

TEACHER BURNOUT AND TEACHER RESILIENCE: ASSESSING THE IMPACTS OF THE SCHOOL ACCOUNTABILITY MOVEMENT

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Burnout is a ubiquitous concept in the social sciences, education and business administration. The concept has been evoked to account for any negative attitude about a role, a relationship, or a line of activity. In fact, a generation ago, *Time* magazine declared the existence of the “burnout of almost everybody” (Morrow, 1981, p. 84). Burnout has been cited as the cause of loss of interest and enthusiasm about a job, a marriage, a life style, or recreational activities. However, a more precise application of the concept of burnout is usually applied to the work of human service professionals and their loss of enthusiasm toward their work and an increased desire on their part to quit. The concept was coined by the clinical psychologist H. J. Freudenberger (1974) to describe the “wearing out” of human service professionals whose clients, patients, or students seem not to improve, recover, or learn. The malady is characterized by emotional exhaustion and a lost sense of personal accomplishment. The workers no longer perform their roles effectively and sometimes even become hostile or uncaring about those with whom they are charged to serve.

Within a few years of the publication of the Freudenberger article clinical psychologists conceptualized three dimensions of burnout and constructed scales for their measurement. The three themes that emerged from their work were: emotional exhaustion; a loss of a sense of personal accomplishment; and depersonalization, or the blaming the client, patient, or student for the sense of diminished accomplishments and the general burnout malaise (Cherniss, 1980, 1992; Maslach, 1978a, 1978b, 1993; Maslach & Jackson, 1981). Psychologists determined that burnout is a personal malady resulting from the inability to cope with stress and the stressors associated with the work role. The clinical approach to burnout tended to “blame” the victim of burnout and what logically followed were strategies to enhance coping skills, ranging from stress management training to holistic health care and yoga (Cedoline, 1982; Farber, 1991; Gold & Roth, 1993; Pines, 1993; Shaw, Bensky, & Dixon, 1981; Swick & Hanley, 1983).

Another psychological approach to burnout links the construct to threats to one’s sense of identity and a desire to see one’s work as meaningful. Burnout so conceptualized by Alaya Pines (1993) represents an “existential crisis.” That is, professionals (and many other individuals in post-industrial societies) come to derive their self-concept and self-esteem from their work roles. It is not uncommon for Americans and others to

introduce themselves to others by noting what they do as workers. Studies of professionals who retire indicate that many develop a sense of aimlessness and diminished self-esteem once their careers ends. Against this context, burned out human service professionals, no longer having a sense of the meaningfulness of their work, ask “Why am I doing what I am doing?” In short, the professionals experience a crisis of existence.

Counterpoised against the clinical approach that sees burnout as a personal malady caused by the lack of coping skills is a sociological approach that explores how structurally and organizationally-induced variables themselves serve as stressors that produce burnout or that conversely, insulate individuals from burnout-inducing stressors. While this sociological approach does not deny the role of stressors in burnout, it suggests that organizational changes may be necessary to promote teacher resilience. The sociological perspective views burnout as a form of role-specific alienation that can be created by structural and organizational barriers to effect role performances (Dworkin, 1987, 1997, 2001, 2007; Dworkin, Saha, & Hill, 2003; Dworkin & Townsend, 1994; LeCompte & Dworkin, 1991). This approach has viewed burnout as a form of work role alienation. The studies assert that burnout includes all of the dimensions of alienation described by Seeman (1959, 1975): powerlessness; meaninglessness; normlessness; isolation; and estrangement.

- Alienation implies a gap between expectations and experiences. Each of the components of burnout are indicators of that gap:
- Teachers who feel that they are unable to perform their roles as their pre-service training had led them to expect develop sense that they are *powerless* to exercise control over central aspects of their work (Shinn, 1982).
- If their activities do not produce positive results, including improved learning by their students, they come to see their work as *meaningless*.
- Often teachers withdraw emotionally from their students and their colleagues, thereby promoting a sense of *isolation*. Social class or ethnic differences between teachers and student exacerbate that sense of isolation.
- Teachers question whether the compromises they have to make in performing their roles are consistent with their central values and their self-image. Serious discrepancies between their values and the activities they are forced to engage in, lead teachers to develop a sense of *estrangement* from the teaching role.
- A sense of *normlessness* arises out of the other elements of alienation when teachers believe that school rules or district mandates are dysfunctional, or that such policies are unenforceable or un-interpretable (Sparks & Hammond, 1981). Frequent changes in school standards, practices, and policies and well as the frequent and changing overlay of new research designs intended to improve student learning under the aegis of external accountability mandates can lead teachers to perceive that clear norms for teaching are either non-existent or contradictory.

External Accountability Systems and Teacher Burnout

Externally-imposed school accountability systems have become a common element in many developed nations of the world and are increasingly common many developing nations. Even countries that do not have national curricula have sometimes embraced

some form of standardized achievement testing of students. Elbaz-Luwisch has observed that large-scale, cross-national assessments of student learning outcomes, including those by the IEA (International Association for the Evaluation of Education Achievement, "... have put increased pressure on state educational systems to demonstrate their effectiveness in producing competitive test results, often overshadowing more vital concerns such as preparing students for adult life, for competent citizenship and economic productivity" (2007, p. 658). Accountability standards have resulted in increases in teacher workloads (Hargreaves, 1994) and efforts to teacher-proof curricula, or what Apple (1987) termed "deskilling." In countries where OECD's PISA (Program for International Student Assessment) or the TIMSS (Trends in International Math and Science Study) data are used to make assessments of educational systems results cannot be disaggregated by students, teachers, or schools. Therefore results of the tests have affected national pride without necessarily benefiting or challenging individual educators. This is not to suggest that educational systems are free from pressures to raise test scores. Results of the 2000 and 2003 PISA ranked Finland highest and leaders in other countries called for their schools to copy the Finnish model. Any change in the national rankings is likely to result in the adoption of a new model. In turn, changes in models adopted by nations will have ramifications for the morale of teachers in those countries.

