained which explained 65.6% of the variance in the correlation matrix for these data.

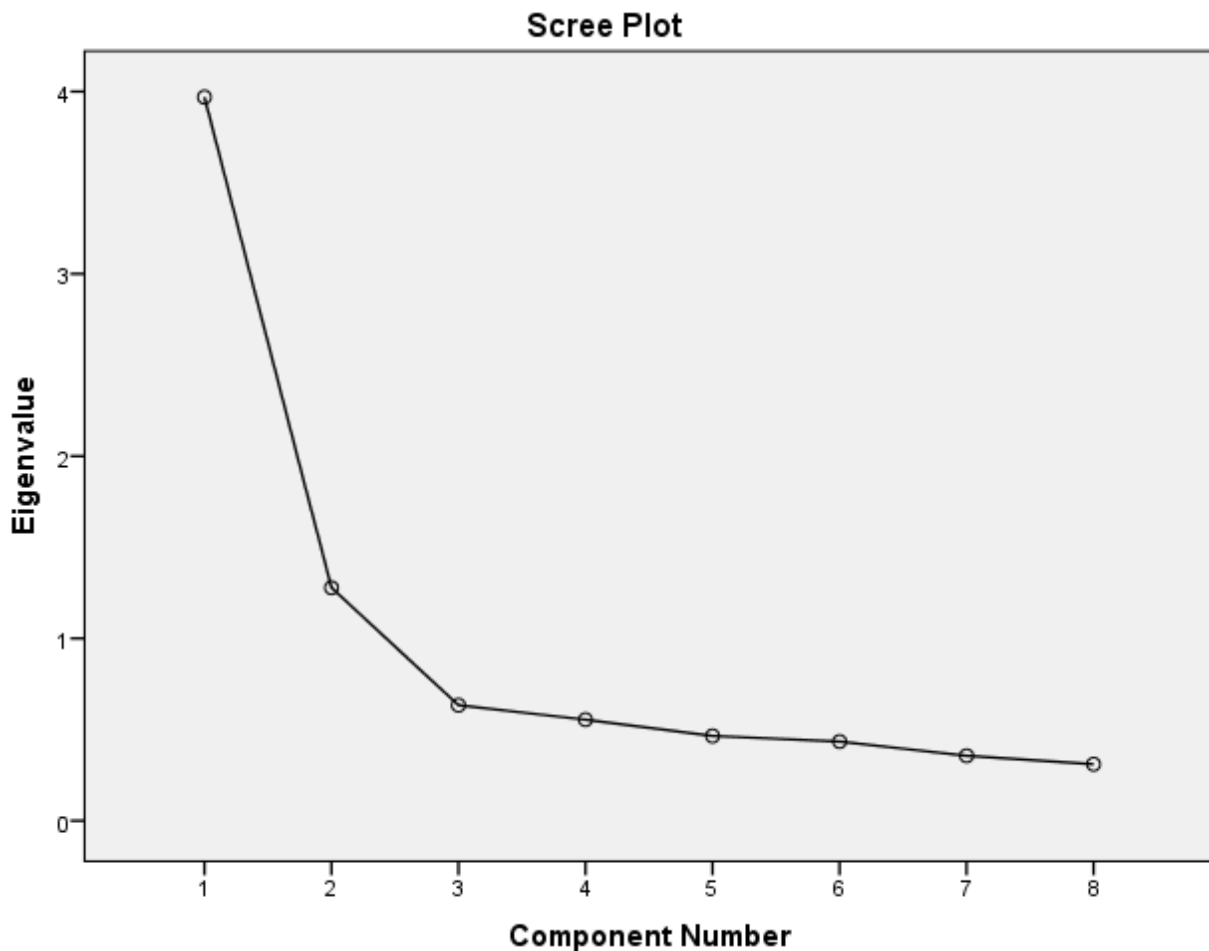


Figure 4.2 Scree Plot

As summarized in Table 4.6 (below), communalities, which represent the proportion of the variance in a scale item explained by a factor, suggest that the two-factor model explained more than 50% of the variance of all eight remaining scales items. The two factors were examined in relation to theory and named appropriately. The first factor was named “Disposition.” Items in the disposition factor measure the degree and valence of the teacher’s general mentality towards the interactions between policy and the profession. The second factor was named “Professional Demoralization.” These items indicate the extent of the teacher's feelings of demoralization (specifically, the symptoms of disheartenment, dysphoria, and loss of meaning).

Table 4.6
Rotated Factor Matrix

	Component		Communality
	1	2	
Current policies enable me to change my working conditions for the better.	.805	-.078	.604
I believe that policy expectations make me a better teacher.	.781	-.117	.654
I agree with the way policies direct me to teach.	.724	-.295	.624
I feel good about how my profession is treated by policy makers.	.711	-.248	.612
I feel that policy directives are improving our education system.	.696	-.345	.568
Under current policies, my role as an educator has been lost.	-.189	.848	.755
I feel disheartened by how education policies define my profession.	-.147	.814	.683
I am frustrated by policies with which I must comply.	-.305	.809	.747
Eigenvalues	3.97	1.28	

Internal Reliability Evidence

The TSES, NWS and MBI-ES were checked for acceptable internal reliability within the current data set. Figure 4.2 is the construction of the MTMM as described in chapter 3: the diagonal boxes contain subscale reliabilities for all of the instruments used in data collection. Reliabilities for the TDS subscales were within the acceptable range for both the Dispositions subscale ($\alpha = .83$) and the Demoralization subscale ($\alpha = .82$). For this population, the reliability of the full scale was found to have an internal reliability of $\alpha = .85$; however, it is important to note that reverse coding of the items in the first factor is required if the scale is to be analyzed as a sum score. While almost all of the subscales have acceptable internal reliability, the competence subscale of the NWS failed to achieve a satisfactory level. For this reason the competence subscale will be removed from future analysis.

Convergent Validity Evidence

Bivariate correlations were computed and entered into the remaining boxes of the MTMM (Figure 4.3). Statistically significant ($p < .05$) correlation coefficients are indicated in bold, predicted evidence of convergent validity are shaded in medium gray and predicted evidence of discriminant validity are shaded in light gray. The current study found that there is a significant moderate relationship among the Demoralization subscale in the TDS and the MBI-ES subscale of Emotional Exhaustion, $r(211) = .38, p < .05$ and the NWS-Autonomy subscale $r(427) = -.37, p < .05$. Note that the other subscales of the TDS were also statistically significant, but are considered weak as they fall below the .30 threshold that is typically applied in education research. This finding aligns with the hypothesis made prior to analysis; however, these findings cannot be considered as evidence of convergent validity because the relationship among the subscales does not suggest a strong relationship (.5 or higher).

