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# Values as moderators of stressor-strain relationships among urban school teachers

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VALUES AS MODERATORS OF STRESSOR-STRAIN RELATIONSHIPS AMONG  
URBAN SCHOOL TEACHERS

A Thesis

Presented to

The Faculty of the Department of Psychology

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Troy Grant Buchanan

August 2004

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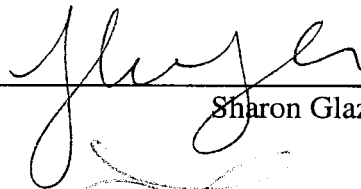
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## Abstract

### VALUES AS MODERATORS OF STRESSOR-STRAIN RELATIONSHIPS AMONG URBAN SCHOOL TEACHERS

Moderating effects of personal values on stressor-strain relationships were examined. These relationships were expected to be more positive for teachers high (versus low) on achievement, benevolence, and tradition values, but less positive for teachers high (vs. low) on self-direction and stimulation values. Self-administered surveys were distributed to 730 teachers in an urban school district; the response rate was 34.25%. Although most values were not significantly correlated with stressors or strains, some values did moderate relationships between some stressors and strains. Results suggest that in some cases, endorsing certain values intensifies stressor-strain relationships and in other cases the relationship is mitigated. Implications of results are discussed in terms of healthy versus unhealthy and growth versus deficiency values.

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## CHAPTER I. INTRODUCTION

Studies undertaken by the Carnegie Foundation (1986) to understand the causes and impact of stress on teachers have shown that 50% of all teachers leave the profession within the first seven years because of job-related stress. Because teaching is a stressful occupation (Abel & Sewell, 1999; Ma & Macmillan, 1999; Remy, 1999; Weiss, 1999), teachers often self-select out of the profession. Withdrawal from the profession of teaching, because of physical and emotional ailments, has been related to “stress” (Carnegie Forum, 1986). Numerous studies (e.g., Harris, 1999; Jamal, 1999; Ma & Macmillan, 1999; MacDonald, 1999; Remy, 1999) have focused on understanding teacher subjective well-being, stress, and withdrawal. The need to provide every child with qualified and committed teachers in the face of an ongoing national teacher shortage supports the importance of conducting research on antecedents and correlates of well-being, in hopes of better understanding “stress” and its effects on teachers.

However, studying antecedents of well-being is not enough. The tendency to perceive job circumstances as stressful depends in part upon the characteristics of the individual (Kimmunen, Vermulst, Gerris, & Makikangus 2003). Individuals exposed to the same environmental conditions may express remarkably different psychological, physical, and behavioral reactions on account of different personality characteristics (see Kahn & Byosiere, 1992). One individual difference variable is values. Values are guiding principles in one’s life, rooted in social, welfare, and biological needs (Schwartz,

1990; 1992). The focus of the current study therefore is the moderating effects of personal values on stressor-strain relationships.

Studies (Bilsky & Schwartz, 1994; Schwartz, Sagiv, & Boehnke, 2000) have provided evidence suggesting that there is a relationship between values and mental health and well-being. Emphasizing certain values (e.g., benevolence or self-direction) leads to behaviors that were instrumental to improving one's subjective sense of well-being, whereas emphasizing other values did not lead to such feelings (Veenhoven, 1991). Schwartz et al. (2000) found that giving priority to certain values, for example self-transcendence values (values concerning welfare for others, such as benevolence) is associated with low measures of worry (a strain), whereas giving priority to self-enhancement values (focusing on pursuit of self-interest, e.g., power and achievement) is associated with higher measures of worry. Glazer (2001) showed that some higher order values moderated the stressor-strain relationship among a sample of nurses in Italy. In particular these relationships probably occurred because values were driven by needs and goals. In other words, values, that function as goal-directed motivators, could affect how "stressed" one feels. When a person's values are attained, then subjective well-being is increased (Schwartz, 1990).

Schwartz (1990) derived ten distinct value types (see Table 1). These value types represent motivations common to people across cultures (Schwartz, 1992) and provide the basis for the current study. Several value types (e.g., tradition, achievement, benevolence) have been related to well-being and other values types (e.g., tradition) have

been linked to ill-being and are therefore theorized in the current study as having potential moderating effects on stressor-strain relationships.

Sagiv and Schwartz (2000) examined the ways in which individual differences in basic values were related to subjective-well being. Their framework was based upon three theoretical underpinnings of individual difference research. They investigated the extent to which a person's subjective sense of well-being depended upon his or her profile of value priorities. Sagiv and Schwartz hypothesized that people for whom particular "healthy" value types (e.g., benevolence) are especially important may tend to have a more positive sense of well-being than persons guided by a different set of "unhealthy" values (e.g., tradition). They concluded that there were "healthy" or "unhealthy" values. Healthy values refer to values that increase personal happiness, whereas unhealthy values have the reverse effect. Sagiv and Schwartz's study suggested that certain "healthy" values might increase the sense of subjective well-being. Jensen and Bergin (1988) identified self-direction, benevolence, and universalism as "healthy" values. There is also evidence that the value types, achievement and stimulation are "healthy" values (Sagiv & Schwartz, 2000). Power, conformity, tradition, and security values were considered "unhealthy."

Sagiv and Schwartz also hypothesized a reversal of direction of causal influence, from subjective well-being to value priorities. That is, well-being might influence healthy values. People who are happy and satisfied with their lives may be more likely to have emotional resources to pursue "healthy" values, whereas people who are unhappy

and dissatisfied may be occupied more with their own problems, and therefore lack the resources to pursue “healthy” values (Bilsky & Schwartz, 1994).

A third perspective regarding values and well-being was offered by Bilsky and Schwartz (1994). They classified values as representing “growth” or “deficiency” needs. Values that represent growth needs (e.g., self-actualization) become more important the more a person attains the goals toward which the values are directed. Thus people, who endorse values, such as self-direction, are likely to increase the importance they attribute to these values when they successfully realize the values in their lives. This suggests that attributing greater importance to values that represent growth needs follows from realizing that same goal. Goal realization, in turn, is likely to promote a positive sense of well-being. Therefore, priority given to growth-related values is likely to correlate positively with subjective well-being. Deficiency related values (or values related to the pursuit of security and power values) are more likely endorsed by people who feel unsafe, and lacking in control over their lives, therefore priority given to these is likely to correlate negatively with subjective well-being.

Finally, the theoretical perspectives presented above are compatible with another theory derived from self-determination theory (Deci & Ryan, 1991). In this theory, pursuit of intrinsic, internal needs (represented by self-direction and benevolence values) leads to a sense of subjective well-being. Conversely, pursuit of extrinsic needs (e.g., money, fame, control over others) provides only indirect satisfaction of the intrinsic needs and may interfere with intrinsic value fulfillment. According to this theory, extrinsic values (such as power values) negatively relate to subjective well-being.

Based on these theoretical models, hypotheses for the current study were formed. Only a few studies (e.g., Butler, 1983; Glazer, 2002) have examined values as moderators of stressor-strain relationships. The present study will add to this literature by examining the interaction of value types and stressors in relation to strains in a sample of teachers from a large urban school district. No published studies have measured elementary school teacher stress and values, although Schwartz's (1992; 2000) research on values was obtained on teachers. The foci in this study are work-related stressors (i.e., time-management, role overload, professional investment, professional distress, discipline and motivation) and strains (i.e., emotional, cardiovascular, gastronomical, fatigue, and behavioral) in relation to personal value types (benevolence, self-direction, stimulation, tradition, and achievement) of teachers.