When test score results can be disaggregated to students, teachers, and campuses, the likelihood that test results will directly affect the morale of teachers increases exponentially. The disaggregation of results frequently means that praise or blame can be ascribed to individuals and organizations. When this happens, the phenomenon is termed "high-stakes testing." High-stakes testing refers to the use of achievement tests taken by students as the sole or principal evaluation instrument in awarding an educational outcome (grade promotion or retention), or to assess teachers, school administrators, schools, or school districts, including the likelihood of their continued employment, continued operation, level of funding, or certification. High-stakes assessments tend to be external evaluation systems because they are often imposed from outside the school system, or mandated by business, the public, or governments in response to external definitions that the schools are failing. Often the schools played a minor role in the crafting of the tests, or education agencies or governments had the tests created on the basis of educational standards developed by political bodies.

High-Stakes Testing in the United States

The forces that resulted in the emergence of high-stakes testing in the United States are well documented. They started with calls for greater school accountability took the form of the Standards-Based Reform Movement (usually called the Standards Movement), which emerged in the 1980s after the publication of *A Nation at Risk* (1983) by the National Commission on Excellence in Education. The commission received its charge from President Ronald Reagan. The corporate sector and social conservatives had charged that by placing a greater emphasis on humanistic and multicultural issues, the public schools of the 1960s and 1970s had abandoned educational "basics" and caused a decline in student achievement. The 1983 report declared that unless massive educational reforms implemented and student achievement improved,

American industry's competitive position in the growing global marketplace was in jeopardy. This rhetoric is what Berliner and Biddle (1995) labeled *The Manufactured Crisis*. Their book offered a cogent critique of *A Nation at Risk*, as it presented evidence that an ulterior motive of the report was to discredit the public schools sufficiently enough to enhance private school vouchers and the ability of elites to redirect their tax dollars to those private institutions.

Public opinion mirrored the commission's dire warnings. 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, Rose, & Gallup, 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.

Since the emergence of the Standards Movement in the 1980s, there have been numerous school reform efforts. All phases of the Standards Movement have made two assumptions about teachers, students, and assessment. Since its emergence in the 1980 through the *No Child Left Behind Act of 2001* (NCLB), the Standards Movement has assumed that:

1. Low student achievement is a product of incompetence and the lack of proper motivation on the part of teachers, school administrators, and schools. High-stakes accountability systems that include the prospect of draconian punishments for failure will create the necessary incentives for school personnel to work harder for the benefit of their students. This model of teacher and student motivation has been severely criticized by Amrein and Berliner (2002).
2. The cause of low student achievement is simply poor teaching and can be assessed by a single indicator such as annual standardized tests that accurately measure what students learn. These tests are based on what students need to know in order to become productive citizens who will maintain the competitiveness of the United States in a global economy.

The assumption of teacher blame is an over simplification that ignores certain realities of education in a diverse society. Most teachers work very hard but many, especially in large urban school districts, have classrooms filled with students who come to school with numerous academic, social, and personal disadvantages that arise from home and community environments and from poverty and racism. The Standards Movement including NCLB does not consider a "value added approach," whereby improvement rather than test passing rates, is the measure of school accountability.

Accountability systems that prescribe the use of a single annual achievement test violate appropriate test theory (Dworkin, 2005; Heubert & Hauser, 1999). Each test is an estimate of a student's "true score" and is subject to "regression effects." However, Kane and Steiger (2002) reported that among high-poverty students year-by-year or test-by-test variability in scores is quite common. Because of myriad events that affect students in minority and low-income neighborhoods and families, one test score may not predict the next test score. Furthermore, some children do less well on standardized, multiple choice tests than they do on other measures of their learning. Thus, portfolios of multiple indicators are preferable to a single test score. However,

multiple measures are more expensive, more difficult to interpret, and do not provide a unitary score that stakeholders demand.

Blaming and punishing teachers for shortcomings in the learning outcomes of students ignores the reality that factors outside of the control of schools often exert a significant effect upon student knowledge acquisition. Ironically, schools that assign their better teachers to classes of low-performing place these teachers in jeopardy. In models of accountability that focus on improved passing rates rather than test score gains, good teachers assigned to work with the lowest-performing students could face disciplinary action or termination if their students only make significant gains, but still do not reach the test's passing threshold. NCLB has especially been faulted for this all-or-nothing strategy.

Phases of the Standards Movement

There have been five waves of reform attempted since the beginning of the Standards Movement. After 1983, states implemented reforms intended to "... introduce uniformity and conformity through standardized curricula, rigorous requirements for student performance, promotion and graduation, and teacher evaluation" (Smylie & Denny, 1990). The reforms attempted to insure that only competent teachers were in the classroom and that graduates of the public school would be competent employees for American industry.

These reforms did not raise student achievement and consequently a second stage of reforms was proposed under the administration of the first President Bush in 1991. He called for "world class standards" and "break the mold schools" in his program, *America 2000*. The cause of low student achievement was determined to be the result of excessive centralization of America's schools. *Goals 2000* proposed to move decision-making closer to what occurred in the classrooms. Legislatures ordered decision making to be decentralized to the individual campuses, and this process was termed "Site-based Decision Making". As Dworkin and Townsend (1994) discovered, site-based systems often resulted in "turf battles" between principals, teachers, and parents over control of the schools. The resulting conflicts negatively affected teacher morale without raising student achievement. Under the Clinton administration the program became known as *Goals 2000*, resulting in the *Elementary and Secondary Education Act of 1994*, as known as the *Improving America's Schools Act of 1994*. It too, failed to raise student achievement.