	Teacher Dispositions (Dispositions)	Teacher Dispositions (Demoralization)	Self-Efficacy Instructional Strategies	Self-Efficacy Classroom Management	Self-Efficacy Student Engagement	Burnout Emotional Exhaustion	Burnout Depersonalization	Burnout Professional Accomplishment	Need Satisfaction Autonomy	Need Satisfaction Competence	Need Satisfaction Relatedness
Teacher Dispositions (Dispositions)	0.83										
Teacher Dispositions (Demoralization)	-0.50	0.82									
Burnout Emotional Exhaustion	-0.28	0.38	0.81								
Burnout Depersonalization	-0.24	0.27		0.84							
Burnout Professional Accomplishment	0.10	0.00			0.80						
Self-Efficacy Instructional Strategies	0.03	0.05				0.90					
Self-Efficacy Classroom Management	0.13	-0.07					0.77				
Self-Efficacy Student Engagement	0.17	-0.10						0.82			
Need Satisfaction Autonomy	0.33	-0.37							0.79		
Need Satisfaction Relatedness	0.11	-0.07								0.86	
Need Satisfaction Competence											0.64

Figure 4.3 Multitrait-Multimethod Matrix

Findings also suggest that there is a relationship among dispositions toward policy and the need for autonomy being fulfilled, $r(426) = .33, p < .05$. This means that a teacher who has a positive disposition towards policy is more likely to feel as if their need for autonomy at work is being met. This finding also does not support evidence of convergent validity; however, it does support the prediction that teacher demoralization is moderately related to teacher's need fulfillment at work.

Discriminant Validity Evidence

In an effort to provide evidence of discriminant validity teacher participants completed the TSES as well as the Depersonalization subscale of the MBI-ES. Though some of the subscales of the TDS were significantly related to subscales of the TSES, the statistically significant results were not meaningful, as the strongest relationship is still considered to be weak, $r(431) = .17, p < .05$. Though a statistically significant relationship was found among the MBI-ES depersonalization subscale and the TDS dispositions subscale ($r(212) = -.24, p < .05$) and the TDS demoralization subscale ($r(211) = .27, p < .05$), the relationship was weak. Despite the statistically significant results, the lack of strength in these relationships provides preliminary evidence of discriminant validity.

Chapter 5: Discussion

The purpose of this study was to develop an instrument to measure K-12 teacher demoralization. This study is the first known attempt to quantify the phenomenon of teacher demoralization. Before an instrument could be developed, the construct first needed to be operationalized and refined, as the current definition of teacher demoralization was ambiguous and would be difficult to measure. The next step in the instrument development was to determine which constructs should be included in the measurement of teacher demoralization. This was accomplished through a principal components analysis. Finally, evidence of reliability and validity were collected. Study results and limitations, as well as future directions for research and practical applications will be discussed.

Operationalization of Teacher Demoralization

The first question in this study was: how can teacher demoralization be operationalized in the context of test-based accountability? Teacher demoralization was defined as a phenomenon that occurs when policy has a deleterious effect on an individual teacher's motivation and affect. Based upon both the review of the literature, teacher demoralization can be operationalized as occurring when teachers have a negative disposition towards policy in conjunction with high occurrences of the feelings of clinical demoralization. This finding expands on the work of Santoro (2011) by linking Sanger's (2012) moral schizophrenia to the idea of inadequacy complex (Shrader, 1984) as discussed in the context of clinical demoralization.

Teachers may enter the profession with a preconceived notion of the nature of their work. Often this preconceived notion is that they will be able to pursue goals that enable them to educate the whole child (Jackson & Belford, 1965; Santoro, 2011); however, some implementations of test-based accountability policies have resulted in negative effects for teachers. These implementations of test-based accountability policies manifest as practices including: lack of resources to meet student needs (Darling-Hammond & Rustique-Forrester, 2002; Horn, 2004; Moses & Nanna, 2007); narrowing of the curriculum (Sabol, 2013; Hargreaves et al., 2013; Dawson et al., 2014); instructional triage (Jennings & Sohn, 2014); teacher evaluations based upon a narrow and sometimes unfair set of criteria (Steiner, 2013; Robinson, 2014); and cheating scandals (Robinson, 2014). It was initially hypothesized that teachers were experiencing need thwarting as a result of current policy and teachers being unable to meet their self-determined needs could be part of the construct of teacher demoralization. This study failed to find evidence that self-determined need thwarting is the same as teacher demoralization.

The negative effects of policy, however, may be establishing a disconnect between some teacher's ideal self and their actual self. Sanger (2012) discusses this "malady of the spirit" as occurring when teachers are focused on prevailing contemporary ideology as opposed to the moral aspects of the work that typically draw them into the profession. This ideology limits what values can be pursued through the work of teachers, thus limiting the ability of teachers to access the moral rewards of their work (Santoro, 2011) and causing a bifurcation between the actual and ideal selves (Sanger, 2012). This bifurcation between the actual and ideal self is termed inadequacy complex in the clinical demoralization literature (Shrader, 1984) and has been observed to result in symptoms of clinical demoralization (Clarke & Kissane, 2002). As a

result, teachers who experience inadequacy complex are at risk of experiencing symptoms of clinical demoralization, including hopelessness, loss of meaning, disheartenment, sense of failure and dysphoria. When teachers experience these symptoms in a professional setting, in conjunction with a negative disposition toward policy, they can be considered to be experiencing teacher demoralization.

Teacher Demoralization Constructs

The second research question answered through this study is: what constructs should be included in the teacher demoralization instrument? The principle components analysis resulted in a two factor solution; the factors were named “Disposition” and “Professional Demoralization.” Taken together, items in the disposition factor measure the degree and valence of the teacher’s general mentality towards the interactions between policy and the profession. The items listed in Table 5.1 make up the disposition factor and address a teacher’s feelings about whether or not policies are interacting with their work in a positive way. This finding echoes the work of Santoro (2011; 2013), who found that teachers were concerned about the effects that reform policies, particularly test-based accountability measures and the resulting sanctions, were having on the profession. This factor was also supported by the qualitative data that was collected for this study where teachers expressed their disagreement with policies regarding instruction and assessment. The Urban High School teacher in particular expressed disagreement with the policy: “What an educator is to them [policy makers] is someone who can gain the results that they are looking for, to me that has nothing to do with being an educator...” This statement epitomizes a negative disposition that some teachers have towards current policies.

