Chapter 6

The Effects of Standards Based School Accountability on Teacher Burnout and Trust Relationships: A Longitudinal Analysis

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6.1 Introduction

In a complex society the education of each successive generation of students is placed in the hands of strangers who are assumed to be benevolent, caring, committed to the welfare of children, and competent. Effective schools and school reform rest upon the mutual trust among stake-holders; in fact, it is the presence of mistrust that can sabotage efforts for substantial and beneficial change (Tschannen-Moran and Hoy 2000; Hoy et al. 2000, 2006; Bryk and Schneider 2002; Forsyth et al. 2006). The emphasis of these studies has been on the social psychology of interpersonal trust. However, the causes and effects of trust operate at more than the individual or interpersonal level.

Global factors, including the national movement toward greater school accountability and the implementation of such accountability strategies, including the mandate for high-stakes testing, can play dominant roles in the shaping and maintenance of relational trust. Accountability mandates have consequences for the morale of school actors, often because their implementation alters vulnerabilities of actors and tests the extent to which actors view one another as benevolent, reliable, competent, honest, and open (Tschannen-Moran and Hoy 2000). The present chapter explores the longitudinal effects of changing school accountability mandates on teacher morale and burnout and its relationship with teacher trust of school administrators, colleagues, students, and the parents of their students. The mandates have increasingly altered teachers' expectations about their job security and therefore, challenged the level of trust that teachers have in those whose performances affect their fate and compensation.

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6.2 Trust

The concept of trust is multifaceted. In their analysis of urban elementary schools, Hoy and Tschannen-Moran (1999) conceptualized five dimensions of trust associated with schools: competence, benevolence, reliability, honesty, and openness, while Hoy and Tarter (2004) add vulnerability to the listing. Tschannen-Moran and Hoy (2000) conducted a meta-analysis of studies of the facets of trust (willingness to risk vulnerability, confidence, benevolence, reliability, competence, honesty, and openness). Building on Coleman's work on social capital, Bryk and Schneider (2002) examined two forms of relational trust: organic and contractual. This dichotomy traces its ontological origins back to Toennies, Weber, and especially Durkheim, all of whom distinguished between social relations based on organic and mechanical solidarity, or what would be found in a folk or urban society (i.e., a gemeinschaft or a gesellschaft). For Bryk and Schneider "Organic trust is predicated on the more or less unquestioning beliefs of individuals in the moral authority of a particular social institution, and characterizes closed, small-scale societies" (Bryk and Schneider 2002, p. 16). Trust is interwoven into the very fabric of social relations and its violation is met with outrage and even severe sanctions (Durkheim 1964; Homans 1961; Blau 1964).

Contractual trust by contrast, is weakly vested in moral-ethical relations. "A contract defines basic actions to be taken by the parties involved. The terms of the contract explicitly spell out a scope of work to be undertaken by the parties involved, or a product or service to be delivered" (Bryk and Schneider 2002, p. 17). Because of its specificity, the task of determining whether the terms of a contract have been met or violated is relatively simple. Violation of the terms of the contract are likely to be met with lawsuits. In modern, complex societies, both organic and contractual trust are present, although there is a predominance of contractual trust. Difficulties often arise when individuals view contractual work relations as if they were based on organic trust. Thus, relations that are specified in contract and occur in bureaucratic settings are overly interpreted as based on a common moral and emotional footing. Violations of the terms of a contract are thus seen as betrayal.

It is our contention that the result of the shift from organic to contractual trust, occasioned by an expanding school accountability system, has resulted in heightened levels of teacher burnout. Prior to externally-based accountability, the mutual understanding between teachers and school districts was that teachers would provide instruction in the best interests of their students and districts offered autonomy in the classroom. This understanding constituted a loosely coupled system (Weick 1976). Only when there was clear evidence of incompetence or a teacher failed to consider the best interests of children would districts intervene.

Contractual trust however, demands accountability and specifies penalties for its violation. The supposition of contractual trust is that teachers will act in their own best interests over those of their students, and need to prove routinely there competence. Ironically, the basis for contractual trust is distrust of the individual. This distrust demands accountability but also redefines relationships in schools from teacher and student, mentor and mentee, to seller and buyer, or merchant and

customer. Students (or the parents and community) pay for a commodity and the sellers (schools and their employees) must deliver to the satisfaction of the buyer or his/her surrogate (student).

The growth in the size of schools, particularly in urban areas, has created an environment where the lack of inter-personal connectedness within the school jeopardizes the effectiveness of the school. People do not know one another but they also don't know where or how they fit into the functioning of the school. Yet, the very size and complexity of the school organization necessitates an awareness of interdependence which is likely to be lacking. The pathological outcomes of a diminished sense of interdependence can be alienation, burnout and distrust.

Parental perceptions of the school and its work, and the trust and cooperation needed between home and school to create an effective school learning environment, is more difficult in situations of diversity. Teachers and principals may come from very different cultural references (economics, linguistics, values) than their students and parents. Further, teachers and principals may also have different cultural references amongst themselves. This lack of understanding between cultural references can lead to further distance between individuals and engenders distrust. Tschannen-Moran and Hoy (2000) noted that confidence, reliability and competence are central facets of trust. When class and cultural differences exist between teachers and others in the school (especially students and their parents) it is likely that teachers will assume that there is also a lack of shared values. The perceived lack of shared values in this diverse environment reduces the confidence in the abilities and intentions of others, including doubts regarding the competence, reliability, and belief in the good intentions of others (benevolence).

6.3 School Accountability and the Modified Social Contract

Eighty years ago, in his seminal study of teaching, Willard Waller observed that "the political organization of the school is one which makes the teacher dominant, and it is the business of the teacher to use his (sic) dominance to further the process of teaching and learning which is essential to social interaction of the school" (1932, p. 9). More than 40 years later Dan Lortie noted that school administrators exercised limited authority over teachers, as teachers "may choose to pay little heed" (1975, p. 74) to their supervisors, especially if they were tenured. Colleges of education imparted in their students the sentiment that teachers had professional autonomy once they closed their classroom doors. In fact, Weick (1976) described the school organization in which teachers and their instruction were minimally coupled to the expectations of school administrators, state education agencies, and the public as a "loosely coupled" system.