## CHAPTER II. REVIEW OF LITERATURE

The study of the stressor-strain relationship in the teaching population is important, as teachers are a primary sensitizing agent of students to society, imparting social norms and mores (Schwartz, 1992). Numerous researchers (e.g., see Brouwers & Tomic, 2000; Lewis, 1999; Remy, 1999) have studied teachers and stress, but none have examined the moderating role of individuals' values on the relationship between stressors and strains, such as the present study proposes. The present study is based on the concept that individual differences, such as values (e.g., stable reflections of basic needs), can affect stressor-strain relationships.

The following sections provide a foundation for the present study. In particular, I review the definitions for and literature on stressors, strains, stressor-strain relationship, and human values. The goal of this review of previous research is to sufficiently operationalize and conceptualize the variables and their relationships in order to provide a framework from which to justify the proposed study.

### *Conceptualizing Stress*

Occupational stress, or job stress, has been studied extensively in Industrial and Organizational Psychology for more than four decades (see Beehr, 1998 for review). Stress has numerous definitions (see Jex, Beehr, & Roberts, 1992; Kyriacou, 2001), but research under the stress label is usually concerned with the negative effects of the workplace environment, sometimes in conjunction with employees' own characteristics, on employees' health and well-being (Beehr, 1998). Within this model, stress does not represent a variable, but rather an area of study concerning relationships among work

environment stimuli and unhealthy responses of the people working in a given work setting (Beehr, 1998; Jex et al., 1992).

Jex et al. (1992) examined the use of the term stress in the measurement of self-reported occupational stressors and strains. They wrote that the term stress has been used erroneously interchangeably with stressors or strains, often without clarifying if the “stress” researchers were examining refers to a stimulus, a response, or stimulus-response relationship. In stress research, a stressor is a stimulus, or any environmental event that is demanding or constraining, and that requires some type of adaptive response (Beehr, Jex, Stacy, & Murray, 2000; Beehr & Newman, 1978; Jex et al., 1992). Beehr and Newman proposed three types of stressors, psychological, physical, and social, which could create strain, in addition to personal characteristics, environmental characteristics, and the interaction between the individual and the environment. Strain is a negative response to stressors (Beehr et al., 2000; Jex et al., 1992). Strains may be psychological (e.g., depression), physiological (e.g., headaches), and/or behavioral (e.g., absenteeism) (Jex et al., 1992). Stress, as Selye (1956) first defined the term, really referred to strain. He wrote that stress is a nonspecific response of the body to any demand made on it to adapt. In the present study, when the word “stress” is written it is to refer to a generic area of study that encompasses the stimulus-response relationship. In other words, “stress” refers to stressors that lead to strains. In this context, the term stressor is often used to refer to job or organizational conditions, and the term strain is used to refer to individuals’ responses to these conditions (Jex et al., 1992).

The most commonly researched job stressors are considered “chronic,” or on-going, for example role conflict and role ambiguity, as opposed to acute (one time and severe) (Beehr et al., 2000). The current study focuses on chronic stressors that are either job-specific or generic (Beehr et al., 2000). Stressors that are job specific, as opposed to generic, may have the greatest impact on individual strains and performance because they are most salient to employees in a particular job. This was evident in Beehr et al.’s (2000) study on booksellers. In that study, job-specific stressors seemed to have a greater impact on strains than generic job stressors. The present study, therefore, uses the Teacher Stress Inventory (TSI) (Fimian, 1986) which was designed to address specific job stressors affecting teacher populations, as well as three measures of generic stressors, role ambiguity, role conflict, and role overload, that are not part of the TSI. In addition, the TSI assesses strains that can be categorized into behavioral, psychological, and physiological reactions to stressors.

### *Teachers and Stress*

According to Brown, Ralph, and Brember (2002), occupational stress is an important issue in the teaching profession because of its negative consequences on work performance. Stressors, such as time management issues, role overload, professional distress, professional investment, discipline and motivation issues, role ambiguity, and role conflict can lead to strains or adverse reactions in the form of emotional reactions (e.g., feeling unmotivated) fatigue reactions (e.g., sleeping more than one should), cardiovascular reactions (e.g., heart racing due to job and pressures), gastronomical

reactions (e.g., stomach problems because of one's job), and behavioral reactions (e.g., excessive alcohol intake) (Evers, Brouwer, & Tomic, 2002).

Evers et al. (2002) found that Dutch teachers suffered from higher levels of strain (e.g., psychosomatic) than the average population, and more than physicians, nurses, and hospital attendants. Dutch teachers self-reported higher levels of strain than industrial workers, civil servants, caregivers, and commercial workers. In fact, Evers et al. reported that in the Netherlands, a relatively high number of teachers are declared disabled or partially disabled because they are unable to cope with the high work demands. These researchers wrote that in 1994 of the total number of people who were disabled due to work 44% were teachers. Of that 44%, over half of the teachers were disabled due to psychological strains, such as teacher burnout. Burnout refers to feeling emotionally overextended and negative, callous, and detached from others, and generally negative of one's own accomplishments in relation to others' job performance (Evers et al., 2002). In addition to disability leave, MacDonald (1999) found that perceived decline in status of teachers affected burnout, which, in turn, had debilitating effects on attrition.

Abel and Sewell (1999) studied the effects of time demands, clerical duties, difficulties with pupils, motivation and control of students, large class sizes, financial constraints, and a lack of educational supplies on teacher job satisfaction and burnout among 52 rural school teachers and 46 urban school teachers. Results of their study revealed greater self-reported strain for urban teachers than for rural teachers. Urban teachers reported more strain from poor working conditions, (e.g., poor salary and poor promotion prospects), lack of recognition in their jobs, lack of equipment and resources

for teaching, and poor staff relations, (e.g., lack of support among colleagues and from administration, including principal). Both urban and rural teachers were equally affected by student misbehavior, maintaining class discipline, difficult classes, and from paperwork demands. Both urban and rural teachers experienced significantly greater strain from student misbehavior and time pressures than any other stressors, but strains (i.e., job satisfaction and burnout) were significantly higher for urban teachers than rural teachers.

### *Stressors*

The present study examines stressors (i.e., time management, role overload, professional regard, discipline and motivation, professional distress, generic role overload, role ambiguity, and role conflict) that might affect teachers' behavioral, psychological, and physiological well-being. Below is an explication of these stressors and the impact those stressors might have on teachers' stress levels and abilities to perform their jobs well.

*Time Management.* English (1994) cited two aspects about time management that are stressors for teachers. He wrote that teachers are often given too much material that they must cover within a short specified time frame. As more and more school systems require that students perform at a certain level, teachers become more concerned with how to cover the required materials in the given time frame. English further purports that the pressure to meet certain standards within a given period of time causes a great deal of strains for teachers. Accordingly, Hoffman (2000) purported that time becomes a stressor for teachers, especially public school teachers, when teachers are burdened by excessive

reports that have to be filled out. Time management is particularly difficult for new teachers who are pressured by the amount of work they have to accomplish and the time they have to do that work. Hoffman reported that it is not unusual for teachers to work 50 hours per week in preparing curricula and handling paper work.

*Role Overload.* Drake and Herbert (2002) defined role overload as exposure to greater demands in terms of time, energy, and/or commitment than the individual possesses or is willing to devote to the role. Role overload is measured as specifically related to the job or generically. Generic role overload refers to non-job specific measures that are employed to address overload issues that are generalizable to many professions. Conversely, job-specific role overload refers to issues specific to a particular profession. Several studies (e.g., Borg, 1990; Hannerz, Albertsen, & Tuchen, 2002; Jamal, 1999; Remy, 1990; Wrobel, 1993) have been conducted addressing the specific and unique job environment of educators. Often new teachers come into the job believing that teaching will involve more hours than the contract hours spent with students. However, they soon discover that even more hours than they had expected are required of them in their role of teacher (Drake & Herbert, 2002). As teachers become more burdened because of role overload, the likelihood of teacher burnout increases (Drake & Herbert).