Table 5.1

Disposition Factor Items

- Current policies enable me to change my working conditions for the better.
 - I believe that policy expectations make me a better teacher.
 - I agree with the way policies direct me to teach.
 - I feel good about how my profession is treated by policy makers.
 - I feel that policy directives are improving our education system.
-

The second factor, Professional Demoralization, illustrates the extent to which teachers are feeling the symptoms of clinical demoralization within the context of their profession. The items in Table 5.2 comprise the Professional Demoralization factor and measure the frequency with which teachers feel symptoms of clinical demoralization in relation to policy. The items represent feelings of disheartenment, loss of meaning and dysphoria in the form of frustration. This factor supports previous work done by Carlson-Jaquez et al. (2015) that provided evidence of teachers experiencing symptoms of clinical demoralization in relation to policy. Notably, items measuring hopelessness and a sense of failure did not load on to this factor.

Table 5.2

Professional Demoralization Factor Items

- I feel disheartened by how education policies define my profession.
 - Under current policies, my role as an educator has been lost.
 - I am frustrated by policies with which I must comply.
-

A full version of the scale can be found in Appendix M. It should be noted that the items in Appendix M should be randomized for administration. Question number 9 is a referent question to collect information as to which policies teachers were referencing while they completed the survey. If so desired, question 9 can be eliminated and the level of policy to which teachers should refer to when they are responding should be noted in the directions.

Content-Related Evidence

Content-related evidence was the focus of the third research question and comes from two sources in this study. First, in the expert review, four content experts reviewed the first iteration and offered feedback regarding the conceptualization and structure of the TDS. The expert panel emphasized the importance of capturing the value conflict that test-based accountability policies have created for teachers. In an effort to provide structure to the TDS, the construct of clinical demoralization was applied to the teaching profession for subsequent iterations of the scale. Adapting clinical demoralization items as a starting point for the TDS provided both structure for further iterations of the scale while capturing the raw emotions of the educators (e.g. frustration, loss of meaning, disheartenment) as recommended by the expert reviewers.

The second source of content validity was derived from the cognitive interview participants. As outlined in the results, teachers who took the survey instrument during the cognitive interview discussed themes of test-based accountability policies with which they don't agree and their resulting emotions. Both of these themes are aligned with the two factor solution of the PCA, thus providing evidence of content validity for the scale.

Internal Structure Evidence

The fourth research question regarded providing internal structure evidence that supports the conceptualization of teacher demoralization. Due to the exploratory nature of this study, Chronbach's alpha was used to provide internal structure evidence. The TDS was found to have strong internal reliability for both subscales (Dispositions subscale $\alpha = .83$; Demoralization subscale $\alpha = .82$). The Dispositions scale was reverse coded and the full scale was found to have acceptable reliability ($\alpha = .85$). These results provide preliminary evidence of internal structure

validity of the TDS; however, more sophisticated methods, such as confirmatory factor analysis (CFA), should be applied to future studies in an effort to confirm and refine these findings.

Convergent and Discriminant Validity Evidence

The purpose of the final research question was to find convergent and discriminant validity evidence in an effort to support the conceptualization of teacher demoralization. To do this, the results of the TDS were correlated with survey instruments that measured similar but distinct constructs that were presented in the literature review. These instruments included the TSES, NWS and the MBI-ES.

Convergent Validity

The current study failed to find acceptable evidence of convergent validity. The relationship among the Demoralization subscale of the TDS and the Emotional Exhaustion subscale of the MBI-ES was significant $r(211) = .38, p < .05$, but it was not so much so that it would be indicative of convergent validity. This means that the MBI-ES Emotional Exhaustion subscale is measuring a similar but distinct construct from the teacher disposition scale. This finding is relevant because Santoro (2011) theorized that teachers who are demoralized experience emotional exhaustion. While this may be true in relation to a process that teachers go through in their careers, this finding indicates that emotional exhaustion is a distinct construct from the operationalization of teacher demoralization as defined in this study.

The relationship among the TDS Demoralization subscale and the NWS-Autonomy subscale, $r(427) = -.37, p < .05$, provides evidence that the two subscales are related but only moderately so. Similar to the MBI-ES, these results indicate that the TDS is measuring a similar but related construct to the NWS-Autonomy subscale. This means that this predicted relationship also fails to provide evidence of convergent validity and is a distinct construct from the

operationalization of teacher demoralization as defined in this study. Though the relationships among the TDS and the MBI-ES and NWS failed to provide convergent validity evidence, they both were the strongest relationships found in this study. This could mean that they are potentially part of a process. For example, it is plausible that autonomy thwarting is causing teacher demoralization, and teachers who are demoralized are more likely to burn out. Future studies could use these constructs to determine the nature of the relationships among the variables.

Discriminant Validity

The TSES was used to provide discriminant validity evidence due the exclusion of external factors such as policy in its construction. All relationships among the TDS and the TSES subscales were found to be either not statistically significant or statistically significant but weak. This finding provides preliminary evidence of discriminant validity in that teacher self-efficacy, as measured by the TSES, was not strongly related to either subscale of the TDS.

The findings regarding the relationship among the TDS subscales and the MBI-ES subscale of depersonalization were not as clear. Though the relationships among the depersonalization subscale and the TDS Disposition subscale ($r(212) = -.24, p < .05$) as well as the relationship among the depersonalization subscale and the TDS Demoralization subscale ($r(211) = .27, p < .05$) were weak, they were still statistically significant and close to the .30 cutoff for moderate relationships. Santoro (2011) and Dunn (2014) both reported findings from their qualitative work that teachers who experience demoralization do not experience depersonalization. This current finding provides evidence to the contrary, therefore replications of this study are necessary before drawing a generalizable conclusion about the nature of the relationship among depersonalization and the subscales of the TDS.

Limitations

One significant limitation of this study is the potential for selection bias. The partnering education association has approximately 50,000 members comprising of teachers but also other education professionals such as bus drivers, nutrition employees and paraprofessionals. Given the potential number of teacher participants, the response rate was low. It is plausible that only teachers who were invited that are experiencing some level of teacher demoralization chose to respond to the survey. Though this would be a concern for future work that utilize the data collected in this study to determine differences within and between groups by demographic factors, it is not a concern for the results presented because this study solely sought to explore the phenomenon for the purpose of instrument development.