The status of teachers was lower than that of many professions, in part because it was a predominantly female occupation, and in urban areas in the latter part of the twentieth century, an occupation with sizeable minority incumbents. Teaching, according to Lortie (1975, p. 10) is a "special" but "shadowed" occupation.

Teaching seems to have more of its share of status anomalies. It is honored and disdained, praised as "dedicated service" and lampooned as "easy work." It is permeated with the rhetoric of professionalism, yet features income below those earned by workers with considerably less education. It is middle-class work in which more and more the participants use collective bargaining strategies developed by wage-earners in factories. (1975, p. 10)

However, until the development of the Standards-based School Accountability Movement, teaching offered one guarantee. Teachers could assume that unless they committed serious offenses, they were guaranteed life-time employment. The trade-off in public school teaching was that once one gained tenure, or a permanent contract, an individual was assured job security. Under the new accountability system, teachers can no longer expect to have classroom autonomy or that their employment would always be secure. The result has been increasing levels of teacher burnout and changes in the nature of the trust between teachers and other stake-holders in schools.

In fact, there is evidence that the morale of America's teachers has been negatively impacted by the various waves of school reform. Detailed analyses by Dworkin and his colleagues (Dworkin and Townsend 1994; Dworkin 1997, 2001; Dworkin et al. 2003) have displayed the changing effects of school reform legislation on teacher burnout.

6.4 The Standards-based School Accountability Movement

The Standards-based School Accountability Movement can trace its origins to the release under the Reagan administration of the report A Nation at Risk (1983) by the National Commission on Excellence in Education. The report held that the nation was at risk of failing to remain competitive against other economies of the world because the nation's students were deficient in science, mathematics, and an array of other skills linked to a globally competitive labor force. Recently, Dworkin and Tobe (2012a) chronicled the waves of school reforms that followed the 1983 commission report, including "America 2000" in the first Bush administration, "Goals 2000" in the Clinton administration, "No Child Left Behind" (NCLB) in the younger Bush administration, and "Race to the Top" in the current Obama administration.

Each wave of reform has initiated greater demands for accountability imposed upon schools and teachers, leading to competency testing of teachers in some states (following *A Nation at Risk*), decentralized decision-making and a call for world class academic standards (following *America 2000*), the use of high-stakes standardized testing to assess student achievement (*Goals 2000*), and the use of the results of high-stakes testing to assess schools and teachers (*No Child Left Behind* and a *Race to the Top*). The later reforms (especially *No Child Left Behind*) incorporated progressively increasing standardized passing criteria for sub-groups of students (based on ethnicity, poverty status, home language status) to judge school and

teacher performances. Low performances resulted in the right of students to change schools and determined whether schools should be closed and re-opened as charters with a completely new staff.

The reform movement did not emerge by chance. Conservatives, business leaders, and middle class parents had expressed concern over perceived changes in schooling following the Civil Rights Movement, school desegregation, and a focus on diversity and multiculturalism. Each of these changes was seen as claimsmaking efforts by previously excluded groups whose gains threatened those with more power, privilege and property. Berliner and Biddle (1995) labeled A Nation at Risk (1983) a product of a Manufactured Crisis intended to result in the weakening of the public schools and the passage of legislation that would permit the middle class to redirect their public school tax dollars toward private school tuition. The Standards-based School Accountability Movement rests on an array of assumptions about public schools and human motivation. The core premise of the movement has been that the public schools are broken and that only through external intervention can they be fixed. Further, the imposition of free market forces and competition, which advocates of the reforms suggest have worked so well for American industry, will turn the schools into more efficient and effective systems for the delivery of educational services.

School accountability systems assume that schools and school personnel cannot adequately evaluate how well they are preparing the nation's children for college and careers, instead, assessments must be based on externally-imposed standards and tests. Externally-imposed accountability systems, by their very nature, assume that some outside agent needs to hold accountable individuals whom if left to their own efforts would fail to teach adequately or would not make adequate academic progress. External accountability systems are premised upon a hierarchy of distrust. The public and federal policy makers including business, have little trust that the state's will provide an education that prepares children to be part of a competitive labor force in a global economy. In turn, states do not trust the school districts, and school districts do not trust their principals, teachers, and ultimately students (Dworkin and Tobe 2012b). Nevertheless, NCLB and Race to the Top assume that through threats and the prospect of school closures and the termination of school employees, the school districts will work harder and help students raise their achievement test scores by legitimate means. However, in a hierarchy of distrust, actors focus on the appearance of desired learning outcomes and not necessarily the actual attainment of the substance of those learning outcomes. There have been numerous analyses of how state education agencies, school districts, schools, and school personnel "game the system." A few of these analyses include those by Booher-Jennings (2005), Booher-Jennings and Beveridge (2007), Weitz-White and Rosenbaum (2007), and Dworkin (2008). Additionally, work by Dworkin et al. (1994, 1997, 2003, 2009, and Dworkin and Tobe 2012b) have explored how each of the waves of school reform affected the morale of teachers and the likelihood that teachers will burn out.

Phi Delta Kappa/Gallup Polls reported every September in the PDK magazine report public attitudes about the public schools. They also represent a form of an

index of public trust or distrust in educational institutions. During the period when A Nation at Risk was released, public confidence in the public schools (PDK/Gallup) were at their nadir. The PDK/Gallup Poll asked respondents to provide grades from "A" to "F" to the nation's public schools and to the local schools in the respondents' communities. As has always been the case, people have a more favorable opinion of their own local schools than schools across the nation. Years earlier, when the first Gallup Poll of public confidence in the public schools was published at the end of the 1960s, half of the American public gave grades of "A" and "B" to the performance of the nation's schools and a higher percentage gave similar grades to their local schools (Elam et al. 1993). By the time of the publication of *A Nation at Risk* (1983), less than one third of Americans gave high marks to the public schools. More recently the percentage of respondents giving high grades to the nation's schools has risen, but never to the levels seen in the 1960s (PDK 2012).