By 1994, Texas and some other states began their own form of school reform through the implementation of "high-stakes testing." Schools could be closed and/or teachers and administrators fired if student achievement did not improve. Improvement was measured by the percentage of students at a school who passed a test, rather than gains in achievement. Again, assessment was based on thresholds rather than improvement, per se. Schools that raised test scores of low-performing students who nonetheless failed the tests were subject to draconian measures, including closure and teacher firings. These high-stakes accountability policies continued to depress teacher morale and sometimes led schools, principals, and teachers to "game the system" and cheat (Booher-Jennings, 2005).

Aspects of the Texas Accountability System, including high-stakes testing, were incorporated into the current reauthorization of Public Law 8910, the Elementary and

Secondary Education Act of 1965, known in its present form as the *No Child Left Behind Act of 2001*. In order to receive federal funds, including the federal subsidized lunch program, states had to submit a plan which promised that 95% of students in schools would be tested and 100% of those tested would be proficient (defined as passing a state-selected standardized test) by the academic year 2013–2014. Schools were to be assessed in terms of making “Adequate Yearly Progress” (AYP). Schools that fail to meet AYP over several years face severe consequences: the loss of some Title I funds (federal funds for low-income schools); the loss of enrollment as students are given public school choice to attend a school meeting its AYP goals; the termination of staff (from the principal and teachers to the custodial staff); and campus closure and reorganization as a charter school.

Measuring the Effects of the Standards Movement on Teacher Burnout

Over the past 30 years I have surveyed teachers and recorded the changes in teacher morale and burnout as different waves of school reform have been implemented, especially in Texas schools. Prior to the Standards Movement teacher burnout varied inversely with years of teaching experience, although there was some curvilinearity to the pattern. Burnout was the malady of neophytes in the years prior to school accountability standards. Using a cross-sectional analysis of data on cohorts of teachers, mean burnout scores were moderate for the newest teachers, increased slightly during the first 5 years, and then slowly declined over the next 30 years of experience (Dworkin, 1987). Following the states’ implementation of accountability systems in response to *A Nation at Risk* (1983), the pattern changed. More experienced teachers were affected, as well as gender and ethnic sub-groups of teachers. These varying patterns have been discussed by Dworkin and Townsend (1994) and Dworkin (1997, 2001, 2007).

Figure 1 displays these patterns across six time periods, each demarcated by changes in the nature of the accountability systems. The *x*-axis in Fig. 1 represents the number of years teaching as reported by survey respondents. The values on the *y*-axis are normalized burnout scores (expressed as *z*-scores), which permit comparisons of results across different reform waves. The burnout scale is a sociological one, based on the dimensions of alienation reported by Seeman (1959, 1975). Dworkin, Chafetz, and Dworkin (1986), Dworkin (1987, 2000) discuss the psychometric properties of the “Dworkin Teacher Burnout Scale,” also referred to as the “Alienational Burnout Scale” (Dworkin, 1997, 2000). The scale itself was constructed through the use of factor analysis and scores are reported as in *z*-scores. Positive scores reflect higher levels of burnout and negative scores lower levels of burnout. As a standard score, the mean is zero and the standard deviation is one.

Pre-Reform Data

Line one describes the burnout scores for teachers by years teaching. The sample is 3,444 Houston area teachers. The data, collected in 1977, depict progressively lower burnout levels among teachers after the third year (the end of the probationary period).

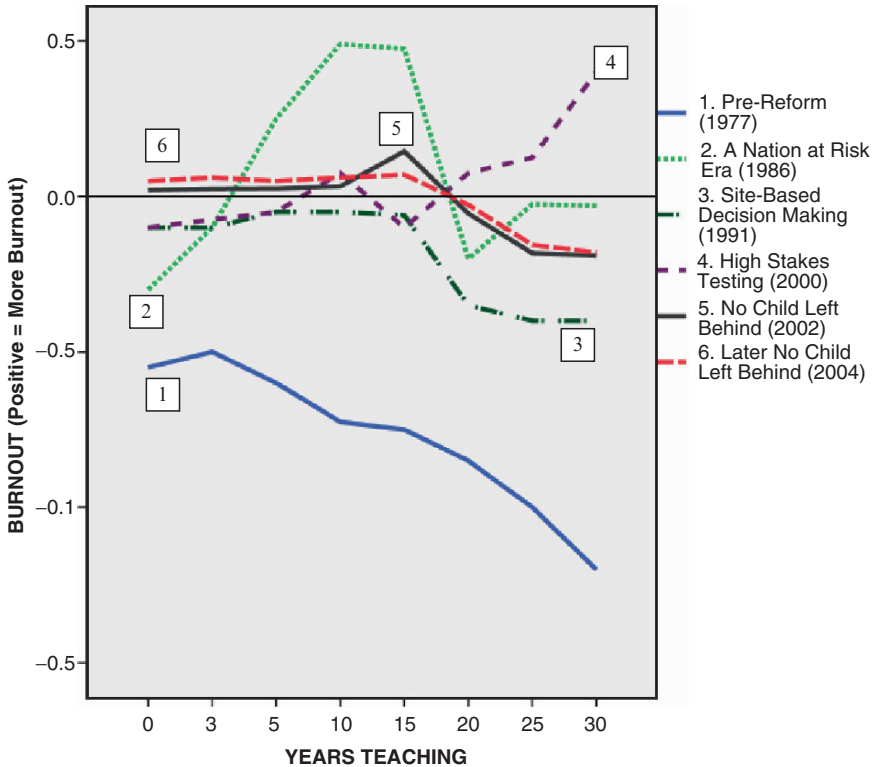


Fig. 1 Burnout by years teaching for each school reform era

Even the highest mean burnout scores were significantly below those of teachers during any of the Standards Movement reform periods. Burnout existed, but the scores had to be adjusted (standardized) in order to conform to the same metric during the later reform phases. Thus, the z-scores would have been higher and some within the positive (higher burnout) range if scale scores for other periods were not also included. Burnout was highest among young, white teachers and especially teachers assigned to schools where the principal was seen as unsupportive, uncaring and uncollegial.