The Dispositions factor measures general items referencing teachers' feelings about current policy. Future applications of the scale should explore the nature of policy and implementation that may cause teachers to have a negative disposition. Cognitive interviews and evaluation that were conducted as part of this study pointed to policies such as test-based accountability for teachers and a one-size-fits-all approach that doesn't account for student growth as being potential contributors to the negative disposition. Using the TDS as strictly a quantitative measure without collecting qualitative data at this point could lead to attribution error. For this reason it is important that anyone who uses the TDS understand the nature of the policies to which participants are referring, or contextualize the survey in an effort to make it more sensitive, before future action is taken based upon the results.

It should also be noted that two symptoms of clinical demoralization, hopelessness and sense of failure, were dropped from the PCA as a result of poor loading with the other items.

This lack of hopelessness could potentially be because participants in this study may be feeling a

sense of professional demoralization but because they are still in the profession they feel somewhat optimistic. Future studies that include hopelessness and sense of failure items could examine the level of demoralization felt by teachers who choose to leave the profession to determine if the factors should be included for those who are exiting the profession. The sense of failure items were problematic throughout the study, teachers in the cognitive interview struggled to answer the questions because of the way that they were written but had a difficult time making suggestions for revisions. Revisiting these two symptoms with new items in a future study may help to confirm that they are not part of the phenomenon of teacher demoralization. Conversely, they may expand upon the scale so that it more closely aligns with clinical demoralization.

Finally, the study failed to find evidence of convergent validity. The researcher chose scales for convergent validity based upon the current understanding of the phenomenon of teacher demoralization. This study provides evidence that, though the constructs of emotional exhaustion and need thwarting are moderately related to demoralization, they are not the same as teacher demoralization as it is defined and operationalized in this study. Future studies should continue to search for evidence of both convergent and discriminant validity in an effort to better understand the construct of teacher demoralization.

Future Directions for Research

The next step in the development of this scale should be to conduct a confirmatory factor analysis (CFA) in an effort to provide stronger evidence of validity (Rios & Wells, 2014) and extend the current findings. In conjunction with providing stronger evidence of internal structure validity for the factor solution, CFA could also illuminate any biases among subgroups to which the scale is administered. Though Chronbach's alpha is an acceptable and widely used way to

measure internal structure validity, it can often under- or over- estimate reliability. The third advantage to applying CFA to the scale for the purpose of further development would be to gain a more accurate measurement of reliability (Rios & Wells, 2014), thus strengthening the internal structure validity evidence.

The current study failed to find evidence of convergent validity. As the scale is developed further, researchers could re-examine the demoralization subscale to determine if it would be appropriate to add items that are more closely related to emotions that are related to need thwarting (specifically autonomy) as well as emotional exhaustion. Researchers could also examine the possibility of adding teacher stress items that may be related, as per qualitative findings, which would be appropriate for future scale development. Another area that researchers could examine is the relationship among teacher demoralization and teacher morale as defined by Evans (2001). Evans (1997; 2001) suggested that teachers who have localized goals are more likely to have higher morale than teachers who have broader, existential goals. The findings in the qualitative portions of this study suggest that some teachers do indeed experience a conflict when their goals for their students are more holistic as opposed to the proximal goals of test-based accountability policies adopted by school divisions and government agencies, which at the time of this study were more focused only on academic achievement as measured by tests.

Future studies could also apply statistical methods to examine the process of teacher demoralization and further explore the relationship among teacher demoralization and teacher stress, burnout, job satisfaction and attrition. Uncovering the processes that teachers experience could provide insight to long term solutions to the problems of teacher shortages and low teacher satisfaction and morale. Application of a mixed-methods approach could provide further insight as to which policies are considered to be demoralizing teachers, as well as construct an

understanding of the process by which teachers become demoralized. For example, if it is found that teachers who are demoralized are at risk for becoming burnt out more than those who are not demoralized, then a qualitative inquiry could point to policies that could be adjusted in an effort to decrease the level of teacher demoralization, thus preventing or reversing high levels of burnout.

Practical Applications

Though ESSA could mean major changes in policy for individual states, these changes were not implemented within the timeframe of the current study because the law was signed just a few months before data collection. ESSA gives states flexibility to create a more comprehensive accountability system, but still requires that states use tests as component of state accountability systems (Darling-Hammond, et al., 2016). ESSA also calls for accountability of the states to provide support and resources to enable the success of every student (Darling-Hammond et al., 2016). A key component to ensuring the success of students is to recruit and retain highly-qualified and effective teachers (Darling-Hammond et al., 2016). The TDS could be used as a measure of consequential validity of test-based accountability policies. Put another way, the level to which policies are demoralizing to teachers can be examined to weigh the unintended consequences against the intended outcomes of policies.

The TDS in its current form can be used to gather group data regarding the level of demoralization felt by teachers in a given setting for the purpose of evaluation projects. If the TDS is administered to a group of teachers within a single state, division or school and those teachers are found to report high levels of demoralization, then policies implemented within the state, division or school could be examined to determine if adjustments could be made in an effort to decrease the level of demoralization. If used for this purpose, researchers could

contextualize the scale further in an effort to achieve greater sensitivity and reduce attribution error. For example, if a school division is concerned that a schoolwide discipline policy is demoralizing to teachers (causing negative motivation and affect), they could contextualize the TDS items to refer specifically to the policy for which there is a concern.

Similarly, schools could collect data from individual teachers who are leaving the county to determine if their attrition is related to feelings of teacher demoralization. Assuming that future studies of teacher demoralization find connections between levels of teacher demoralization and attrition, utilizing the TDS in accountability systems could be one way to check that state, division and school policies are supporting this goal of having effective teachers in every classroom.

Teacher advocacy groups and unions could also use the TDS in an effort to provide evidence of the effects of policy on teachers. The TDS measures both teacher dispositions towards policy as well as feelings of clinical demoralization as they relate to the profession of teaching. For this reason the TDS could provide quantitative data that illustrates the effects of policies on the workforce. The data presented could contribute to guiding policy that seeks to avoid teacher demoralization. The scale could also potentially identify the habits and thoughts of teachers who are not experiencing high levels of teacher demoralization. By doing so, researchers and advocates can gain perspective into differences among teachers who score both high and low on the TDS in an effort to suggest interventions to help reduce teacher feelings of demoralization. In doing so, practical interventions can be tested empirically and adjusted in an effort to help improve the work life of teachers and ultimately assure that all students have access to highly-qualified and effective teachers in their classrooms.