*Professional Regard.* Another stressor for teachers is the lack of professional regard. Van der Doef and Maes (2002) and Certo and Fox (2002) reported that one important reason for teacher burnout is the lack of professional regard given to them. Society continues to portray teachers by “Those who can do-do; those who can’t teach.”

This lack of professional regard, that is, the worth or estimation in which someone is held (Merriam-Webster, 1993) is probably best demonstrable by the low starting salaries for teachers. Lack of good salary and benefits have been noted in research (Certo & Fox) as a primary reason teachers leave the teaching profession. Teachers are paid significantly less than people in private industry who have the same level of education. Because the public perceives teachers as working only nine months out of the year, they do not perceive teaching as a difficult job that needs higher compensation (Certo & Fox).

*Professional Development.* Teachers also reported being strained by the number of professional development courses they were required to take and the poor quality of some of these courses (Certo & Fox, 2002). When professional development activities did not match teachers' personal needs, teachers thought that their time was not valued. Certo and Fox quoted a teacher in their study who indicated that at her school district professional development programs were a waste of time. When teachers are required to attend those types of professional development programs, they might report high levels of frustration and general strain.

*Discipline and Motivation.* Classroom discipline and motivation are a well-documented source of teacher strain (see Evers et al., 2002; Lewis, 1999). Discipline issues rate consistently among the strongest of teacher stressors. In a study of over 5,000 American and Canadian teachers, 63% reported student discipline problems as the most stressful factors in their work environment (Kuzman & Schnall, 1987, cited in Remy, 1999). Although Certo and Fox (2002) reported that salary, benefits, and professional regard were top reasons teachers were leaving their jobs, discipline and motivation

problems with students closely followed. According to Lewis, discipline can be distinguished from the broader area of classroom management in that the latter emphasizes the provision of quality instruction as a means of minimizing disruption in classrooms, whereas discipline is generally represented as what teachers do in response to students' misbehaviors. Discipline issues have been related to interference with effective classroom teaching and a major stressor for teachers. Certo and Fox reported that teachers felt they were held responsible for poor student behavior even when they were facing crowded classroom conditions. Teachers also thought that discipline problems inside those crowded classrooms made it very difficult to motivate students. Teachers, in Certo and Fox's study, reported that too much of their teaching day had to be spent dealing with discipline problems without any support from administrators or parents. Lewis reported discipline issues in a classroom as institutional stressors which prevented teachers from using best practices. Consequently, dealing with these stressors left many teachers feeling burned out and ready to leave the teaching field.

*Role Conflict and Role Ambiguity.* Role conflict and role ambiguity are two stressors, in addition to role overload, that can be studied as generic constructs. Jianling (2000) noted that teachers often face conflict in their roles as teachers. Role conflict can also occur within individuals' specific teaching role (e.g., intra-role conflict). Strain occurs when there is a mismatch between the requirements and demands of one's job and the person's real or perceived ability to meet those demands.

Role ambiguity occurs when one is presented with insufficient or unclear information about his or her responsibilities. Role ambiguity is a chronic stressor and is



among the most commonly researched job-related stressors (O'Driscoll & Beehr, 2000). Self-report measures of chronic stressors do not provide respondents with a limited referent (e.g., in the last week) when they are asked to describe their jobs (Beehr et al., 2000). Several studies support evidence that role conflict and role ambiguity, negatively relate to job satisfaction (e.g., Yousef, 2000), anxiety, low organizational commitment, and intention to leave the organization (Glazer, 1999).

### *Strains*

When stressors are perceived negatively, physiological or psychological ailments, or deviant behaviors might occur. These strains can further affect other strains. For example, Norton (1998) reported there is a growing concern among administrators about teacher absenteeism (a behavioral strain) due to illness (a physiological strain). Norton wrote that for some teachers the response to unduly stressors resulted in anxiety attacks or emotional nervousness (psychological strains), which led to withdrawal (a behavioral strain). Additionally, Norton noted that teachers who were burdened by too many stressors reported excessive fatigue, inability to wake up in the morning, and falling to sleep as soon as they get home from work. Harden (1999) also reported that teacher absenteeism (a behavioral strain) was sometimes due to cardiovascular problems (a physiological strain) brought on by chronic work stressors.

Adams (1999) reported on a survey conducted by the Chicago Teachers' Union that 56.6% of the participating teachers had suffered physical or mental illness symptoms related to their teaching occupations. Adams also reported that illness symptoms were linked to work-related stressors among teachers. According to Adams, there were

specific illness symptoms associated with teacher stressors, including migraine and sinus headaches, allergies, colds, postnasal drip, hypertension, bladder, kidney and bowel disorders, colitis, nervous stomach, acne, and weight problems. Adams' study found teachers who had trouble sleeping, worried about their work, suffered from work-related headaches, and had stomach upsets were teachers who suffered from unmanageable stressors. These strains need to be monitored, because they impact not only the teachers, but indirectly affect their students and schools.

As Norton (1998) stated, teacher absenteeism, due to physiological strains also puts a strain on schools' budgets. For example, substitute teachers have to be hired to replace absent teachers. Schools also have to contend with higher health insurance rates, disability rates, workers' compensation, and liability insurance (for teachers and substitute teachers). Moreover, when teachers are absent, student performance suffers (Remy, 1999). If student performance suffers then remedial education is required and that too has associated cost. These costs are some reasons to examine stressors among teachers.

### *Values*

The study of values has continued to be the subject of much research (Knoop, 1994; Sagiv, & Schwartz, 2000; Schwartz, 1990; Schwartz & Sagie, 2000; Schwartz et al., 2000) over the last decade. Schwartz and Bilsky (1987) defined the term values as "something similar to conceptions of the desirable that influence the ways people select action and evaluate events" (p. 550). In other words, values are cognitive principles that guide people's actions. Although there are many definitions offered for the term values,

Schwartz (1987) posited that there are five common features to all the definitions offered; “According to the literature, values are (a) concepts or beliefs, (b) about desirable end states or behaviors, (c) that transcend specific situations, (d) guide selection or evaluation of behavior and events, and (e) are ordered by relative importance” (p. 551). Schwartz (1992; Schwartz & Sagiv, 1995) further noted that values are cognitive representations of three essential human needs, including biological needs, social-interactional needs, and social-welfare needs (which are necessary for group welfare and survival). These needs are translated into values. As Schwartz (1992) noted, sexual needs (biological human need) can translate into the values of intimacy or love; social interactional needs (coordinating resource exchange) can translate into values of equality or honesty; and social demands (demands for group survival) can translate into values of national security or world peace.

The present study adopts Schwartz’s (1992) definition of values as desirable, transsituational goals, varying in importance, and serving as guiding principles in people’s lives. The primary content aspect that distinguishes among values is the type of motivational goals they express (Schwartz et al., 2000). Ten motivationally distinct value types were derived from universal requirements of the human condition and validated in over 100 samples across over 50 cultures (Schwartz, 1992; Schwartz & Sagiv, 1995) (see Table 1).