6.5 Teacher Burnout

The term "Burnout" was first coined by the psychologist Freudenberger (1974) to describe a condition in which human service professionals such as teachers, nurses, and social workers, "wear out." Following Freudenberger (1974) publication, psychologists offered an operationalization of the construct and developed a scale to assess burnout. The most frequently used psychological measure of burnout was the scale developed by Christine Maslach (1978a, 1978b, 1993). The Maslach Burnout Inventory (MBI) identified three dimensions of burnout: emotional exhaustion, a sense of loss of personal accomplishment, and depersonalization where the student, patient or client was at fault. Subsequent work by Maslach and Jackson (1981), Cherniss (1980 and 1992), Iwanicki and Schwab (1981), and more recently by Friedman (1991, 1995, 2003) and Farber (1991) validated the dimensions. Burnout leads human service professionals to withdraw emotionally from their work, to perform less effectively, and even to become hostile toward those they are expected to help. Most psychological models of burnout 'blame the victim' or attribute to the victims an unwillingness to cope with multiple life stressors. From a psychological perspective, burnout is seen as a personal weakness rather than an institutional weakness; the solutions are therefore aimed at changing the individual by enhancing coping skills and stress management (Abell and Sewell 1999; Farber 1991; Gold and Roth 1993; Pines 1993).

Alaya Pines (1993), in another psychological approach, characterized burnout as an existential crisis, where the value of the individual's work and sense of self-worth are questioned. In this conception of burnout, teachers come to question why they are doing this unappreciated and underpaid job and question what difference their efforts make. These questions reflect self-doubt, a diminished sense of self-worth and value of their work. Workers often define themselves in terms of their work roles; diminished satisfaction with work represents diminished appraisal of their own worth.

As a sociological concept, burnout is explained in terms of structural and organizational causes, rather than as a result of failings of the individual to cope with stress. The initial sociological view arose from six dimensions of alienation (Seeman 1959, 1975) powerlessness, normlessness, meaninglessness, isolation, self-estrangement, and cultural-estrangement. In this conceptualization of burnout, teachers may feel powerless in the educational system or in their school; normless in that school rules may be perceived as dysfunctional, unenforceable or non-existent; meaningless because they are unable to achieve their personal goals or incapable of making a difference in their students' lives; feel isolated or estranged from their colleagues and principal; and teachers may believe their students and families do not share the same cultural and educational values as they do.

Stress can still be a precipitating factor in teacher burnout but from the sociological view the causal elements operate within the organization of schooling, the policies that dictate how teachers are appraised, and how they are expected to conduct themselves within their teaching role. Accountability systems that hold teachers responsible for the learning outcomes of their students in settings where teachers have little control over the non-classroom activities of their students, create structural barriers that deprive teachers of their sense of control over outcomes.

Both psychological and sociological conceptualizations of burnout posit jobrelated stressors as casually implicated. The hierarchy of distrust that underlies current high-stakes accountability systems exacerbates job stress and hence, burnout. The result of increased job stress is a diminution in teacher trust of students and administrators, and this can become circular. Increased stress leads to increased burnout, which results in decreased trust of students, colleagues, and administrators, which heightens job stress and in turn burnout. In fact, Dworkin et al. (2003) noted that especially in high poverty schools, neither the teachers nor the principals are willing to place their personal fate in the hands of their students and their students' parents and therefore they adopt pedagogical styles that leave little to student initiative and reject democratic schooling. Instruction limits student choices and tends to emphasize the so called "drill and kill" formats. Teachers are less satisfied with their jobs when they do not trust their students (Van Houtte 2006), such trust is dependent upon teachers' perception of the teachability of the students (Van Maele and Van Houtte 2011). In turn, teacher trust is also diminished when there are significant cultural and class differences between teachers and students (Van Houtte 2007).

Analysis of samples of Texas teachers surveyed in 1977, 1986, and 1991, which included data collected prior to the Standards-based School Accountability Movement, during its inception under *A Nation at Risk*, and after the implementation of America 2000 revealed a pattern in burnout levels for teachers with varying years of experience (Dworkin and Townsend 1994). In the 1977 data set, burnout was highest among neophyte teachers and lowest among teachers with 15–20 years of experience. However, when the first school reforms were instituted and required competency testing of teachers, burnout levels in those data (1986) were significantly higher for all experience levels than in the previous 1977 study. Burnout in 1986 was highest among teachers with between 10 and 15 years of experience who they considered themselves to be competent, but the accountability system assumed that they were no different than new teachers and had to prove themselves. By the

time of the 1991 survey, competency testing and accountability had become a way of life and teacher burnout subsided to levels that were mid-way between those found prior to the reforms and those found at the inception of reforms. Subsequent cohorts of teachers produced levels of burnout that varied with the extent to which the newer reforms threatened their continued employment (Dworkin 2001, 2009; Dworkin et al. 2003; Dworkin and Tobe 2012b).

6.6 Predictors of Teacher Burnout

Substantial research has outlined the factors that either contribute to teacher burnout or that sustain its opposite, teacher resiliency. A catalogue of such predictors has been summarized in Dworkin (1987, 2009). Most researchers agree that job stress is a key factor in creating burnout (Freudenberger 1974; Maslach 1978a, 1978b, 1993; Maslach and Jackson 1981; Cherniss 1980, 1992; Pines 1993). Other factors found to be significant include teacher demographic characteristics such as gender, ethnicity, and teaching experience; role conflict and role ambiguity (Schwab and Iwanicki 1982), which heightens job stress; and the presence of support by administrators and colleagues, which enhances coping abilities. These factors that exacerbate or retard burnout are briefly described in what follows.

Job Stress The two major perspectives of teacher burnout, one based on clinical psychology and one based on sociology, both see job stress as a central causal element. The psychological perspective conceives of burnout as a stress-induced response characterized by emotional exhaustion, a loss of a sense of accomplishment, and depersonalization. The sociological perspective also sees stress as instrumental in burnout, but contends that burnout is a form of role-specific alienation, characterized by feelings of powerlessness, meaninglessness, isolation, normlessness, and estrangement. The gap between the expectations created in pre-service training and the experiences of teachers in classrooms, especially the highly stressful classrooms of high-poverty schools exacerbate the sense of burnout. Pre-service public school teachers come to expect through their training that they will be accorded professional autonomy and professional respect. They often feel that teaching is a calling and that their students will eagerly accept the knowledge that they have to offer. Their experiences are at considerable odds with their expectations. They are often faced with few resources in the classroom and treated with little respect and much abuse.