It is recommended that a mixed-methods approach is used when administering this scale so that evaluators can offer suggestions for intervention based upon the qualitative responses of the participants. The scale was created purposefully to be open to teacher interpretation, based upon the feedback received during the expert review. As noted in the limitations, use of the scale without qualitative feedback from participants could lead to attribution error. A simple set of short response questions at the end of the scale regarding the policies to which the participants were considering during its administration could help to avoid this error and lead to more accurate research and evaluation conclusions.

Also in regards to error, it should also be noted that teachers may sometimes not be able to identify from where certain policies were being levied and as a result some policy implementation may be attributed to the wrong level. For example, in Virginia the state includes guidelines for teacher evaluation but does not mandate that a certain system be used. Teachers, however, may be unaware that the state guidelines are in place not to mandate a certain system but to guide divisions so that they can construct locally appropriate teacher evaluation systems. If the school division creates an evaluation system based upon a loose interpretation of the state guidelines and that system is deemed unfair by the teachers, it is possible that teachers will referent the state evaluation policies as opposed to division from where the conflict stems. As a result, the referent question should be interpreted with caution.

Conclusion

This study is a first attempt to quantify the phenomenon of teacher demoralization. In order to develop an instrument to measure K-12 teacher demoralization, the construct of teacher demoralization first needed to be refined and operationalized. For the purpose of this study teacher demoralization was defined as a phenomenon that occurs when policy has a

deleterious effect on an individual teacher's motivation and affect. Both cognitive interviews and a principal components analysis revealed that teacher demoralization can be operationalized as occurring when teachers have a negative disposition towards policy and experience demoralization symptoms when using policy as a referent. Though preliminary validity evidence was presented in this study, further research is needed to confirm the findings of this study and further refine the Teacher Dispositions Scale to measure teacher demoralization. Future studies should also consider the relationship among teacher stress, need fulfillment, burnout, job satisfaction and attrition. This study provides a starting point for future quantitative study of the phenomenon of teacher demoralization. Studies utilizing the construct of teacher demoralization could start to provide education policy stakeholders with insight into real solutions for improving the work lives of teachers and keeping highly qualified and effective teachers in the classroom. The impact of an understand as such could have far reaching implications not only for eliminating teacher shortages but also for assuring the every child has a highly qualified teacher for their K-12 schooling.

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Appendix A

Sample Items from the MBI-ES

Emotional Exhaustion

- I feel fatigued when I get up in the morning and have to face another day on the job.
- I can easily create a relaxed atmosphere with my students.

Personal Accomplishment

- I feel I'm positively influencing other people's lives through my work

Depersonalization

- I feel I treat some students as if they were impersonal objects.
- I don't really care what happens to some students.

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Appendix B

Teacher Demoralization Scale Items - Draft 1

4/2014

Demoralization Conceptualization

The construct of teacher demoralization can be succinctly defined as the inability of a teacher to access personal rewards of teaching as a result of institutional policy and practice. Institutional policies that are likely to contribute to teacher demoralization not only prevent teachers from accessing these moral rewards (e.g. having the ability to meet students' individual needs) but also may ask teachers to compromise their personal morals. Instead of feeling like policy empowers them to do their best work, demoralized teachers feel as if policy restricts what they can do in their classroom to help students succeed. Unlike traditional views of teacher burnout which place the responsibility of coping with stressors on the individual, demoralization accounts for institutional practice that teachers are subject to, over which they have little or no control.

State/Federal Policy

1. I feel constrained in my teaching by state and federal requirements.
2. I feel good about the daily tasks that the state and federal education agencies ask me to carry out as a teacher.
3. Federal and state policy mandates facilitate meeting the needs of my students.
4. Policies of my state and federal governments dictate much of what I do in my classroom.
5. State and federal policies empower me to do what I feel is best for my students.
6. I feel comfortable completing the tasks that I am required to perform as a professional educator.
7. Policies of my state and federal education agencies allow me to give equal attention to all of my students.
8. Federal and state policy mandates influence my teaching in a positive way.
9. I have the flexibility under state and federal education policy to cater my instruction to meet the needs of the students in my classroom.
10. State and federal education policies enable me to cater my instruction to suit the interests of the students in my classroom.
11. Federal and state policy mandates force me to teach a narrow set of standards within my content area.
12. As a teacher I am encouraged to ignore students who I know will not pass standardized tests.
13. Current education policy empowers me to help students who are at risk.
14. My morale as a teacher is negatively influenced by current educational policies.
15. Federal and state policy mandates prevent me from doing the best teaching that helps students learn.

School Division Policy

16. I feel constrained in my teaching by school division requirements.
17. I feel good about the daily tasks that my school division asks me to carry out as a teacher.
18. School division policy mandates facilitate meeting the needs of my students.
19. Policies of my school division dictate much of what I do in my classroom.
20. School division policies empower me to do what I feel is best for my students.
21. Policies of my school division allow me to give equal attention to all of my students.
22. School division policy mandates influence my teaching in a positive way.
23. I have the flexibility under school division policy to cater my instruction to meet the needs of the students in my classroom.
24. School division policy enables me to cater my instruction to suit the interests of the students in my classroom.
25. School division policy mandates force me to teach a narrow set of standards within my content area.
26. Current school division policy empowers me to help students who are at risk.
27. School division policy mandates prevent me from doing the best teaching that helps students learn.

Classroom Management Teacher Self-Efficacy

28. I can control disruptive behavior in the classroom.
29. I can get children to follow classroom rules.
30. I can calm a student who is disruptive or noisy.
31. I can keep a few problem students from ruining an entire lesson.
32. I can make expectation clear about student behavior.
33. I can establish routines to keep activities running smoothly.