Schwartz and colleagues (Bilsky & Schwartz, 1994; Sagiv & Schwartz, 2000) and Deci and Ryan (1985; 1991) sought to develop and test hypotheses about direct relations of value priorities to subjective well-being. They all discussed the notion of well-being

in relation to values. Two perspectives refer to healthy and unhealthy values, one perspective refers to growth and deficiency values, and one perspective relates to self-determination theory.

*Healthy and Unhealthy Values.* “Healthy” values refer to those values that lead to perceptions, attitudes, or behaviors that tend to increase personal happiness, whereas “unhealthy” values have the reverse effect (Sagiv & Schwartz, 2000). Two perspectives might explain the relationship between healthy values and well-being. First, Sagiv and Schwartz’s study suggested that certain “healthy” values might increase the sense of subjective well-being. Researchers (e.g., Jensen & Bergin and Sagiv & Schwartz) identified self-direction, benevolence, and universalism values as “healthy” values. Sagiv and Schwartz further noted that achievement values and stimulation values might also be “healthy” values. Other values, which compose the Schwartz universal values theory, such as power, conformity, tradition, and security are considered “unhealthy” values (Sagiv & Schwartz, 2000). Healthy values are expected to relate positively to well-being, whereas unhealthy values are expected to relate negatively to well-being. This is one possible theoretical explanation for the relationship between values and well-being, and was empirically supported by Sagiv and Schwartz.

A second theoretical explanation for values relations with well-being that is not examined in the present study, is that well-being might influence “healthy” values. Sagiv and Schwartz (2000) hypothesized this reversal of direction of causal influence, from subjective well-being to value priorities. They stated that people who are happy and satisfied with their lives may be more likely to have emotional resources to pursue

“healthy” values, whereas people who are unhappy and dissatisfied may be occupied more with their own problems, and therefore lack the resources to pursue “healthy” values (Bilsky & Schwartz, 1994).

*Growth and Deficiency Values.* A third perspective regarding values and well-being was offered by Bilsky and Schwartz (1994). They classified values as representing “growth” or “deficiency” needs. Values that represent growth needs (e.g., self-direction values) become more important the more a person attains the goals toward which the values are directed. Growth values are held by people who feel free to make choices. This suggests that attributing greater importance to values that represent growth needs will promote a positive sense of well-being. Sagiv and Schwartz (2000) found that achievement, self-direction, and stimulation values were correlated positively with well-being, measured in terms of both general mental health and of positive affect. However, when barriers are placed that hinder one’s ability to reach desired goals, strain will likely occur. Thus, it is conjectured that priority given to growth-related values is likely to increase the positive relationship between stressors and strains.

Deficiency related values (or values related to the pursuit of security and power values) are more likely endorsed by people who feel unsafe, and lacking in control over their lives. People who feel environmentally constrained and have little control of their lives hold these values. Priority given to these values (e.g., tradition) is likely to correlate negatively with subjective well-being. Tradition, conformity, and security values, negatively related to positive affect. Moreover, when stressors are perceived, people

valuing deficiency values would report greater strains than those with low deficiency values because they rely on others to rectify problems that aren't getting resolved.

A two-by-two matrix of healthy vs. unhealthy values and deficiency vs. growth needs is presented in Table 2.

*Self-Determination Theory.* The theoretical perspectives presented above are compatible with a fourth perspective derived from self-determination theory (Deci & Ryan 1985; 1991). In Deci and Ryan's theory, pursuit of intrinsic, internal needs leads to a sense of subjective well-being. Conversely, pursuit of extrinsic needs (e.g. money, fame, power) provides only indirect satisfaction of the innate intrinsic needs and may interfere with intrinsic value fulfillment. According to this theory, extrinsic values will negatively relate to subjective well-being.

Schwartz et al. (2000) studied values and worry among seven samples from four cultural groups (West Germans, East Germans, Israelis, and Russians). According to Boehnke and Schwartz (1998), worry is "an emotionally disturbing cognition that a state of an object (micro and macro) in some domain of life will become discrepant from its desired state" (Schwartz et al., 2000, p. 311). They intended the definition of worry to apply to both daily worries and to intense and uncontrollable worries associated with severe anxiety. Thus, worries are considered a psychological strain. Results of their study showed that across the samples, patterns of relations between individuals' value priorities and their worries were consistent. People who gave priority to self-transcendence values, such as universalism and benevolence values, were more likely to have lower micro worry (e.g., worries dealing with the self or with whom one closely

identifies) (Boehnke, Schwartz, Stromberg, & Sagiv, 1998) and higher macro worry (e.g., worries about society, the world, or the universe) (Boehnke et al., 1998). People who gave priority to self-enhancement values, that is power, hedonism, and achievement, were more likely to have high micro worry and low macro worry. Boehnke et al. (1998) demonstrated that values could, in part, explain worries (strains).

Glazer (1999) found that for Italian nurses as role overload or role conflict increased, anxiety increased more positively for nurses with low achievement and self-direction values than for nurses with high achievement and self-direction values. However, such relationships were not found for Hungarian, United States, or United Kingdom nurses. Little overall support was found support for the moderating effects of values in the various countries examined, however the evidence of the values, achievement and self-direction interacting significantly with selective measures of well-being provided direction for the current study design.

### *Summary*

The organizational psychology approach to occupational stress largely considers the effects of social-psychological stressors in the workplace on individual outcomes (Beehr & Glazer, 2001). People enter the teaching field to work with students for a variety of reasons. However, it is likely that people would hold similar value priorities in a given occupation (Glazer & Beehr, 2002; Schwartz, 1990; 1992). Based on several sources reviewed, hypotheses regarding values and subjective well-being are based on literature pertaining to (a) “healthy” values and “unhealthy” values, (b) priorities for growth versus deficiency needs, (c) pursuit of particular values as a result of well-being,

and (d) self-determination theory. These are the theoretical underpinnings of the current study.

Five values of interest in the current study, achievement, benevolence, self-direction, stimulation, and tradition values, are expected to moderate stressor-strain relationships. The present study proposes to examine effects of both job specific stressors (time-management issues, role overload, professional regard, discipline and motivation issues, and professional investment) and generic role stressors (role ambiguity, role overload, and role conflict) on strains (emotional reactions, fatigue reactions, cardiovascular reactions, gastronomical reactions, and behavioral reactions).

Figure 1 depicts the study model.



## Hypotheses

Sagiv and Schwartz (2000) developed and tested hypotheses as to the relationship of value priorities and subjective well-being. The hypotheses of the present study expand on the theoretical background and knowledge derived from this work.

- H<sub>1</sub>: Achievement values reflect goals toward reaching personal success by demonstrating competence in areas deemed important by society. These values relate to healthy values and growth needs. Therefore, it is expected that as stressors increase, people who have a high value for achievement will experience more strain than those who have a low value for achievement. With high achievement values, teachers will perceive stressors as an impediment toward attainment of goals and thus report stronger strains.
- H<sub>2</sub>: Benevolence values reflect preservation and enhancement of the welfare of people with whom one is in frequent personal contact (Schwartz et al., 2000). Benevolence values relate to growth values and possibly healthy values (Sagiv & Schwartz, 2000). Therefore, it is hypothesized that teachers who value benevolence values will report greater strains, from stressors, as stressors might be impediments to fulfillment of benevolence. With high benevolence values vs. low benevolence, the relationship between stressors and strains will be more positive.
- H<sub>3</sub>: Self-direction values reflect independent action, thought and feeling and readiness for new experiences (Schwartz et al., 2000). These values relate to growth needs and are considered healthy values (Sagiv & Schwartz, 2000). Schwartz et al. found self-

direction values to be positively related to well-being. As a result, stressors might be seen as challenges to create new opportunities and not obstacles that are barriers to success. Therefore, it is hypothesized that as self-direction values increase in importance the relationship between stressors and strains will be less positive.