Safe Schools Schools that are fraught with drug and gang problems, disruptive students, and bullying students create two categories of stressors that adversely affect teacher morale and a sense of trust. The presence of danger heightens teacher job stress, a significant causal factor in burnout. In this current era of school accountability, teachers are assessed on the extent to which they raise student standardized test scores; campus insecurity and danger affect student achievement of the vic-

tims of school violence and bullying, and also the performance of the whole class, including the bullies (Bru 2009). Thus, a school that is not safe and secure is likely to have depressed test scores amongst all students, resulting in elevated teacher stress due to fear of negative job appraisals, increased burnout, and diminished trust among individuals within the school.

A broad array of activities can make a school unsafe and insecure, some of which constitute illegal acts and others that diminish the effectiveness of teaching and learning. Three elements of unsafe and insecure schools included in the construct are the presence of legally-defined crimes against the person or property, student bullying behaviors, and markedly disruptive student behaviors in class.

Schools that are persistently dangerous under NCLB can be deemed INOI (In Need of Improvement) and can face sanctions, including school closing. Dangerous schools impact teachers and exacerbate burnout in two distinct ways. The threat of teacher and student victimization is itself a stressor that can affect teacher morale and burnout. Additionally, dangerous schools tend to be low-performing schools, with teaching and learning disruptions depressing student performance.

In schools where gang violence and criminal activities spill over from dysfunctional neighborhoods, the level of job stress experienced by teachers and administrators significantly increases their burnout and diminishes their work commitment. Vettenburg (2002) noted how teachers who feel unsafe in their workplace have difficulty focusing their attention on teaching and the stress associated with the perception of physical danger diminishes their commitment to their students and their work. The investigator further noted that mitigating student aggressive behavior alone was less significant than changing the organizational climate. Likewise, Orpinas et al. (2000) noted that both students and teachers who feel unsafe are more likely to miss class; it is the organizational climate that defines the work environment for teachers and reinforces a sense of distrust of students, colleagues, and administrators.

Prior work has also linked the lack of school safety, teacher burnout, and distrust for two reasons. Increased risk of crime and victimization of teachers is in itself a job stressor, which can heighten burnout. However, victimization of students is associated with diminished academic performance of those victimized and those who are victimizers. Even if the safety issues are limited to psychological bullying behavior (as opposed to violent crime) or disruptive student behaviors, the results are that students will learn less, perform less well on tests, including state-mandated standardized tests, and thereby increase the accountability risk to schools and teachers. Further, diminished student achievement adversely affects the teachers' sense of accomplishment, as the teacher has less evidence that her/his teaching practices have been effective in promoting learning. It is therefore expected, that in relatively unsafe schools, teacher burnout will be higher and that as the accountability system changes from minimally threatening to severe (e.g., school closings and staff terminations), burnout levels among the teaching staff will increase.

Principal and Peer Support Stinnett and Henson (1982) and Duke (1984) argued that principals and peers could provide social buffering and support that would

reduce teacher burnout. Similar observations were made by Dworkin (1987, 2009), Saros and Saros (1992), and Blasé (2009). In his early study of teacher burnout, Dworkin (1987) examined four kinds of principal teacher relationships: principal was not influential and unsupportive, principal was not influential and unsupportive, and principal was influential and supportive. Under the conditions of principal supportiveness (regardless of level of influence on district administration) the relationship between job stress and teacher burnout was not significant. Unsupportive principals on the other hand were associated with a strong relationship between job stress and teacher burnout. The level of teacher reported job stress did not differ across the four types of principals, suggesting that a supportive principal breaks the functional connection between job stress and burnout.

Peer support was also associated with reduced teacher burnout, however, Dworkin et al. (1990) found that only when the principal was supportive would peer support have a significantly diminish burnout. However, the threat of school closure under accountability systems may lead to principals being placed under greater stress, too. Such stress can lead principals to be less trusting of their staff, thereby exacerbating burnout among all involved. Additionally, unsupportive and stressed principals so affect all teachers that attempts at supportiveness by colleagues reinforces the tensions that pervade the job. In attempting to provide support colleagues validate the perceived stress levels. However, Dworkin (2009) noted that as the school accountability system imposed stressors on principals, their capacity to serve as a buffer and reduce teacher burnout diminished.

Teacher resilience and decreased burnout are cited as products of collegial support in the research by Howard and Johnson (2004) and Freidman (2003). It would be expected that school reform strategies, including team teaching associated with mainstreaming of special education students, content specialization, curriculum standardization, and response to intervention strategies, would increase collaboration among teachers and create contexts for mutual support. We would then expect that the role of collegial support in mitigating teacher burnout would also improve over time. One countervailing pressure on collegial support, is the reward structure in accountability systems that has teachers competing for bonuses and thus perhaps less willing to share effective practices.

6.7 The Context of Trust and Burnout: Introduction to the Data Sets

The data used in the current study are drawn from a single, large school district in the Houston metropolitan area. The students from the district generally come from families living in poverty (82% of the students are on free or reduced lunch status) and are overwhelmingly minority group members (Latino, African American, and Asian American). The total student body numbers over 60,000 and the teaching staff exceeds 4,000 individuals assigned to 67 campuses. Demographically, the district

resembles the majority of the school districts that are within the City of Houston and the areas that closely surround the city. The district has received awards from the Texas Education Agency, as well as national awards, for the performance of their students on state mandated standardized achievement tests (the Texas Assessment of Academic Skills [TAAS], and later the Texas Assessment of Knowledge and Skills, [TAKS]). Nevertheless, campuses in the district have a range of accountability ratings assigned to them by the Texas Education Agency (from "Exemplary" to "Low Performing"). The senior author has worked with the district and its upper administration for 20 years and conducts annual attitudinal climate surveys for the district.

The 2002 teacher data set was enumerated early in the spring of the year, soon after the passage of *No Child Left Behind*, but before any of the accountability details were made public. In fact, the survey was completed before the "Dear Colleague" letter that specified terms of the new law was sent out to state education agencies by US Secretary of Education Rod Paige. Although Texas had a working accountability system with student testing and the evaluation of schools in place for several years, there was little evidence to suggest that low student performance would have consequences for teachers or schools within the state at the time of the 2002 survey. However, the 2002 survey was collected four months after 9/11 and three months after the beginning of the war in Afghanistan. Thus, the social context in which the survey was conducted remained with numerous stressors. The 2002 data set consisted of 2,869 surveys of K-12 teachers.