Appendix C

Evidence of Demoralization Factors from the High-Stakes Testing Literature and Potential Demoralization Scale Items (From Carlson-Jaquez et al., 2015)					
Demoralization Factor	Helplessness	Disheartenment	Sense of Failure	Loss of Meaning	Dysphoria
Definition	Feeling of not having the power to change the current situation	Feelings of discouragement, isolation and distress	Teacher feels that he or she has failed or is a bad teacher under current conditions	Teacher can't find value or take pride in work under current conditions and daily activities	Feelings of dissatisfaction, anger, guilt and frustration towards work
Evidence from the Literature	Teachers are denied autonomy under modern accountability policies (Nichols & Berliner, 2005; Moses & Nanna, 2007; Dunn, 2014). Some teachers "put up with" their working conditions because they are unable to leave the profession, either as a result of their lack of training in another field or their inability to obtain employment due to economic conditions (Kennedy, 2010, p. 596).	Empirical evidence suggests that teachers are discouraged (Valli & Busse, 2007) and disheartened (Johnson et al., 2009; Santoro, 2013) by modern policies. Teachers are asked to related to their students in more of a business model in an effort to increase productivity (e.g. academic achievement as measured by high-stakes tests); this model leaves little room for the caring nature of the profession (Pring, 2001).	Teachers are often blamed for a lack of student achievement as measured by standardized test scores (Jones, 2008). The state of Virginia Department of Education (2011) recommends that up to 40% of a teacher's annual evaluation be based upon student achievement outcomes as measured by standardized tests.	Prescribed approaches to instruction limit teacher creativity and the ability of teachers to meet individual student needs and interests (Apple, 2000; Jones, 2008). A data-focused approach to education has led teachers to center their instructional decisions around helping their students obtain passing test scores as opposed to the needs of their students (Apple, 2000; Pring, 2001; Nichols & Berliner, 2005; Jones, 2008; Carlson-Jaquez et al., 2015); for some teachers this is in contrast to their views of "good teaching" (Santoro, 2013)	Teachers are frustrated in their pursuit of what they feel to be the good work of teaching (Santoro, 2013). Kennedy (2010) has documented what she refers to as "reform fatigue"; teachers are closing their classroom doors and doing whatever they have to in order to meet the needs of their students, even if it is contradictory to the policy.
Qualitative Evidence	"Every single day it's the same thing with new problems." "And administration doesn't really help with that because they're concerned about test scores and IEP data and all of those paperwork things."	"I think part of the apathy from the kids comes from they know that we're all just score-driven, they don't have to learn anything" "It's hard to feel good about yourself."	"I was in tears and totally apart because this means that my rating this year is unacceptable"	Commenting on how the profession has changed within the teacher's career: "More actual time was with the students as opposed to numbers and papers"	"I get really irate about that, and I'm...it infuriates me!" "So there's a lot of overall stress and...I don't know, not a lot of time for teaching."
Scale Sample Items	1.I feel that I have no control over my work. 2.I feel trapped in my profession. 3.I lack the authority to solve the problems I face in my classroom.	1. I feel disheartened by how modern education policies have changed my profession. 2.I feel discouraged about my profession. 3.I feel alone in my work.	1.I am a bad teacher if my students do not meet the requirements of high-stakes accountability tests. 2.I am responsible if my students fail standardized tests.	1.Under current policies, my role as an educator has been lost. 2.There is a purpose in the way policies direct me to teach.	1.I am angry about a lot of things in my profession. 2.I am often frustrated by policy mandates. 3. I feel guilty about my work under current policies.

Appendix D

This purpose of this survey is to help us gain a better understanding of teacher dispositions towards education policy. Your answers are confidential.

Directions: Please indicate how true each of the following statements is for you given your experience as teacher during the current school year. For the purpose of this survey, we would like for you to think of policy as expectations and regulations that govern the work of teachers. Remember that your administrator will never know how you responded to the questions. Please use the following scale in responding to the items.

1	2	3	4	5
Never	Rarely	Sometimes	Most of the time	Always

Helplessness

1. Reform initiatives allow me to have control over my work.
2. High-stakes accountability empowers me to improve instruction for my students.
3. I feel empowered by current policies to change my working conditions.
4. Modern education policies undermine my authority to solve the problems I face in my classroom.
5. Education policies trust me to act as a professional.

Disheartenment

1. I feel disheartened by how modern education policies define my profession.
2. I feel discouraged about how my profession is viewed by the general public.
3. Established policies encourage positive interactions with my coworkers.
4. I feel good about how my profession is treated by policy makers.
5. I feel that current policies create a calm work environment.

Sense of Failure

1. I feel like a bad teacher if my students do not meet the requirements of test-based accountability policies.
2. The community views me as a successful teacher only if my students meet the requirements of accountability tests.
3. I am responsible if my students fail accountability tests.
4. People in charge treat me as a professional under current education policies.
5. Administrators view me as a successful teacher only if my students meet the requirements of accountability tests.

Loss of Meaning

1. Under current policies, my role as an educator has been lost.
2. There is a purpose in the way policies direct me to teach.
3. Under current policies, my job seems pointless.
4. I agree with the way policies direct me to teach.
5. Under current policies, I am unable to do my job in the way that I was trained.

Dysphoria

1. I am angry about a lot of things in my profession.
2. Reform mandates are improving our education system.
3. I am often frustrated by reform mandates.
4. Reform mandates make me a better teacher.
5. I feel guilty about my work under current policies.

Appendix E

Consent Statement

Thank you for participating in my study to examine teacher dispositions towards policy. The purpose of this study is to develop a survey instrument to measure teacher dispositions. Risks of participating in this study are minimal. I understand the sensitive nature of this topic and want to emphasize your safety (psychological or other) is our utmost concern. Your name and any information that you share that could be used to link you to our study will be removed from the information that you share today in an effort to protect your identity. Your decision to participate is completely voluntary and you are welcome to stop the interview at any time. Here is an information sheet with my name and contact information, the name and contact information of my advisor, as well as the contact information for the VCU IRB office in the instance that you feel harmed as a result of the study. For questions about your rights as a participant in this study, or to discuss other study-related concerns or complaints with someone who is not part of the research team, you can contact the VCU Office of Research Compliance and Education. The entire interview should last approximately 45 minutes. Do you have any questions for me before we begin?

Cognitive Interview Protocol

1. Please read each survey item and select an answer. When you have a response, I would like to ask you a few questions about how you arrived at each answer.
 - a. Was it easy or difficult to choose an answer?
 - b. How did you arrive at your answer?
 - c. What does (fill in the term e.g. policy, test-based accountability, etc.) mean to you?
2. Describe your experience completing the survey.
 - a. What would you do to make it better?
3. Please re-read the directions. I have defined policy as “expectations and regulations that govern the work of teachers.” What does that mean to you?
4. I am trying to measure a phenomenon that occurs when policy has a damaging effect on an individual teacher’s motivation and affect. What can I add to better capture the way that some teachers are experiencing this phenomenon?