A Nation at Risk Data

The second line represents data collected on 1,060 Houston area teachers in 1986, after Texas had implemented competency testing for teachers and reclassified teachers downward on the career ladder system (tied to pay increases that ultimately were never implemented because of the lack of funds). Although the test was a minimum skills test, passable by most middle school students and over 95% of the teachers passed the test, competency testing was nonetheless a new and stressful experience to teachers who had come to think of themselves as skilled professionals. Assessment also included in-class observations by school district personnel (or by the principal) and

this further challenged the self-image of teachers as experts. It further denied teachers the sense of autonomy often expected by professionals (Duke, 1984). During this period of reform principals had to serve as evaluators of teachers, which challenged the perception of their supportiveness and collegiality. Mean burnout scores were significantly higher than had been found prior to the reforms and were especially high among teachers with 10–15 years of experience. Burnout scores were highest among minority teachers during the period.

The Site-Based Decision Making Data

The third line in Fig. 1 is based on a small sample of 261 Houston area teachers surveyed in 1991. Teacher evaluation was no longer novel. The implementation of reforms was more often taken for granted than had been the case 5 years earlier and this was reflected in lower mean burnout scores. The accountability system of the previous period was still in place, continuing to challenge the sense of professionalism held by experienced teachers. These more senior teachers were most likely to be involved in stressful “turf battles” with the principal and parent committees under the site-based plans. The teachers from experience levels associated previously with the highest mean burnout scores also had the highest burnout scores in 1991.

High-Stakes Testing Period Data

The 2000 data set consisted of 2,961 Houston area teachers. Texas had adopted the Texas Assessment of Academic Skills test (TAAS), a high-stakes standardized test in 1994 and gradually implemented more accountability consequences into it, including the closing of schools and the termination of teachers. With a standardized student achievement test fully in place, rather than either an easy competency test or an evaluation by a principal, teacher evaluation became removed from the control of teachers or even campuses. Other than by cheating or gaming, test scores were not subject to manipulation, and were yet a further step removed from the actual classroom behaviors of the teachers. During prior evaluations teachers had control over the way in which they presented curricula. However, they had much less control over how well their students assimilated the curricula and translated it into multiple-choice answers on a standardized test. Now the fate of schools and the careers of teachers depended on the performances of students, who often were the least trusted actors in the accountability drama.

The introduction of high-stakes testing had dramatic effects on teachers. One striking aspect of the fourth line in Fig. 1 is the significantly higher mean burnout scores of the most experienced teachers. Teachers with 20 or more years of experience had the highest burnout scores in this period. In fact, teachers with 30 years of experience had mean burnout scores that were as high as the highest observed during the reforms following the publications of *A Nation at Risk* in the 1980s, when accountability was first implemented. It is possible that some of the respondents to the 2000 survey who had been teaching for 20–30 years were the same individuals who had high burnout scores in 1986, when they had been teaching for 10–15 years. However, the highest

scores in 1986 were from minority-group teachers, while the highest scores in 2000 were found for teachers from all ethnic groups, and especially white teachers working in high-poverty, minority schools. Experienced teachers, and especially those teaching in high-poverty schools, are challenged by the low student achievement of children who bring few academic resources from their home environments. The work is difficult and many of the most senior teachers are more expert at classroom management and discipline than at teaching to a standardized test that by law changes each year. Teachers who were close to retirement were under the most stress, hoping that they could avoid losing their jobs due to school closures before retirement age.

No Child Left Behind Data

The fifth and sixth sets of lines in Fig. 1 represent two periods of the implementation of the current *No Child Left Behind Act of 2001*. The first data set was collected from a survey of Houston area teachers in 2002, soon after the implementation of the law, while the second data set was obtained in 2004, after most elements of the law were fully in place. NCLB not only required schools to meet AYP standards that escalated each year, but also implemented a mandate that teachers had to be “Highly Qualified.” This standard was met if the teacher had a degree and/or certification in the subject matter she/he taught. Although there were subsequent modifications and exceptions adopted after 2004, the law meant that many teachers had to re-qualify for certification, a procedure that involved testing.

By 2003, Texas replaced the TAAS test with a more rigorous exam, the Texas Assessment of Knowledge and Skills (TAKS), and mandated an end to social promotion, or the practice of passing students who failed the test on to the next grade. Students, who failed the reading section of the TAKS in third grade, or the reading and/or math sections of the TAKS in fifth grade or in eighth grade, would have to retake the exam and possibly go to summer school. If they continued to fail the test, they could be required to repeat the grade. An exit version of the test (TAKS and earlier the TAAS) was a requirement for graduation since the 1990s. Re-certification and the pressure to raise student achievement high enough that retention-in-grade was minimized negatively affected teacher morale.