H<sub>4</sub>: Stimulation values emphasize excitement, novelty, and challenge in life (Schwartz et al., 2000). Stimulation values relate to healthy values and growth needs. Just like, self-direction values, people valuing stimulation endorse change and challenge, and it is hypothesized that as the importance of stimulation values increases the relationship between stressors and strains will be weaker; the relationship between stressors and strains will be less positive for teachers who place greater importance to stimulation values, than teachers who place little importance to stimulation values.

H<sub>5</sub>: Tradition values relate to respect, commitment, and acceptance of customs and ideas that traditional culture or religion provide the self (Schwartz et al., 2000). Schwartz et al. found tradition values to be negatively correlated with well-being. Tradition values reflect both unhealthy and deficiency needs. Therefore, it is hypothesized that the relationship between stressors and strains will be more positive for teachers who place greater importance on tradition values, than teachers who place little importance to tradition values. When faced with stressors, teachers valuing tradition will likely report greater strains than teachers with low tradition values, because stressors generally disrupt the status quo, which is valued.

## CHAPTER III. METHODS

The present study design was cross-sectional and correlational. It was based upon research methodologies most commonly used when examining moderating factors in predictor-outcome relationships (Baron & Kenny, 1986; Cohen & Cohen, 1983). Similar methodologies have been successfully used in several studies (e.g., Butler, 1983; Cooke & Rousseau, 1983; and Harris, 1999).

*Participants*

Seven hundred and thirty surveys were distributed through internal district mail to 12 elementary schools (K-6) in a public unified school district in Arizona of those, 250 completed, surveys were returned, yielding a 34.25% response rate. The sample comprised of about 6% in the total teacher population of the school district. Table 3 presents demographic data. Teachers mean age was 43.15 years (S.D. = 10.28). The average number of years teaching at one's current school site was 7.4 years (S.D. = 6.01) and the mean number of total years teaching was 14.61 years (S.D. = 8.83). Ninety one percent of all respondents reported being female, and nearly eight percent were male. Over 36 percent of teachers surveyed had a Bachelors degree, 63.3 percent reported having a Masters degree, and no one reported having a Doctorate degree. The ethnicity of the teachers was primarily Euro American (88.1%) and Hispanic/Latino/a (4%). Eighty-five and six-tenths (85.6) percent of respondents taught regular education or non-designated "special need" populations whereas 14.4% taught special education programs, those classes were composed of special need students. Sixty-six percent reported

teaching class sizes of 21-30 students. Over 17 percent reported class sizes of more than 31 students. The remaining reported fewer than 20 students per class.

### *Measures*

Data for the study were gathered through self-report questionnaires.

Demographic questions were provided as part of the Teacher Stress Inventory (TSI). The TSI (a.k.a., Teacher Concern Inventory, see Appendix, section I) was developed in the 1980's and refined over the following decade by Fimian (1986). The instrument consists of 49 items designed to measure occupational stress experienced or exhibited by public school teachers (Remy, 1999). The level of teacher stress is determined by scores on the TSI in terms of five stressors, including time-management, work related stressors (reflecting job-specific role overload), professional regard, discipline & motivation, and professional investment, as well as five strains, including emotional reactions, fatigue reactions, cardiovascular manifestations, gastronomical reactions, and behavioral reactions. Teachers in the present study responded to the questions regarding stressors and strains using a 5-point Likert type scale ranging from 1 "Not Noticeable" to 5 "Very Noticeable." Higher scores on each subscale were indicative of higher reported levels of stressors and strains. Below is a brief description of each measure in the TSI.

*Time Management* was assessed in terms of job-related commitments or responsibilities that require managing or coping with limited time resources, time constraints, or insufficient time to complete a task or group of tasks. This construct was expected to be comprised of eight items (see items 1-8 in Appendix).

*Role Overload*, labeled ‘Work Related Stressors’ on Fimian’s (1986) scale, refers to duties, responsibilities and tasks, which compose a teacher’s workload and consume the hours of a workday at the school site. Six items (see items 9-14 in Appendix) were expected to assess job-specific role overload.

*Professional Regard* refers to the lack of promotion or advancement opportunities, status, and respect on the job, and inadequate salary and recognition. Five items (see items 15-19 in Appendix) were supposed to measure this construct.

*Discipline and Motivation* was assessed in terms of student discipline problems, monitoring pupil behavior, poorly motivated students, inadequate or poorly defined discipline problems or policies, and rejected authority by both students and administration. Six items (see items 20-25 in Appendix) comprised this construct.

*Professional Investment* was to be assessed by four items (see items 26-29 in Appendix) reflecting lack of control over decisions made about the classroom and school matters, lack of opportunities to be intellectually stimulated on the job or improve professionally, and inability to express opinions openly and honestly.

In addition to the TSI stressor measures, generic role stressors, including *Role Conflict*, *Role Ambiguity*, and *Role Overload* were also assessed (Abdel-Halim, 1978; Beehr, Walsh, & Taber, 1976; Rizzo, House, Lirtzman, 1970). Role conflict, role ambiguity, and role overload were each measured with five items (see items 50-64 in Appendix). The response scale ranged from 1 “Strongly Disagree” to 7 “Strongly Agree,” 4 represented a neutral response “neither agree nor disagree.”

*The TSI includes five strain variables.*

*Emotional (Psychological) reactions* to stressors were to be measured by five items (items 30-34 in Appendix) reflecting feelings of insecurity, vulnerability, inability to cope, depression and anxiety.

*Fatigue reactions* were to be assessed via five items (see items 35-39 in Appendix) and operationalized in terms of sleeping more than usual, procrastinating, becoming tired in a very short time, physical exhaustion, and physical weakness.

*Cardiovascular reactions* were expected to be measured by eight items (see items 40-42 in Appendix). Items related to responses to stressors with feelings of increased blood pressure, feelings of heart pounding or racing and with rapid and/or shallow breath.

*Gastronomical reaction* was to be comprised of eight items (see items 43-45 in Appendix). Items addressed stomach pains for an extended duration, stomach cramps, and stomach acid.

*Behavioral strains* was supposed to be measured by four items (see items 46-49 in Appendix), including use of over-the-counter drugs, prescription drugs, and alcohol and by calling in sick.

*Schwartz's Values Survey (SVS)* developed by Schwartz (1992) and refined in subsequent studies consists of fifty-seven items describing end states and attributes. Respondents were asked to indicate the importance of each item on a 9-point scale, with anchors labeled -1 "opposed to my values" to 7 "of supreme importance." Forty-five of 57 items generally reflect 10 universal value types. However, only five value types were hypothesized to moderate stressor-strain relationships, for this study. Cronbach alpha

reliability coefficients for achievement values (comprised of 7 items) was .69, for self-direction values (comprised of 5 items) it was .68, for stimulation values (comprised of 3 items) it was .48, for tradition values (comprised of 5 items) it was .48, and for benevolence values (comprised of 9 items) it was .48. The reliabilities are within the ranges commonly observed for the specific value types (Schwartz et al., 2000). The SVS is a desirable instrument with this particular study as the primary source of norming data was teacher populations in over 60 countries.

### *Procedure*

*Survey Administration Procedure.* Teachers had to meet the following inclusion criteria in order to participate in this study.