Appendix F

Pilot Study Survey Items

This purpose of this survey is to help us gain a better understanding of teacher dispositions towards education policy. Your answers are confidential.

Directions: Please indicate how true each of the following statements is for you given your experience as teacher during the current school year. For the purpose of this survey, we would like for you to think of policy as expectations and regulations that govern the work of teachers. Remember that your administrator will never know how you responded to the questions. Please use the following scale in responding to the items.

- | 1 | 2 | 3 | 4 | 5 |
|-------|--------|-----------|------------------|--------|
| Never | Rarely | Sometimes | Most of the time | Always |
| 1. | | | | |
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Appendix G

Dear Teachers,

My name is Heather Carlson-Jaquez and I'm a doctoral candidate at Virginia Commonwealth University. You are receiving this email because I would like to invite you to participate in my dissertation study. The purpose of this study is to develop a survey instrument to measure teacher dispositions towards education policy. This research is valuable because it will provide information on how modern education policy is affecting teachers and could help guide future education research and policy making in the future. If you would like to participate all you have to do is follow the survey link provided at the bottom of this email and complete the online survey. The survey will take approximately 30-40 minutes to complete.

Participation in this study is entirely voluntary. Risks of participating in this study are minimal, as we will not ask you to identify yourself and you are welcome to not answer any questions that you do not feel completely comfortable with. I understand the sensitive nature of this topic and want to emphasize your safety (psychological or other) is our utmost concern. You can refuse to participate or stop at any time.

If you are interested in participating, have any questions about the study, or if you decide to participate in the study and feel harmed as a result of participation, please contact Heather Carlson-Jaquez at carlsonha@vcu.edu. For questions about your rights as a participant in this study, or to discuss other study-related concerns or complaints with someone who is not part of the research team, please contact the VCU Office of Research Compliance and Education at 804-827-2157.

<INSERT SURVEY LINK HERE>

Appendix H

Teacher Dispositions Scale (Full Data Collection Version)

Directions: Please indicate how true each of the following statements is for you given your experience as a teacher during the current school year. Policy is defined as expectations and regulations that govern the work of teachers for the purpose of this survey. When responding to the questions, consider the level or levels of policy that you feel are most relevant for the given question (Federal, State, School Division and/or School).

1	2	3	4	5
Never	Rarely	Sometimes	Most of the time	Always

1. I feel that policy directives are improving our education system.
2. Policy initiatives allow me to have control over my work.
3. I feel disheartened by how education policies define my profession.
4. Under current policies, my role as an educator has been lost.
5. I am frustrated by policies with which I must comply.
6. High-stakes accountability empowers me to improve instruction for my students.
7. I believe that policy expectations make me a better teacher.
8. Current policies enable me to change my working conditions for the better.
9. I feel good about how my profession is treated by policy makers.
10. I agree with the way policies direct me to teach.
11. I feel that current policies create a calm work environment.
12. Education policies trust me to act as a professional.
13. Under current policies, I am unable to do my job in the way that I was trained.
14. My professional responsibilities, as outlined by policy, are in agreement with my personal philosophy of teaching.
15. Please indicate the frequency with which you referred to the following levels of policy while answering the questions in the previous section:
 - Federal
 - State
 - School Division
 - School
16. I am happy about most things in my profession.
17. Parents view me as a successful teacher only if my students meet the requirements of accountability tests.
18. My colleagues view me as a successful teacher only if my students meet the requirements of accountability tests.
19. Administrators view me as a successful teacher only if my students meet the requirements of accountability tests.
20. I feel encouraged by how my profession is viewed in the community in which I work.
21. If my students fail accountability tests, I feel as if I have failed as a teacher.

Appendix I

Teachers' Sense of Efficacy Scale, Short Form (Tschannen-Moran & Woolfolk Hoy, 2001)

Teacher Beliefs

This questionnaire is designed to help us gain a better understanding of the kinds of things that create challenges for teachers. Your answers are confidential.

Directions: Please indicate your opinion about each of the questions below by making any one of the nine responses in the columns on the right side, ranging from (1) "None at all" to (9) "A Great Deal" as each represents a degree on the continuum.

Please respond to each of the questions by considering the combination of your *current* ability, resources, and opportunity to do each of the following in your present position.

1. How much can you do to control disruptive behavior in the classroom?
2. How much can you do to motivate students who show low interest in school work?
3. How much can you do to calm a student who is disruptive or noisy?
4. How much can you do to help your students value learning?
5. To what extent can you craft good questions for your students?
6. How much can you do to get children to follow classroom rules?
7. How much can you do to get students to believe they can do well in school work?
8. How well can you establish a classroom management system with each group of students?
9. To what extent can you use a variety of assessment strategies?
10. To what extent can you provide an alternative explanation or example when students are confused?
11. How much can you assist families in helping their children do well in school?
12. How well can you implement alternative teaching strategies in your classroom?

Appendix J

Basic Need Satisfaction at Work Scale (Self-Determination Theory.org, 2016)

When I Am At Work

The following questions concern your feelings about your job during the last year. (If you have been on this job for less than a year, this concerns the entire time you have been at this job.) Please indicate how true each of the following statement is for you given your experiences on this job. Remember that your boss will never know how you responded to the questions. Please use the following scale in responding to the items.

1 2 3 4 5 6 7
Not at all true Somewhat True Very True

1. I feel like I can make a lot of inputs to deciding how my job gets done.
2. I really like the people I work with.
3. I do not feel very competent when I am at work.
4. People at work tell me I am good at what I do.
5. I feel pressured at work.
6. I get along with people at work.
7. I pretty much keep to myself when I am at work.
8. I am free to express my ideas and opinions on the job.
9. I consider the people I work with to be my friends.
10. I have been able to learn interesting new skills on my job.
11. When I am at work, I have to do what I am told.
12. Most days I feel a sense of accomplishment from working.
13. My feelings are taken into consideration at work.
14. On my job I do not get much of a chance to show how capable I am.
15. People at work care about me.
16. There are not many people at work that I am close to.
17. I feel like I can pretty much be myself at work.
18. The people I work with do not seem to like me much.
19. When I am working I often do not feel very capable.
20. There is not much opportunity for me to decide for myself how to go about my work.
21. People at work are pretty friendly towards me.