Mean burnout scores for both of the NCLB era data sets are similar. Possibly because of the “Highly Qualified” rule, they are higher than those in the 2000 data when high-stakes testing was only a state mandate. One striking difference between the NCLB era data and the data from 2000 is that the most experienced teachers no longer have the highest mean burnout scores. Part of the change may have been due to the retirement of some of the most burned out senior teachers and part from the realization that wholesale firings of senior faculty were unlikely as the state continued to experience substantial increases in student enrollment. The Texas Education Agency reported that student enrollments grew between 2000 and 2004 from 3.99 million students taught by 268,000 teachers in 2000 to 4.31 million students taught by 289,000 teachers in 2004 (Texas Education Agency Academic Excellence Indicator System for 2000 and 2004).

As Fig. 1 displays, burnout patterns vary with years of experience and those patterns are modified in the different school reform efforts. Prior to the Standards Movement

burnout was most often the malaise of inexperienced teachers. Dworkin (1987, p. 155) reported that burned out teachers were most likely white teachers; teachers assigned to schools whose student body racial composition they did not prefer; who were racially different and isolated from the student body; who reported experiencing discrimination that they attributed to racial issues; who had sources of income other than their teaching salary to rely upon (including from a spouse with a much larger income than that of the teacher); who did not get along with their principals; and who believed that fate, chance and luck determined their destinies (external locus of control) more than any of their own actions. Burnout was further exacerbated when teachers defined their jobs as stressful and saw their principals as uncollegial, unsupportive, or treated them as expendable. Burnout per se did not vary by gender. However, male teachers were more likely to quit teaching if they experienced burnout, in part because men at the time (1977) and even today have many more career alternatives to teaching than do women.

The Standards-Based Reform Movement in its various phases altered the context of teacher burnout. Accountability systems deny teachers their sense of professional status, including their sense of professional autonomy. Teachers are required to take competency tests long after they have completed their pre-service coursework in college and even after they gained tenure. The more recent components of the Standards Movement include high-stakes testing of students with ramifications for the continued operation of schools and the continued employment of the teachers at those schools. Yet, reliance upon high-stakes tests further separates the teacher from his or her performance. When accountability consisted of the demonstration of observable skills, teachers could exercise some control over the display of expertise. However, when the measure of competency is based on the performance of the teachers' students, professional control is further distanced from the teachers.

Additionally, the use of quantified test scores, externally imposed, and machine tallied at a state agency, means that groups of teachers who might have had a privileged status at their schools no longer have advantages and are just as threatened as any other instructor. This de-personalizing aspect of accountability can alter the demography of who burns out and who does not. Most notably, all ethnic groups of teachers are likely to burn out, but male teachers are now more likely to experience burnout than female teachers, as their relatively higher gender status is countered by the more "objective standard" of a student test score (Dworkin, 2007).

Teacher Burnout and Teacher Resilience

The Standards-Based Reform Movement has altered the patterns and extent of teacher burnout, but it has not altered questions of why some teachers burn out and others do not. The clinical psychological approach argues that some teachers have better coping skills or personalities that allow them to resist the negative effects of stress. The sociological approach asks what organizational factors and social networks are available to mitigate job stress and facilitate coping. Perhaps because of the growing push toward school accountability in many nations, concerns about teacher burnout

and the question of teacher resilience have recently resurfaced in the literature of the social psychology of education.

Resilience has been defined as "... the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances" (Masten, Best, & Garmezy, 1990, p. 425). Similarly, Bernshausen and Cunningham (2001) defined resilience as the ability to bounce back after encountering stressful conditions. While Bobek (2002, p. 202) noted that, "A teacher's resilience is enhanced when he is capable of assessing adverse situations, recognizing options for coping, and arriving at appropriate solutions." The central elements of resilience were enumerated by Howard and Johnson (2004) as they described how some Australian teachers cope successfully in situations that produce burnout among many others. Key characteristics of the resilient teacher included a strong sense of agency (i.e., internal locus of control), or the feeling that they could control any situation; a tendency not to dwell on past mistakes or failures in an agonizing fashion; a capacity to depersonalize unpleasant experiences and thereby understand them analytically; and a strong moral sense of purpose, such that one comes to see work in troubled, and hence burnout-prone schools as a challenge driven by a desire to make a difference. Finally, resilient teachers have strong support groups, including colleagues and administrators who value their efforts.

Evers, Tomic, and Brouwers (2005) reported that teachers who engage in "maladaptive thinking" are less resilient and more likely to burn out. Such individuals cannot cope with rejection, believe in so-called "magical thinking," whereby superstitions dominate their attributions, and engage in rigid, "dichotomous thinking," often involving simple answers to complex issues. These patterns of non-resilience are quite similar to what was described as an external general expectancy or external locus of control first identified by Rotter (1966) and later by Lefcourt (1976). Dworkin (1987) reported that burned out teachers were significantly more likely to be externals, who believed that fate, chance, and luck controlled their destinies, while internals who did not burn out believed that they were responsible for shaping their own destinies. Similar to locus of control is the sense of self-efficacy. Friedman (2003) reported that a strong sense of self-efficacy in interpersonal relations within the school as an organization and in relations within the classroom reduced the sense of burnout among Israeli teachers.

Clinical strategies that help teachers to adopt a sense of agency, to depersonalize negative experiences, to develop a sense of calling and strong moral, to cease to engage in maladaptive and categorical thinking or to acquire a sense of self-efficacy (i.e., an internal locus of control) may be effective in enhancing resilience. They require one-on-one approaches to the development of coping skills, but they do not attack organizational and structural problems that teachers experience. A more cost-effective approach would be organizational, structural, and policy changes that promote teacher efficacy. Such changes to the organization of schools might promote what can be called "organizationally facilitated resilience" as a means of mitigating teacher burnout.