The 2004 survey was also administered during the spring semester. The state legislature had enacted a law ending social promotion as a practice for students who failed the state-mandated standardized test, the TAAS (1994–2002) and the TAKS (2003–2011). Students in grades three, five, and eight had to pass relevant sections of the test in order to avoid having to attend summer school or repeat the current grade. While *No Child Left Behind* had specified consequences for teachers and school when student failure resulted in schools and districts not meeting their AYP goals, AYP passage standards were still relatively low in the 2003–2004 academic year. Teachers recognized that, while testing had become high stakes for students, the reality of teacher terminations if a school failed to meet AYP goals was minimal. Recently, Dworkin and Tobe (2012a, b) described this time period through 2010 as one in which teachers had become cynical about the threats to continued employment specified by *NCLB*. In reality, few if any teachers lost their jobs due to low student achievement in Texas schools. The 2004 survey consisted of the responses of 1,771 K-12 teachers.

The 2006 survey would likely have produced similar results as that of 2004, except for the effect of Hurricane Katrina on Houston area schools. The hurricane that destroyed many parts of New Orleans resulted in more than 150,000 residents of Louisiana migrating to the Houston area. Many school districts, and especially those in high-poverty regions of the metropolitan area, were inundated with thousands of children, many traumatized by the loss of their homes and family members. Further, the students coming from New Orleans schools were often well behind their Houston classmates in academic preparation. They had left low-performing or In Need of

Improvement (INOI) schools in Louisiana for better-performing schools in Houston. This alone challenged teachers who could not assume requisite knowledge on the part of the incoming students. Additionally, many of the school districts in Houston sought to keep the Louisiana students on the same campuses, either to contain the students or in order to enable the recent immigrants with a social network. Unfortunately, the decision permitted the reconstitution of the gang structures from some of the New Orleans schools. Survey research conducted for one school district by the authors revealed considerable threats of gang violence experienced by the Houston students attending schools with many transplanted students. There were 1,497 K-12 teachers who participated in the 2006 survey. Significant attitudinal anomalies were found for teachers, administrators and parents in 2006 surveys.

The data collection in 2009 follows the US economic crisis that occurred the fall semester before. Although many teachers experienced some decline in the value of their savings, the state retirement fund seemed to be healthy and most teachers could continue to assume that their jobs were also safe. Teacher layoffs were not yet an issue in early 2009, thus, most teachers remained somewhat cynical about risks to job security. The 2009 sample consisted of 1,825 teachers in grades K-12.

The Texas Legislature meets every other year and passes biennial budgets. The Legislature met in late spring 2009 and generally imposed budget cuts in programs and the reduction of overhead (including making buses more efficient). The surveyed district pledged not to lay-off teachers but focused on increasing efficiency in all services and used attrition. Thus, by 2010 there was only moderate evidence that the schools would experience budget shortfalls large enough to result in the termination of programs and layoffs of teachers. The 2010 survey reflects the continued belief by teachers that their jobs were secure, despite the mandates of No Child Left Behind for schools that failed to meet their AYP objectives. Many urban schools in Texas began to incorporate value-added models based on student test scores to assess teacher performance. High student gain scores drove additional compensation for some teachers, while lower gain scores resulted in no additional compensation. Many teacher organizations challenged the validity of the process and the calculation of value-added. Nevertheless, the accountability system resulted in no clear evidence that teachers were losing their jobs. A total of 1,560 K-12 teachers participated in the 2010 survey.

The pledge by conservatives in the Texas government not to raise taxes resulted in substantial cuts in the funding of many Texas agencies. However education suffered more than other sectors of the state economy. In 2011, the Texas Legislation and the governor addressed the shortfall in funding for state agencies by significantly reducing the state education budget. In 2010–2011 the budget cuts led to the use of low student performance as a reason for teacher layoffs. Reductions in per student funding of Texas public school amounted to a loss of more than \$ 5.4 billion over the biennium. By 2012, Texas public schools lost more than 25,000 positions, including nearly 11,000 teaching jobs (Houston Chronicle 3/17/12, p. 1). The Houston area school districts lost nearly 3,000 teaching positions, some due to attrition (failure to fill jobs after teachers leave) and some due to the termination of

programs. The school district surveyed had a reduction in workforce of 6%, mainly through attrition but had a resultant increase in class sizes.

Consequently, teachers in the 2012 survey recognized that the threats to job security *NCLB* and the Texas accountability system had advocated were becoming realized. Since many school districts in the United States rely on principals to make the initial recommendations for program closures and staff layoffs, the relationship between teachers and principals and the content of teacher-principal trust has been modified in light of the budget crisis. The sample of K-12 teachers surveyed in 2012 consisted of 1,575 individuals.

6.8 Hypotheses

This data analysis addresses two central issues: (1) the content of the accountability system and (2) changing effect sizes of the predictors of burnout in light of modifications to the accountability system. Specifically, the first asks how a modification to the content of the accountability system alters the level of teacher burnout experienced by the samples. That is, when accountability increased risks to continued employment, does the level of burnout change? Similarly, social factors heighten risks to the safety of teachers, or increase their workload (including class sizes), will these social factors be reflected in changes in the level of teacher burnout?

The second issue asks whether increasing risks to job security, caused by changes in the accountability system, or changes in social factors, affect the relative explanatory power of individual predictors of teacher burnout. That is, will the relative effect sizes of job stress, role conflict, school safety, and trust of the principal, colleagues, and students and their parents change when accountability makes job security more tenuous? Likewise, will changes in the mix of the student body alter the configuration of predictors that account for teacher burnout?

Hypothesis associated with the Magnitude of Teacher Burnout H1: As the increasing demands of the accountability system combine with decreased school funding and resources, the higher will be the level of teacher burnout.

Hypotheses Associated with the Effect of Predictors H2: Principals—as resources allocated to schools diminish under budgetary constraints, trust of principals by teachers will decrease due to their role in decision making on program cuts and teacher terminations.

H3: Colleagues—as the increasing demands of the accountability system combine with decreased school funding and resources, teachers will become more supportive of one another and thereby increase their level of collegial trust. Alternatively, it is plausible that competition for scarce and diminishing resources could lead to decreased collegial trust.