Appendix K

Demographic Items

1. With which gender do you most closely identify? Male/Female
2. How many full years of teaching have you completed?
Less than 5, 5-9, 10-14, 15-19, 20+
3. How would you describe your school division? Rural, Suburban, Urban
4. What is the highest degree of education you have earned? Bachelors, Masters, Ph.D.
5. Do you hold a certification for the content area in which you teach? Yes/No
6. Please indicate the grade level in which you teach: elementary, middle or high school
7. Do you teach in a high-stakes tested content area? Yes/No
8. Do you teach in a Title I school? Yes/No
9. Please indicate the current accreditation status of your school:
Fully accredited, Accredited with warning, Not accredited, I don't know

Appendix L

Scale Revision Notes: Changes Made During Cognitive Interviews

Revisions made after Interview 1 (suburban middle school) and Interview 2 (urban elementary school):

1. Changed “Test based accountability empowers me to improve instruction for my students” to “High-stakes accountability empowers me to improve instruction for my students” because teachers were interpreting test-based accountability in this item as both teacher evaluation and data driven instruction. When I changed the item to “high-stakes accountability” they interpreted the item as asking about evaluation only.
2. Changed sense of failure item “I am responsible if my students fail accountability tests” to “I am made to feel responsible if my students fail accountability tests” because teachers were wrestling with how to answer the question based upon how they felt as opposed to how their supervisors make them feel.
3. Sense of failure #3 “I feel valued as a teacher under current education policies” felt very similar to disheartenment items but was vague, teachers wondered “valued by whom?” and so it was removed.
4. Changed sense of failure #5 “I am a successful teacher only if my students meet requirements of accountability tests” to “Administrators view me as a successful teacher only if my students meet requirements of accountability tests” for the same reason as sense of failure #2 being changed.
5. Loss of meaning #5 “Under current policies, I am unable to do my job the way that I was trained to in my pre-service education” the phrase “pre-service education” was a problem for one of the participants because the teacher’s path to licensure was not traditional. It was changed to “in the way that I was trained.”

Additions made after Interview 1 (suburban middle school) and Interview 2 (urban elementary school):

6. Under sense of failure, “I feel valued as a teacher” was replaced with “The community views me as a successful teacher only if my students meet the requirements of accountability tests” based upon the recommendations of what the scale was missing (how the community – parents and administrators – value teachers).

Revisions made after Interview 3 (rural high school):

1. Under sense of failure, split “The community views me as a successful teacher only if my students meet the requirements of accountability tests” into two items “Parents view me as a successful teacher...” and “My colleagues view me as a successful teacher...” because the teacher was not sure of whom “the community” was referencing.
2. Changed the phrase reform mandates in 2 of the 3 items under dysphoria because the teacher did not understand what was meant by the phrase. I left one of the “reform

mandates” phrases because the other two teachers did not have any problems with the phrase. I would like to see if other teachers have an issue with the phrase, but I did reword the others in the instance that future participants struggle with the phrase.

Additions made after Interview 3 (rural high school):

1. Added “Modern education policies allow me to give proper attention to my students’ individual needs.” based upon the recommendation of the teacher after discussing not having enough time to focus on the students because of the increased amount of paperwork.

Revisions made after Interview 4 (urban high school):

1. Change “reform initiatives” to “policy initiatives” for dysphoria #1.
2. Change dysphoria #3 because the teacher felt that the question conflicted itself, it now reads “I believe that policy expectations make me a better teacher.”
3. Removed dysphoria #5 “Education policies trust me to act as a professional.”
4. Removed “I feel good about how my profession is treated by policy makers” because it aligned too closely with the previous group of questions.
5. Added the phrase “meaningful purpose” to loss of meaning #4 because the teacher felt that the policies have a purpose, even if he doesn’t agree with them.
6. Fixed the syntax of loss of meaning #5 to make it a little easier to read.

Additions made after Interview 4 (urban high school):

1. Added “I am sad about most things in my profession” upon discussing with the teacher the meaning of the subscale at the end of the interview.

Revisions made after Interview 5 (rural middle school) and Interview 6 (suburban elementary school):

1. Changed sense of failure #4 “I am responsible if my students fail accountability tests” to “I feel responsible if my students fail accountability test.”
2. Changed dysphoria #1 “Policy directives are improving our education system” to “I feel that policy directives are improving our education system.”
3. Changed dysphoria #4 “Reform mandates make me a better teacher” to “I feel that reform expectations make me a better teacher.”

Additions made after Interview 5 (rural middle school) and Interview 6 (suburban elementary school):

1. It was suggested that I add an item regarding being able to meet student needs, so I added disheartenment #6 “Modern education policies allow me to give proper attention to my students’ individual needs.”

Additional Revisions before Pilot Study

1. Changed dysphoria #2 to “I am frustrated by policies with which I must comply” to more closely align the item to the theory.
2. Changed sense of failure #1 to “If my students fail accountability tests, I feel as if I have failed as a teacher” to more closely align the item to the theory.
3. Changed dysphoria #5 to “I am evaluated fairly under current education policies” to more closely align the item to the theory.
4. Changed the valence of multiple items (dysphoria #5, disheartenment #2, sense of failure #5, loss of meaning #3 & 5) to reduce bias and any potential negative effect on participants.
5. Added a referent question after each item to determine what policy the teachers were using to respond to the given questions.

Appendix M

Directions: Please indicate how true each of the following statements is for you given your experience as a teacher during the current school year. Policy is defined as expectations and regulations that govern the work of teachers for the purpose of this survey. When responding to the questions, consider the level or levels of policy that you feel are most relevant for the given question (Federal, State, School Division and/or School).

1	2	3	4	5
Never	Rarely	Sometimes	Most of the time	Always

1. Current policies enable me to change my working conditions for the better.
2. I believe that policy expectations make me a better teacher.
3. I agree with the way policies direct me to teach.
4. I feel good about how my profession is treated by policy makers.
5. I feel that policy directives are improving our education system.
6. I feel disheartened by how education policies define my profession.
7. Under current policies, my role as an educator has been lost.
8. I am frustrated by policies with which I must comply.
9. Please indicate the frequency with which you referred to the following levels of policy while answering the questions in the previous section:

Federal
State
School Division
School

Note: Items should be randomized when administering this scale but Item 9 should always be the last item on the questionnaire.

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