In their discussion of resilience among teachers, Howard and Johnson (2004) also recognize the significant role of social support networks, including supportive co-workers and administrators. Likewise, policies and practices at schools can have the effect of stifling teacher enthusiasm. Gaziel (2004) observed that restrictive and unsupportive

behaviors of principals are often implicated in low teacher morale and high teacher absenteeism. Dysfunctional organizational rules and administrative actions tell teachers that they are in toxic work environment or that they are considered expendable employees. Such messages deny teachers the opportunity to develop a sense of agency (Howard & Johnson, 2004) or efficacy (Friedman, 2003).

Schools faced with accountability standards easily become rule bureaucracies, in which arbitrary policies are mindlessly imposed and strip teachers of their professional identities. Low-performing schools, under threat by accountability mandates, have developed policies that are frantic responses to such external threats. In one Houston area school with particularly low test scores, the principal decided that a more professional teacher dress code would be a first step toward higher achievement. The principal ordered that all female teachers must wear pantyhose all year long. Summer school teachers in classrooms with inadequate air conditioning had to follow the rule even when the temperatures outdoors were near 100°F. In another instance, a large school district was concerned about claims that teachers helped students cheat on the state-mandated, high-stakes test by erasing wrong answers on the scan sheets and replacing them with correct one. The district ordered the teachers to break off the erasers on each student's pencil just before the test. Of course, this did mean that students who legitimately wanted to change their answers during the test were unable to do so and test scores for the district declined that year.

Finally, professional status means that teachers develop their own lesson plans. In another high-poverty, low-performing school the principal informed the teachers that she did not think they were competent enough to develop quality lesson plans for the year. Instead, she herself wrote up a unitary lesson plan that was to be used in all grades and subjects. The plan was useful in some subjects, but not in others, and further informed the teachers that they were not trusted to do a task expected of "real teachers."

The role of administrators in facilitating resilience or in reducing the probability of teacher burnout can be illustrated from the following study of teacher burnout. Using a sub-sample of 291 teacher surveys, Dworkin (1987) constructed four statistical types of principals reported by the teachers and he then examined the relationship between job stress and teacher burnout for each of the types. However, the *relationship* between stress and burnout varied by principal type. The four kinds of principals were as follows: (1) principals who were seen by their teachers as supportive and effective in making changes; (2) principals who were seen as unsupportive but effective; (3) principals who were seen as supportive but ineffective; and finally (4) principals who were seen as unsupportive and ineffective. Levels of reported job stress were homogeneous across the four categories of principals. When the principals were seen as supportive, regardless of whether they also were perceived to be effective, the regression coefficient between stress and burnout was not significant. Rather, a personality component of the teacher (locus of control) was implicated in linking stress to burnout. However, when the principals were seen as unsupportive, regardless of whether they were seen as effective, the regression coefficient between stress and burnout was statistically significant. In my conceptualization of burnout as role-specific alienation, the principal affects the extent to which teachers perceive their role as meaningless.

A supportive principal tells the teachers that their efforts are valued and this breaks the functional connection between stress and burnout.

A follow-up study by Dworkin, Haney, Dworkin, and Telschow (1990) compared the effect of supportive principals and supportive colleagues on the linkage between stress and burnout. While most co-workers were supportive when the principal was supportive, the effect size of principal support was significantly larger than that of co-workers. Further, when the principal was unsupportive but co-workers offered support the link between stress and burnout remained strong. Hence, principals are better able than colleagues to provide the support necessary to make stressful work situations less burnout-inducing. When there is little or no principal support, co-workers cannot compensate and reduce the likelihood of stress or burnout. It is probable that under the condition of little support for principals most of one's colleagues are likely to burn out, too and that militates against the effectiveness of co-worker support.

The two studies describe above were conducted during the pre-reform era. Are the patterns of principal and co-worker support observed prior to the Standards Movement likely to function in a similar fashion in an era of high-stakes standardized testing under NCLB, where teacher assessment is distanced from actual teaching and rests upon the performance of students? This question was addressed in a survey conducted by my research team in 2006. The study had a sample of 1,388 urban public school teachers in the Houston area. Particular attention was focused on the inter-mix among principal support, co-worker support, perceived job stress, and burnout, along with an array of covariates.

Table 1 presents the results of a regression analysis of the survey data. Covariates included demographic characteristics of the teachers, including ethnicity, gender, years teaching (expressed as a squared function because of the curvilinear nature of the relationship between years teaching and burnout), and grade level taught. Preliminary analysis eliminated academic degrees as a useful covariate. Perceptions about the school were incorporated into the model, including whether the campus was seen as safe and secure

Table 1 Predictors of teacher burnout under high-stakes testing conditions ($n = 1,388$)

| Independent variables | <i>b</i> | SE (<i>b</i>) | β | <i>t</i> | <i>p</i> (<) |
|---------------------------|----------|-----------------|---------|----------|--------------|
| Asian-American teacher | .143 | .142 | .021 | 1.06 | NS |
| African-American teacher | .148 | .050 | .067 | 3.00 | .003 |
| Hispanic teacher | .130 | .063 | .047 | 2.08 | .037 |
| Female teacher | -.127 | .054 | -.050 | -2.36 | .018 |
| Years teaching squared | .005 | .004 | .029 | 1.33 | NS |
| Grade level taught | -.052 | .020 | -.063 | -2.63 | .009 |
| Safe & secure school | -.171 | .028 | -.170 | -6.08 | .0001 |
| External locus of control | -.176 | .027 | -.169 | -6.60 | .0001 |
| Job stress | .433 | .024 | .433 | 18.03 | .0001 |
| Supportive principal | -.222 | .031 | -.218 | -7.15 | .0001 |
| Supportive co-workers | -.105 | .031 | -.102 | -3.42 | .001 |
| Intercept | .095 | .075 | | 1.26 | NS |

Adjusted $R^2 = .627$

NS not significant

(a relative absence of gang activities, drugs, and risks to personal safety or the safety of one's possessions) and whether the teacher had an external locus of control. Key independent variables were the perceived level of job-related stress, perceived supportiveness of the principal, and perceived supportiveness of co-workers.