- 1) Regular teaching staff members of the school with a full or part-time contract with the school district during the 2002-2003 school year;
- 2) held a state issued teaching credential, an emergency teaching credential, or any other Arizona recognized teaching related credential.
- 3) Had been at the school site since August 26, 2002, the first day of the 2002-2003 school year.

Participants were instructed that participation was completely voluntary and no information would be used to identify individuals. The only parties who would have access to the information would be the principle investigator and thesis advisor. Surveys were distributed through internal district mail with enclosed addressed envelopes.

Participants were requested to complete the survey, seal it in the addressed envelope (attention to the principle investigator), and return it via the internal district mail system

no later than two weeks after receiving the survey. This method was suggested by in-staff personnel within the research and development department in order to facilitate a high participation rate and also the timely return and dissemination of the information. Confidentiality was maintained except for the purpose of distributing surveys; no easily identifying information was obtained from completed surveys. No participant was forced to participate in the study. Teachers could withdraw from participation at anytime during the course of the study.

#### *Data Analysis*

Descriptive and inferential statistics (i.e., reliabilities, factor analyses, correlations, and moderated regression analyses) were used to analyze data. Hierarchical multiple regression analyses were performed to detect main effects and interaction effects of each of the stressors and each of the value types on each strain. In order to test interaction effects, interaction terms between each stressor and each value type were created from the unstandardized independent variables (cf. Cohen & Cohen, 1983). Based on Baron and Kenny (1986) and Cohen and Cohen, control variables (i.e., age, degree level, class size, years at teaching site, type of class taught, and years of teaching experience) were entered in step 1, stressors were entered in step 2, value types were entered in step three, and the interaction terms (predictor x moderator) were entered in step four. This resulted in four regression analyses. If any beta weights of the interaction terms were significant, then the strain was regressed on the particular stressors, value types, and interaction terms in order to determine the nature of the interaction.



## CHAPTER IV. RESULTS

*Factor Analysis*

Stressors and strains were factor analyzed. Results of the exploratory factor analyses indicated modifications were needed. Tables 4 and 5 present the stressor items and their factor loadings. First, an exploratory factor analysis of stressors using varimax rotation was conducted, constraining the number of factors to eight (see Table 4). Based on that analysis, it was determined that a six-factor structure would be better (see Table 5). However, factor 1 was divided into two because the content of the items seemed to reflect both generic role overload and time-management. More research on these scales is warranted in order to determine if the items continue to reflect one construct or should remain two, as is suggested for this thesis. Also, "Professional" stressors, Professional Distress and Professional Regard loaded onto one factor, labeled "Professional Issues." Professional issues reflect items dealing exclusively with teacher specific professional issues. Thus, seven stressors were arrived at for inclusion in the study. The four job specific stressors were time-management (alpha reliability of .76), professional issues (alpha reliability = .83), discipline and motivation (alpha reliability = .86), and job-specific role overload (alpha reliability = .81). The three generic stressors were role conflict, role ambiguity, and role overload with reliabilities of .81, .75, and .86, respectively.

Next, exploratory factor analysis was conducted on strains items, also using varimax rotation. However, instead of five factors (see Table 6), four factors were uncovered (see Table 7). Contrary to the original strains, though in keeping with a more

parsimonious conceptualization, cardiovascular and gastronomical reactions, loaded onto one factor, labeled "Physiological Strain." The four final strains were psychological, fatigue, physiological, and behavioral, with Cronbach alpha coefficient values of .84, .83, .84, and .63, respectively. Though the reliability coefficient for the behavioral strain was low and only two of the six inter-item correlations were above .30, it was included because five of the six correlations were significant and the strain had been validated and used in previous research, and addressed behaviors of interest to the researcher

#### *Descriptive Statistics and Intercorrelations*

Table 8 contains means, standard deviations, correlations, and reliability coefficients among all study variables based on the final factor analyses. Most job-specific stressors of the TSI and the generic role stressors positively correlated with strains. Of the five value types (self-direction, stimulation, benevolence, tradition, and achievement), only achievement values correlated significantly with behavioral strain ( $r = -.19, p < .01$ ), as well as job-specific role overload and generic role ambiguity ( $r = -.16$ , and  $r = .19, p < .01$ , respectively).

#### *Moderated Regression Analyses*

First, in order to determine which demographics should be controlled for in regression analyses,  $t$ -tests or ANOVAs were computed with demographic variables. It was found that teachers with less years of teaching experience had greater strain than teachers with more years of teaching experience. Likewise, those variables that were found to be significant demographic variables included years teaching at current site, education level (i.e., bachelor or masters, age, gender, and type of class taught, such as

special education classes or regular education) on the stressor-strain relationship. Therefore, these variables were controlled for in subsequent regression analyses.

To examine the potential moderating effects of the five value types on the relationship between stressors (time-management, job-specific role overload, generic role overload, professional issues, student discipline and motivation, role ambiguity, and role conflict) and strains (psychological, physiological, fatigue, and behavioral), four moderated regression analyses were performed (Cohen & Cohen, 1983). Each of the four strains was regressed on demographics, all stressors, all value types, and the interaction between each stressor and each value type. Thus, age, gender, type of credential, years of teaching at current site, years of total teaching experience, highest degree held, and size of classroom were entered in Step 1. In Step 2, the main effects of the role stressors were assessed. Moderating variables were entered in Step 3, and the interaction terms (stressors x values) were entered in Step 4.

In each of the regression analyses for each of the four strains (psychological, physiological, behavioral, and fatigue) some interaction terms were significant. Hypothesis 1 was partially supported. achievement values exhibited a marginally significant moderating influence on the generic role overload and fatigue relationship above the main effects (see Table 9), accounting for 1.7% of variance above and beyond the control variables and main effect variables on fatigue. The interaction effects, when plotted, revealed that as generic role overload increased fatigue increased more strongly for teachers who placed greater importance on achievement values than those who had lower achievement values (see Figure 2).

Hypothesis 2 was also partially supported. Benevolence values were not correlated with any strains nor added significant variance in strains after controlling for demographics and entering role stressors, however it did moderate the relationship between certain stressors and strains. The interaction between benevolence values and time-management, accounted for 4.1% more variance in psychological strain after controls and main effects were entered (see Table 10). The interaction between benevolence values and generic role overload and benevolence values and role conflict accounted for 3.4% and 2.7% respectively of additional variance in physiological strains after controlling for socio-demographics and main effects, (see Tables 11 and Table 12). The moderating effects of benevolence values are depicted graphically in Figures 3-5. Figures show that the relationships between stressors and strains are positive with high benevolence values and weak or negative with low benevolence values. In particular, under conditions of greater time-management, role conflict, and generic role overload, teachers with high benevolence values reported more psychological and physiological strains than did their counterparts who had low benevolence values.

Hypothesis 3 was not supported. Self-direction values did not moderate the relationship between any stressors and strains.

Hypothesis 4 was partially supported. Stimulation values moderated the role ambiguity and physiological strain relationship, accounting for 2.5% variance beyond the variance accounted for by the control and main effect variables (see Table 13). Plotting the interaction revealed that as role ambiguity increased physiological strain decreased

for teachers with low stimulation values, but remained low and flat for teachers with high stimulation values (see Figure 6).

Hypothesis 5 was partially supported. Tradition values moderated the relationship between discipline and motivation stressor and physiological strains accounting for 1.5% of additional variance after control variables and main effects were added (see Table 14). The plotted interaction demonstrated that as discipline and motivation increased physiological strain increased more positively for teachers with high tradition values than for teachers with low tradition values (see Figure 7).