Table 6.1	Teacher	burnout
scale score	es across	years

Year	Mean scale score	S.D.	N
2002	0.036	0.96	2,869
2004	-0.133	0.985	1,771
2006	0.107	0.997	1,497
2009	-0.189	0.958	1,825
2010	-0.011	0.999	1,560
2012	0.241	1.085	1,575

H4: Students and Parents—as teacher performance evaluations and job security increasingly depend upon improving student test performance the less likely teachers will be to trust students and their parents.

6.9 Results

6.9.1 Changes in Burnout Levels

Presented in Table 6.1 are the means and standard deviations for the burnout scale scores for each sample of teachers collected between 2002 and 2012. Burnout is measured using the ten item role-specific alienation scale used by Dworkin and his colleagues since 1987. The scale values are in z-score format, with a mean of zero and a standard deviation of one. The scale values are likely to change depending upon the mix of attitudes and experiences held by teachers in each year, thereby causing some patterns of responses to the ten Likert items to have different scale values at one time or another. All 10 items used in the burnout scale across the six time periods were therefore pooled to develop a common scale that permits year by year comparisons. The same procedure was conducted on the items that comprise the other constructs, including the three measures of trust, stress, role conflict and role ambiguity, and school safety.

Significant differences in burnout scale scores were detected through the computation of a one-way ANOVA, followed by a Sheffe test for homogenous subsets. The Sheffe test revealed that 2004 and 2009 did not differ from one another, but displayed significantly lower mean burnout scores than did the other years. The years 2002, 2006, and 2010 were not significantly different from each other (although 2006 burnout means approached being higher than the other years), while 2012 was an extreme outlier with the highest mean burnout score.

The 2002 mean score may reflect some of the stress still felt because of 9/11, but also because testing was becoming higher-stakes, directly for students, but indirectly for teachers. The "no social promotion policy" passed by the Texas Legislature in 1999 began implementation in 2003. Teachers in 2002 knew there would be retention in grade based upon new, more rigorous, standardized tests (TAKS) that

Year		Stress	Safe	Role	Principal	Colleague	Student and
			school	conflict	trust	trust	parent trust
2002	Mean	-0.347	0.028	0.623	0.162	0.114	-0.222
	S. D.	0.882	0.960	0.870	0.792	0.777	0.953
2004	Mean	-0.367	0.073	0.610	0.190	0.125	0.324
	S. D.	0.869	0.966	0.923	0.847	0.751	0.990
2006	Mean	0.318	-0.087	-0.482	0.036	0.026	-0.545
	S. D.	0.987	1.076	0.771	0.879	0.752	0.778
2009	Mean	0.075	0.207	-0.616	0.204	0.195	0.407
	S. D.	0.957	0.940	0.753	0.797	0.724	0.997
2010	Mean	0.286	-0.056	-0.481	-0.053	0.119	0.468
	S. D.	1.002	1.013	0.779	0.861	0.771	0.956
2012	Mean	0.500	-0.275	-0.359	-0.674	-0.667	-0.378
	S. D.	1.030	1.020	0.821	1.455	1.696	0.788

Table 6.2 Means and standard deviations of burnout predictors

would require them to make retention decisions with all the accompanying social and organizational implications.

When teachers realized that the threats associated with NCLB did not result in terminations, the 2004 burnout levels declined. The teachers had been working with the new TAKS exam for over a year and had learned to teach to it. The 2006 year saw the influx of many high-risk, traumatized students from the post-Katrina New Orleans schools and stress levels were high for teachers, parents, and students. Burnout mean scores rose significantly. After the majority of the students from New Orleans left or assimilated into the Houston schools, job stress declined. Although the national economic recession had begun in 2008 and was even more severe in 2009, teachers in Houston were not experiencing downsizing of school districts or campuses. Consequently, burnout levels remained significantly lower than the multi-year average. By spring 2010, the economy had affected the Houston labor market. Despite the fact that teacher layoffs were not yet occurring, districts were asked by the state legislature to trim their budgets and economize. Burnout was slightly higher than in 2009, but still below that of the multi-year average. When layoffs occurred in 2011 and 2012, the level of burnout rose significantly to a mean substantially higher than had been seen before.

Teacher burnout levels appear to be sensitive to changes in the accountability system, decreased school funding which challenges job security and increased class sizes, and the perceived level of school safety. Consequently, H1 is supported by the multi-year data.

6.9.2 Changes in Predictors of Burnout

Table 6.2 displays the means and standard deviations of the burnout predictors across the six time periods. Following ANOVA's for each of the constructs across

Predictors	Beta 2002	Beta 2004	Beta 2006	Beta 2009	Beta 2010	Beta 2012
Teacher stress	0.123	0.069	0.268	0.266	0.325	0.336
Safe school	-0.298	-0.219	-0.176	-0.105	-0.189	-0.234
Role conflict/	0.106	0.009	0.246	0.190	0.221	0.211
ambiguity						
Principal trust	-0.262	-0.259	-0.162	-0.184	-0.140	-0.043
Colleague trust	-0.103	-0.084	-0.059	-0.082	-0.112	-0.145
Student and parent	-0.149	-0.282	-0.113	-0.228	-0.044	-0.001
trust						
Black teacher	-0.001	0.047	0.051	0.023	0.043	0.032
Latino teacher	0.026	0.049	0.027	0.048	0.051	-0.041
Female teacher	-0.009	-0.053	-0.081	-0.085	-0.046	-0.013
Grade level	-0.051	-0.044	-0.034	-0.033	0.019	0.001
Years teaching	-0.017	-0.031	-0.019	0.005	-0.019	-0.025
Constant sig.	0.007	0.004	0.001	0.001	NS	N.S.
Adjusted R^2 =	0.337	0.478	0.524	0.559	0.509	0.504

Table 6.3 Effect of predictors on teacher burnout across years (standardized regression coefficients)

Notes: Statistically significant predictors (p<0.05) are in **bold** Years of Education was not significant in any of the years

years, Scheffe post-hoc tests of significance were computed to determine statistically significant differences between years. The advantage of the Scheffe over other post-hoc tests is that it does not require equal n-sizes each year.