When burnout was regressed only on the support and stress variables (without the other covariates in Table 1), the standardized effect of stress was $\beta = .500$, while the effects of principal support was $\beta = -.267$ and co-worker support was $\beta = -.147$. Job stress is the most powerful predictor of burnout; principal support is nearly twice as effective in reducing burnout as is co-worker support. With the covariates in place, stress remains the strongest predictor of burnout, having an effect size of $\beta = .433$. Principal support reduces burnout, as does co-worker support, but now the respective coefficients are $\beta = -.218$ and $\beta = -.102$. Principal support remains more than twice as effective in reducing burnout as is co-worker support.

Next the perceptions of the supportiveness of principals were categorized as had been done in the pre-reform study. The scales for principal support and co-worker support are expressed as z-scores. The distribution of scores were trichotomized and scores that were less than one standard deviation below the mean were defined as non-supportive and scores that were more than one standard deviation above the mean were defined as supportive. Separate regressions were run to assess the effect of job stress on burnout under conditions of supportive and unsupportive principals and co-workers. The covariates were included in the analyses, but are not reported in Table 2. The relationship between job stress and burnout remained strong under all conditions of support by principals and by co-workers. When principals were seen as supportive, the effect of stress on burnout was $\beta = .326$ and when principals were seen as unsupportive the effect of stress on burnout was $\beta = .574$. Likewise, when co-workers were seen as supportive, stress has an effect size on burnout of $\beta = .421$ and when co-workers were seen as unsupportive the effect of stress on burnout was $\beta = .526$. While support either from the principal or co-workers attenuated the association between job stress and burnout slightly, it did not eliminate the effect of stress on burnout. Expressed differently, when high-stakes accountability systems are in place and teacher assessment depends upon student test scores rather than observational measures conducted by principals or when such assessments are not mandated, the level of job stress cannot be mitigated by social support. Under NCLB poor performances by students have negative consequences for all school personnel,

Table 2 The effect of job stress on burnout under differing conditions of principal and co-worker support

| Condition | <i>b</i> | SE (<i>b</i>) | β | <i>t</i> | <i>p</i> (<) |
|--|----------|-----------------|---------|----------|--------------|
| Supportive principal (<i>n</i> = 500) | .260 | .053 | .326 | 4.86 | .001 |
| Unsupportive principal (<i>n</i> = 216) | .531 | .060 | .574 | 8.87 | .001 |
| Supportive co-worker (<i>n</i> = 235) | .364 | .059 | .421 | 6.20 | .001 |
| Unsupportive co-worker (<i>n</i> = 243) | .485 | .061 | .526 | 7.93 | .001 |

teachers, their co-workers, and the principal. High-stakes testing has the potential of countering support or even resiliency in reducing the likelihood of teacher burnout.

Summary and Conclusions

Public school teachers experience higher than average rates of job stress and burnout than most college-educated workers. As far back as 1932, the sociologist Willard Waller commented on the high rate at which teachers became discouraged and quit their jobs, even in the years of the Great Depression. Teachers are expected to work long hours, without compensation for the time spent bringing work home, and generally are paid relatively low salaries. Teachers who work with children, who because of poverty and racial discrimination, bring many academic disadvantages to school, are often expected to work even longer and harder. Schools in blighted neighborhoods are frequently under-staffed and lack necessary material resources. Teachers sometimes have to “make do” with less than they need to raise student achievement. Conditions in high-poverty schools, as well as in many less-disadvantaged schools, make teaching a stressful occupation.

Job stress is a central precondition of burnout, both from the clinical psychological perspective and the sociological perspective. The psychological approach views burnout as a failure to cope with stress and manifests itself in emotional exhaustion, the loss of a sense personal accomplishment, and a tendency to depersonalize relations, especially with students, who the teachers see as the cause for their lost sense of accomplishment. The sociological approach portrays burnout as an organizational and structural problem that results in role-specific alienation. Burnout comprises the dimensions of alienation described by Seeman (1959, 1975), including feelings of powerlessness, meaninglessness, normlessness, isolation, and estrangement. The unit of analysis in psychology, and especially clinical psychology is the individual. Consequently, strategies to address burnout are individualistic, intended to make teachers more resilient and better able to cope with stress. Sociological orientations emphasize structural and organizational causes, including the imposition of the social structure on groups and individuals. The redress of burnout as seen by sociologists usually involves making structural changes to organizations in order to reduce job stress.

A growing stressor that teachers face has been the emergence of the Standards-based Reform Movement (Standards Movement) in education that began in the 1980s. Concerns of business, governmental, and public stakeholder regarding student achievement and the prospect of declining competitiveness of national economies have exacerbated job stress and burnout among teachers, who are often blamed for not working hard enough to raise student standardized achievement tests scores. Early components of the reforms included competency testing of teachers and a call for linking salary to student learning outcomes. The latest reforms include high-stakes testing, in which student achievement outcomes can be used to close schools and terminate all staff. The *No Child Left Behind Act of 2001* (NCLB) provides an example of such reforms. Using a 30 years of survey data, this chapter has examined the impact of progressive changes in school reform on the level and patterns of teacher burnout. Data were collected in the Houston metropolitan area (United States).