## CHAPTER V. DISCUSSION

The present study attempted to increase knowledge of the moderating role of values on stressor-strain relationships. The moderating effects of five values, tradition, self-direction, benevolence, stimulation, and achievement, on the relationship between stressors and strains, as reported by teachers in a large urban school district, were examined. Generally, results support the study's hypotheses that values moderate stressor-strain relationships. However, a significant interaction effect appears to depend upon the type of stressor and type of strain (psychological, fatigue, behavioral, or physiological issues). For the most part, stressors have a more positive impact on strains when achievement, benevolence, stimulation, and tradition values are emphasized, but no moderating effects by self-direction values were found. These results expand upon those of Sagiv and Schwartz (2000) who found a weak yet significant relationship between value orientation and well-being. More specifically, these results demonstrate that emphasizing certain values (e.g., healthy vs. unhealthy values) has a reverse buffering effect that is, they increase the relationship between stressors and strains, whereas weak convictions toward those values decreases the relationship between stressors and strains (e.g., the relationship is often negative).

Although the methodological limitations of self-report data mean that conclusions should be drawn with caution, the pattern of results across the regression analyses increases confidence in the meaningfulness of the study's findings. Partially supporting the study's hypotheses, value types (achievement, tradition, stimulation, and benevolence values), moderated relationships between role stressors (time-management, generic role

overload, student discipline and motivation, generic role conflict) and physiological, psychological, and behavioral strains.

More specifically, achievement values moderated the relationship between generic role overload and physiological strain. Benevolence values moderated the relationship between time-management and psychological strain, and the generic stressors, role overload and role conflict with physiological strain. Achievement and benevolence values are considered healthy values (Sagiv & Schwartz, 2000). However, it appears that when teachers are unable to achieve or cannot care for the welfare of their students due to various stressors, strains will increase. As the need to be successful increased in importance, a teacher seemed more likely to feel physiological strain when faced with role overload. Teachers with high achievement values likely perceive role overload as an impediment toward attainment of goals and thus strains were greater for teachers valuing achievement.

The significant moderating effect of benevolence values on stressor-strain relationships might also be explained in terms of stressors impeding value attainment. First, as a teacher pursues benevolence values, the corresponding perceptions, attitudes, and behaviors exacerbate the stressor-strain relationships, because the lack of ability to enhance and preserve the welfare of others could manifest itself as greater strain. Second, teachers might see time-management constraints, role overload, and role conflict as an impediment to the realization of these needs and the stressor-strain relationship becomes stronger.

Self-direction values are consistent with emphasizing independent actions, thoughts, and feelings; however this value did not moderate stressor-strain relationships. In other words, as the importance for emphasizing independent action increased, teachers did not appear to become more strained. A possible explanation is that teachers might not value self-direction (i.e., independent action and thought) in their roles and therefore the moderating effect is negligible.

Stimulation values (i.e., excitement, novelty, challenge in life) have been theorized to be a healthy and representative of growth needs, the endorsing of which leads to intrinsic satisfaction and well-being. However, in this study, teachers endorsing stimulation values reported more strain than teachers who placed little value to stimulation.

Finally, the moderating influence of tradition values, emphasizing self-restriction, order, and resistance to change, on the discipline and motivation relationship with physiological strain is consistent with theoretical underpinnings of the current study. Tradition values have been categorized as unhealthy values (Sagiv & Schwartz, 2000). As unhealthy values are pursued, stressors have a more positive relationship with physiological strains. In this context, high importance placed on tradition values exacerbated the discipline and motivation relationship with physiological strain. As discipline and motivation are composed of issues revolving around lack of respect, commitment, and acceptance of customs, it is logical that as teachers, who endorse these values, are confronted with an environment that is the antithesis of their values, strains will increase.



In a cross-cultural study, Glazer (1999) studied values and their relationship to well-being. Glazer found little support for the moderating effects of higher-order human values (comprised of composites of value types) as measured by Schwartz's Value Survey. However, the current study generally found support for the moderating effects of four value types on stressor-strain relationships. Therefore, more research on this topic is warranted.

### *Summary*

Results of the present study, derived from teachers in a large urban school district, provided some support for the moderating effects of values on the relationship between stressors and strains. These findings partially support existing literature on values and well-being, which is primarily based on teachers.

The major finding was that four value types (achievement, stimulation, benevolence and tradition values) moderated relationships between both job-specific stressors (time-management, discipline and motivation) and generic role stressors (overload, conflict, ambiguity) with strains (physiological, psychological, fatigue and behavioral strains). Thus, four hypotheses were partially supported. Although the methodological limitations of cross-sectional self-report data from the same source mean that conclusions should be drawn with caution, the pattern of values moderating the relationships across these regressions analyses increases confidence in the meaningfulness of the findings.

A potential explanation for the results might be that the values studied are considered general human values, whereas some of the stressors and strains measured

were job-specific. That values moderated more generic stressor-strain relationships than job-specific stressor-strain relationships might be a function of the type of values assessed.

### *Limitations*

This study is not without its limitations. First, for this sample, at least, some of the stressors might have been salient issues that were exaggerated in teachers' responses. Respondents might have over weighted the issues contained in the survey as they are situations and feelings that are likely to be present on a daily basis and have significance to teachers' lives. Second, although value scores were evenly distributed across the range, it is possible that higher-order values would have been more appropriate to study than the motivational value types. Previous researchers (Glazer, 2001; Schwartz, Sagiv, & Boehnke 2000) examined higher-order values in relation to the stressor-strain relationship. Value dimensions are groupings of values as defined by Shalom Schwartz's research (see: Sagiv & Schwartz, 2000). This grouping of values into higher-order constructs, for example, benevolence and universalism, into a higher-order value labeled self-transcendence, defined as concern for the welfare of others, might reflect a more accurate measure of the human, universal values studied here. Third, data are cross-sectional, common source and common method variance might have affected results. As method bias is a common source of error in research, it would be desirable to use longitudinal research in this area and avoid common cross-sectional issues. Likewise, variance attributed to the methodology rather than the study constructs, continues to be an issue in behavioral research of this type.

*Suggestions for Future Research*

As O'Driscoll and Beehr (2000) pointed out, researchers should give more attention to the differential needs of individual employees in future examinations of the impact of work environments on employees' affective responses. A greater recognition of individual differences, such as values, would assist in the development and maintenance of work environments that would improve attitudes and enhance well-being among employees. Additionally, studies need to be conducted on work environments of teachers due to high turnover rates and often facing critical shortages in personnel (Gauci, Borda, & Norman, 1997). Finally, studies on stress and values might benefit from examining which stressors moderate relationships between values and strains. It is possible that certain stressors would threaten the attainment or fulfillment of certain values, and thus create strains that would otherwise not be affected by values.

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Table 1.

*Definitions of Value Types in Terms of Their Goals and the Single Values That Represent Them*

Values	Goals	Items
Self-direction	Independent thought and action – choosing, creating, exploring	Creativity, freedom, independent, choosing own goals, curious
Stimulation	Excitement, novelty, and challenge in life	Daring, a varied life, and exciting life
Hedonism	Pleasure and sensuous gratification for oneself	Pleasure, enjoying life
Achievement	Personal success through demonstrating competence according to social standards	Ambitious, successful, capable, influential
Power	Social status and prestige, control or dominance over people and resources	Authority, social power, wealth, preserving my public image
Security	Safety, harmony, and stability of society, of relationships, and of self	Family security, national security, social order, clean, reciprocation of favors
Conformity	Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms	Self-discipline, politeness, honoring parents and elders, obedience

Table 1 Cont'd

Values	Goals	Items
Tradition	Respect, commitment, and acceptance of the customs and ideas that traditional culture or religion provide	Devout, respect for tradition, humble, moderate
Benevolence	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact	Helpful, honest, forgiving, loyal, responsible
Universalism	Understanding, appreciation, tolerance, and protection for the welfare of all people and for nature	Equality, social justice, wisdom, broad-minded, protecting the environment, unity with nature, a world of beauty

*Note.* Adopted from Schwartz & Sagiv (1995).