The mean scores for the predictors followed a similar pattern as was found for *Burnout*. *Job Stress* was significantly higher in 2012 than any other year and was followed by 2006 and 2010. Other years had significantly lower mean scores for stress. *School Safety* was seen as highest in 2009 and lowest in 2012, followed by 2006 and 2010. *School Safety* was compromised by budget cuts and increased class sizes in 2012, and in 2006 by the changing student body. Economizing in 2010, including reductions to campus police budgets, resulted in perceived threats to school safety. *Role Conflict and Ambiguity* was highest in 2002 and 2004, as the Texas accountability system and its variant under NCLB were taking shape.

Principal Trust was significantly lower in 2012 than in any other year, followed by 2006 and 2010, and significantly higher in 2002, 2004, and 2009. Colleague Trust was also lowest in 2012 and highest in 2009. Finally, Student and Parent Trust were lowest in 2006 with the influx of students from New Orleans, followed by 2012, and higher in 2004, 2009, and 2010.

Table 6.3 presents standardized regression coefficients for the predictors of burnout, including the three trust measures, for each of the years, permitting comparisons of the relative effect size of each predictor. Statistically significant standardized predictors are displayed in boldface.

Across the six time periods the Adjusted R^2 varied from 0.337 to 0.559. Beginning in 2006 with the Katrina students *Job Stress* has become the most powerful predictor and even more so in 2010 and 2012 with a commensurate increase in the variance explained by the model (adjusted R^2).

 Table 6.4 Predictors of teacher burnout across years (unstandardized regression coefficients)

	2002	2004	2006	2009	2010	2012
Predictors	<i>b</i> (se)	b (se)	b (se)	<i>b</i> (se)	<i>b</i> (se)	<i>b</i> (se)
Teacher stress	0.135(0.035)	$0.069\ (0.036)$	0.273 (0.024)	0.263 (0.021)	0.318 (0.031)	0.359 (0.031)
Safe school	-0.309 (0.030)	-0.220(0.032)	-0.161 (0.025)	-0.107 (0.028)	-0.187 (0.035)	-0.249(0.035)
Role conflict/ambiguity	0.118(0.040)	0.010(0.045)	0.316(0.036)	0.244(0.033)	0.281(0.046)	0.284 (0.045)
Principal trust	-0.313(0.045)	-0.297 (0.046)	-0.183(0.031)	-0.222(0.028)	-0.156 (0.037)	-0.051(0.037)
Colleague trust	-0.128(0.033)	-0.110(0.034)	-0.078 (0.030)	-0.108 (0.028)	$-0.139\ (0.036)$	-0.201(0.036)
Student/parent trust	-0.157 (0.024)	-0.260(0.023)	-0.168(0.031)	-0.204 (0.020)	-0.041(0.025)	-0.002(0.034)
Black teacher	-0.003(0.051)	0.115(0.051)	0.125(0.051)	0.054(0.044)	0.100(0.065)	0.079 (0.064)
Latino teacher	0.081 (0.071)	0.148(0.065)	0.072 (0.058)	0.121(0.049)	0.121 (0.068)	-0.109(0.071)
Female teacher	-0.020(0.051)	-0.134 (0.052)	-0.209 (0.054)	-0.201 (0.045)	-0.105(0.064)	-0.034(0.065)
Grade level	-0.057 (0.027)	-0.056 (0.028)	-0.042(0.028)	-0.039(0.024)	0.022(0.036)	0.002 (0.036)
Years teaching	-0.010(0.014)	-0.020(0.014)	-0.013(0.014)	0.003 (0.012)	-0.012(0.018)	-0.003(0.003)
Constant Sig.	0.007	0.004	0.001	0.001	N.S.	N.S.
Adjusted $R^2 =$	0.337	0.478	0.524	0.559	0.509	0.504

Notes: Statistically significant predictors (p<0.05) are in **bold** Years of Education was not significant in any of the years

Generally teacher demographics had a minimal and often non-significant effect on *Burnout*. The key constructed variables of *Safe School, Teacher Stress*, and *Colwleague Trust had a significant effect each year* on *Teacher Burnout*. *Role Conflict and Ambiguity*, was significant each year except in 2004. *Principal Trust* ceased to be significant in 2012, while *Student and Parent Trust* were not significant in 2010 and 2012.

To what extent were the changes in the effect size of each predictor significantly different over time? To address that question it will be necessary to examine the un-standardized regression coefficients (b's) and their standard errors. The question whether a b for a predictor at time one is different from a b for that same predictor at time two can reasonably be answered using a test of the significance of difference between two b's (Clogg et al. 1995). Table 6.4 displays the unstandardized coefficients (b) and their standard errors (se) for each predictor in order to observe changes in the effect size of a predictor over time. Standard errors are almost the same each year for any given independent variable.

Prior research has shown that *Stress* is usually the strongest single predictor of *Burnout* and this was certainly the case in 2012 and also in 2010. The effect of *Stress* was higher in 2012 than in any prior year other than 2010. In 2002 and 2004, *Stress* had less of an effect than the variables of *Principal Trust* and *Student/Parent Trust*. Since 2006, *Stress* has become the strongest predictor of teacher *Burnout*.

The role of *Principal Trust* in decreasing *Burnout* declined and became non-significant in 2012. Conversely, the role of *Collegial Trust* in decreasing *Burnout* was highest in 2012. *Student and Parent Trust* became non-significant in predicting *Burnout* in 2010 and 2012.

Safe School reduced Burnout in all years but had a stronger effect in 2002 and 2012. Role Conflict and Ambiguity also had a greater effect on Burnout in 2006 and subsequently. The three trust measures demonstrate significant changes in their relationship to Burnout across the time periods.

There is a general decline in the effect of *Principal Trust* on the reduction of Burnout. The 2002 data indicates that Principal Trust is one of the two strongest predictors of diminished Burnout but by 2012 Trust of Principal has no effect on Burnout. We conclude that the non-significant relationship between Principal Trust and Burnout is a consequence of the budget cuts and the role of the principal in determining which programs and personnel will be terminated. In addition to making difficult budgetary decisions, the continued tenure of principals is dependent upon their schools meeting adequate yearly progress goals (AYP) under NCLB. They are consequently more stressed by their changing roles and less able to be supportive of their teachers. Relationships between the principal and teachers initially based on organic trust have changed to the more bureaucratic form of trust (Lee et al. 1991) and in turn have weakened the principal's ability to reduce teacher burnout. As principals become more stressed and burned out themselves the less ability they have to be supportive of their teachers. In turn, the lack of supportiveness by principals fails to buffer teacher burnout but exacerbates teacher stress, further heightening burnout for both teacher and principal. The relationship between teacher and principal

stress and burnout then becomes circular and cumulative with the pressures of the accountability system.