Compared to pre-reform data of the 1970s, the various manifestations of the Standards Movement has increased burnout and adversely affected more experienced teachers. High-stakes testing, unlike earlier reform components that specified direct observations of teacher performances or that included standardized testing of teachers, makes teachers even more powerless and prone to burn out. High-stakes testing relies on improvements in student passing rates on standardized tests. Teachers can exercise some agency over their own test taking or over the content of the lesson they teach during an observation. However, when evaluations are based on the performances of their students on standardized tests, teachers are distanced from the evaluation process by one further step.

Many investigators have begun to focus on the characteristics of resilient teachers, who exercise agency and a sense of control over their work situation, do not dwell excessively on failures, accept challenges, and who seek to make a positive difference in the lives of children. As a psychological approach the focus of much resiliency research has been on enhancing individual skills. However, resiliency research has also focused on support networks, including those involving co-workers and the campus principal. Social support systems have been found to break the functional connection between stress and burnout, by allowing teachers to understand that their work is meaningful to their colleagues and administrators. Much of the work on the role of administrator or colleague support on the relationship between stress and burnout has been based on data collected prior to the reforms that included high-stakes testing and the prospect of school closings and terminations when passage rates on tests do not improve.

Data presented in this chapter suggest that while social support systems can affect the functional connection between job stress and burnout, they no longer can insulate teachers from stress or burnout. This is partly due to the fact that the most recent reforms and especially those under NCLB place all teachers and the principal in jeopardy. Stressed individuals merely exacerbate one another's stress levels.

The intent of this chapter was to examine how school reforms that emerged out of the Standards Movement have altered levels of patterns of teacher burnout. No attention has been placed on how burnout affects teacher turnover or student achievement. Previous work addressed these issues (Dworkin, 1987, 1997). However, it is appropriate in closing to summarize some of the consequences of teacher burnout.

It seems logical that teacher burnout is implicated in teacher turnover. Job stress and burnout sap teachers of enthusiasm and have been linked to increased teacher absenteeism (Gaziel, 2004; Leiter, 1991). However, the long-term effects of burnout on teacher turnover remain problematic. This is because professionals who have invested educational efforts in a job do not regularly quit without prospects of other employment. What may more likely happen is that they withdraw enthusiasm and the willingness to make extra efforts in their work. In short, their commitment wanes. Twenty years ago this seemed to be the case partly because most public school teachers are women and career opportunities outside of teaching and the other semi-professions have historically been limited for women. Thus, when Dworkin (1987) reported on a 5-year follow-up of every teacher in the pre-reform sample who was burned out and expressed a desire to leave teaching, those with skills that had analogues in the private sector (especially math, science, industrial arts, business) were seven time more likely to have quit than those whose skills focus on working with little children. However, profes-

sional careers for women have expanded significantly. A majority of college-educated women do not consider public school teaching as a career option. Among those who do, the prospect of leaving public education in light of job stress and burnout is likely more enticing. Staffing reports from the US Department of Education and from state education agencies indicate that there are critical shortages of teachers, especially in high demand areas such as science, math, and bilingual/English as a second language instruction. Many of the shortages are partially a result of deployment patterns rather than actual shortages (Ingersoll, 2007). However, urban school districts have in recent years offered bonuses to teachers willing to come to their schools. Some high-poverty, inner-city schools lose most of their new faculty each year.

Burnout does involve the removal of positive affect and energy from teaching. In the pre-reform period burned out teachers seemed to have little negative effect on the achievement of average and low-performing students, but reduced by 20% the academic gains of previously high-achieving students (Dworkin, 1987). However, Pamela Tobe (in Chap. 73 of this book) reports in “Value-added Models of Teacher Effects” that teacher burnout affects teacher performances with the result that gain scores on Texas’ standardized achievement test are significantly lower for all groups of students. In a time of high-stakes testing and potentially draconian consequences for students, teachers, and schools, teacher burnout seems to have far-reaching effects. Diminished student achievement in turn can result in student grade-retention, which especially in later grades can result in higher student dropout rates.

Biographical Note

A. Gary Dworkin is Professor of Sociology and co-founder of the Sociology of Education Research Group (SERG) at the University of Houston in Texas, USA and a former chair of the Department of Sociology. Currently, he is Secretary of Research Committee 04 (Sociology of Education) of the International Sociological Association. He has served on the Council of the Sociology of Education section of the American Sociological Association and as President of the Southwestern Sociological Association. His publications include ten books and numerous articles on teacher burnout and student dropout behavior, minority-majority relations and gender roles, and the assessment of school accountability systems. Recently, Dworkin published essays on accountability and high-stakes testing under *The No Child Left Behind Act in the journal Sociology of Education* (2005), in Sadovnik et al., *No Child Left Behind and the Reduction of the Achievement Gap: Sociological Perspectives on Federal Education Policy* (Routledge 2007) and on the unintended consequences of school accountability in the *International Journal of Contemporary Sociology* (2008). He also assessed the effects of retention-in-grade (with Jon Lorence, published by the Brookings Institution in Washington, D.C., 2002). Dworkin (with Rosalind J. Dworkin) wrote three editions of *The Minority Report*, a race, ethnic, and gender relations book (3rd edition published by Wadsworth 1999). Among some of his earlier books on teachers and teaching are *Teacher Burnout in the Public Schools* (SUNY Press, 1987), *When Teachers Give Up* (Hogg Foundation/Texas Press, 1985) and *Giving Up on School* (with Margaret D. LeCompte, Corwin/Sage Press, 1991).

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