Colleague Trust remained a modest but significant factor in reducing teacher burnout throughout the time periods. However, when *Principal Trust* ceased to have a mitigating effect on burnout in 2012, Colleague Trust increased its beneficial effect on burnout. It was as if teachers were transferring their reliance on principals for support to their colleagues—likely because colleagues have a shared fate. Nevertheless, the mean scores for both Principal Trust and Colleague Trust diminished significantly, especially by 2012. Thus, while neither principals nor colleagues were as highly trusted by the time that job security was being jeopardized, each unit of trust assigned to either group had different effects on burnout. Colleagues may be supportive, but they are not expected to be effective in providing job security. In fact, they may actually be competitors for diminishing resources (including continued employment). However, principals are expected to provide security and if they do not or cannot do so, they are likely to be perceived as betraying their staff and hence, less trustworthy. The fluctuation in the relationship between burnout and the principal and colleague trust measures are consistent with the predictions of H2 and H3. The mean trust levels for colleagues diminished across the time periods as the accountability system, budgetary issues, and other stressors increased (Table 6.2). This provides support for the alternative hypothesis that colleagues are competitors for diminishing resources, reducing the overall level of *Colleague Trust*.

Student/Parent Trust is significant only until 2009. As job risk increased due to accountability and budgetary problems, trust of parents and students no longer decreased Burnout. The effect of budgetary constraints and the school accountability system have conjoined to change the relationship between teachers and students and hence teachers and parents. When student achievement had minimal effects on teacher job security and bonuses, teachers' trust in the competency of students (one of the five facets of trust noted by Tschannen-Moran and Hoy 2000), had few consequences. Parental involvement, generally associated with higher student achievement, was not as important when job security was not threatened by low student test scores. Increasing risks due to accountability and the budgetary cuts made more salient the extent to which teachers were dependent upon the actions of people over whom they had very little control. It should be recalled that the essence of trust is the willingness to place in the hands of others outcomes that are valued by the individual (Curall and Inkpen 2006). Job security is one such outcome and hence, the data supported H4.

6.10 Discussion

The data provided support for all four research hypotheses, although additional factors have operated to impact teacher burnout. Schools are dynamic organizations in which myriad events impinge upon the routines of teachers, administrators, and students. Thus, changes in accountability standards and the extent to which the job

security of teachers is affected by those standards is nuanced by history effects, including the impact of a devastating hurricane that changed the school populations and similar devastating effects of the national and state economy that caused the state government to limit school funding. The accountability system in Texas and the escalating expectations for student performance mandated by NCLB (changes in AYP) increased stress levels for teachers and in turn, elevated the extent to which they displayed burnout responses. However, when there was evidence that the draconian threats of the accountability system were not being realized in terms of job terminations, stress and burnout levels diminished. But, once budgetary constraints imposed on school districts resulted in the closing of programs and the layoffs of personnel, the accountability system affected job security.

Burnout represents a diminution in work satisfaction and altered relationships with those in the workplace. As external stressors increased burnout levels rose and the mix of predictors changed. Trust and burnout tend to co-vary negatively. Burnout is affected by contextual factors, including those that affect workload, interpersonal dynamics, and job security. Many individuals entered teaching with the assumption that their efforts would make significant differences in children's lives. Poverty has the ironic effect of making children more needful of what teachers can offer, but also more likely to resist or at least appear to be unappreciative of those offers. The result is often that students and teachers come to think that the other does not care (LeCompte and Dworkin 1991) or is untrustworthy (Van Houtte 2006). Dworkin (1987) illustrated how principal support and trust, as well as colleague support and trust, could serve as compensatory factors in maintaining morale in light of lower student performances and support. In high poverty schools, trust of one's principal and one's colleagues made up for the fact that students were not always making a year's academic progress each year. Furthermore, teachers, once they had attained tenure, were promised job security.

The Standards-based School Accountability Movement in the United States altered the equation and the understandings that school stakeholders had with one another. Teachers were no longer trading lower pay for job security (compared with the business sector); they were recipients of both lower pay and job insecurity. Additionally, the terms of their contract with society changed. It was not their own efforts that determined how well they were appraised; rather it was the efforts of their students on externally created, standardized tests. Additionally, their own appraisals had significant ramifications for continued employment and even the likelihood that their schools could be closed. Schools that systematically failed to meet AYP goals under *NCLB* could lose significant (and likely high-performing) members of their student bodies and face reorganization as a charter school with an entirely new teaching staff.

Prior to the external accountability system the trust between stakeholders, and especially between principals and teachers, was organic in nature. Trust was based not simply on the roles of teacher and administrator, but also included friendships among school personnel. In urban school districts relationships were often more formal than in rural contexts mostly because of school size but the bureaucratic formality has been exacerbated by high stakes standards of accountability. The dichotomy

of organic and contractual trust is an *ideal type*, no actual relationship in large-scale social systems is purely one or the other. Both before and since accountability, trust relationships have contained a combination of formal and informal elements however, the issue is one of the relative weight of one kind of trust versus the other. The externally-based accountability system shifted the balance toward more contractual trust, where friendships counted for very little. In a system in which personal relationships count for very little and in which there is distrust between contracting partners, external threats leave individuals with few resources for real support and trust. Burnout becomes more likely and there are fewer interpersonal factors that can effectively militate against it, thus there is a circular aspect to burnout and trust. The accountability system, especially as manifested in the Texas system and in No Child Left Behind, is based on a theory that prescribes threats of punishment for poor performance as a motivator of teachers and students to perform better (Dworkin 2008). Such threats, however, enhance burnout and diminish trust among school actors. As Forsyth et al. (2006) and Hoy and Tarter (2004) each have demonstrated, effective school improvements are predicated on a climate of trust and a sense of justice. Accountability systems that emphasize punishments destroy trust, exacerbate burnout, and defeat the intended goals of that system.

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