Table 2.

*Schwartz's Values in terms of Deficiency vs. Growth Needs and Unhealthy vs. Healthy Values*

	Deficiency Needs	Growth Needs
Unhealthy Values	tradition	
Healthy Values	benevolence	self-direction stimulation achievement

Table 3.

*Characteristic of the Study Population (N = 250)*

	%
Average Age	43.2 years (S.D. = 10.28)
Years teaching at current site	7.40 years (S.D. = 6.00)
Years working in profession	14.61 years (S.D. = 8.83)
<u>Gender</u>	
Male	7.4
Female	89.6
<u>Ethnicity</u>	
Asian American	2.0
African American	1.0
Euro American	88.1
Hispanic	4.0
Native American	1.5
Other	
<u>Education Level</u>	
Bachelor Degrees	36.7
Master Degree	62.4
<u>Type of Teaching Credential</u>	
Permanent	98.5
Temporary	1.5
<u>Type of Class Taught</u>	
Special Education	13.9
Regular Education	82.2
<u>Class size</u>	
1-10	4.5
11-20	10.9
21-30	64.4
31 or more	16.8

Table 4.

*Item Factor Loadings with Number of Stressor Factors Constrained to Eight*

Items	1	2	3	4	5	6	7	8
<b>Time Management</b>								
1. I easily over-commit myself.							.53	-.35
2. I become impatient if others do things too slowly.							.54	
3. I have to try doing more than one thing at time							.54	
4. I have little time to relax/enjoy the time of day.	.59							
5. I think about unrelated matters during conversations.							.71	
6. I feel uncomfortable wasting time.							.44	
7. There isn't enough time to get things done.	.78							
8. I rush in my speech.							.57	
<b>Role Overload (Job-specific)</b>								
9. There is little time to prepare for my lessons/responsibilities.	.78							
10. There is too much work to do.	.76							
11. The pace of the school is too fast.	.56							
12. My caseload/class is too big.	.47							
13. My personal priorities are being shortchanged due to time demands.	.63							
14. There is too much administrative paperwork in my job.	.51							
<b>Professional Distress</b>								
15. I lack promotion and/or advancement opportunities.		.83						
16. I am not progressing in my job as rapidly as I would like.		.80						
17. I need more status and respect on my job.		.75						
18. I receive an inadequate salary for the work I do.		.51						
19. I lack recognition for the extra work and/or good teaching I do.		.73						



Items	1	2	3	4	5	6	7	8
<b>Discipline &amp; Motivation</b>								
20. I feel frustrated because of discipline problems in my classroom.			.81					
21. I feel frustrated having to monitor pupil behavior.			.82					
22. I feel frustrated because some students would do better if they tried.			.71					
23. I feel frustrated attempting to teach students who are poorly motivated.			.76					
24. I feel frustrated because of inadequate/poorly defined discipline problems.			.76					
25. I feel frustrated when my authority is rejected by pupils/administration.			.60					
<b>Professional Regard</b>								
26. My personal opinions are not sufficiently aired.		.40						.57
27. I lack control over decisions made about classroom/school matters.		.42						.60
28. I am not emotionally/intellectually stimulated on the job.		.46						
29. I lack opportunities for professional improvement.		.49						
<b>Role Overload (Generic)</b>								
50. I receive an assignment without the manpower to complete it.				.54				
51. I am given enough time to do what is expected of me on my job.	-.42							
52. It seems like I have too much work for one person to do.				.78				
53. On my present job, the amount of work seems to interfere with how well I can do the job.				.85				
54. I often notice a marked increase in my workload.				.76				



Table 5.

*Final Stressor Factor Analysis*

Items	1	2	3	4	5	6
<b>Time Management</b>						
1. I easily over-commit myself.	.59					
2. I become impatient if others do things too slowly.						
3. I have to try doing more than one thing at time	.49					
4. I have little time to relax/enjoy the time of day.	.54					
5. I think about unrelated matters during conversations.	.63					
6. I feel uncomfortable wasting time.	.53					
7. There isn't enough time to get things done.	.51	.53				
8. I rush in my speech.	.67					
52. It seems like I have too much work for one person to do.	.65					
53. On my present job, the amount of work seems to interfere with how well I can do the job.	.78					
54. I often notice a marked increase in my workload.	.73					
<b>Role Overload (Job-specific)</b>						
9. There is little time to prepare for my lessons/responsibilities.		.74				
10. There is too much work to do.		.72				
11. The pace of the school is too fast.	.36	.54				
12. My caseload/class is too big.		.50				
13. My personal priorities are being shortchanged due to time demands.	.47	.56				
14. There is too much administrative paperwork in my job.		.51				
<b>Professional Distress</b>						
15. I lack promotion and/or advancement opportunities.		.78				
16. I am not progressing in my job as rapidly as I would like.		.77				
17. I need more status and respect on my job.		.78				
18. I receive an inadequate salary for the work I do.		.44				
19. I lack recognition for the extra work and/or good teaching I do.		.75				
26. My personal opinions are not sufficiently aired.		.52		.37		

Items	1	2	3	4	5	6
<b>Professional Investment</b>						
27.	I lack control over decisions made about classroom/school matters.					.54
28.	I am not emotionally/intellectually stimulated on the job.					.48
29.	I lack opportunities for professional improvement.					.53
<b>Discipline and Motivation</b>						
20.	I feel frustrated because of discipline problems in my classroom.					.80
21.	I feel frustrated having to monitor pupil behavior.					.82
22.	I feel frustrated because some students would do better if they tried.					.71
23.	I feel frustrated attempting to teach students who are poorly motivated.					.77
24.	I feel frustrated because of inadequate/poorly defined discipline problems.					.75
25.	I feel frustrated when my authority is rejected by pupils/administration.					.60
<b>Role Conflict</b>						
55.	I have to do things that should be done differently.					.52
56.	I work with two or more groups who operate quite differently.					.78
57.	I receive incompatible requests from two or more people.					.78
58.	I do things that are apt to be accepted by one person and not accepted by others.					.84
59.	I work on unnecessary things.					.52
<b>Role Ambiguity</b>						
60.	I feel certain about how much authority I have.					.40
61.	I have clear, planned goals and objectives for my job.					.74
62.	I know I have divided my time properly.					.63
63.	I know exactly what is expected of me.					.77
64.	Explanation is clear of what has to be done.					.80

Table 6.

*Item Factor Loadings with Number of Strain Factors Constrained to Five*

Items	1	2	3	4	5
<b>Psychological</b>					
1. I respond to stressors by feeling insecure.	.87				
2. I respond by feeling vulnerable.	.81				
3. I respond by feeling unable to cope.	.73				
4. I respond by feeling depressed.	.65			.43	
5. I respond by feeling anxious.	.47				
<b>Fatigue</b>					
6. I respond to stressors by sleeping more than usual.				.59	
7. I respond to stressors by procrastinating.				.58	
8. I respond to stressors by becoming fatigued in a very short time.			.81		
9. I respond to stressors with physical exhaustion.			.85		
10. I respond to stressors with physical weakness.			.72		
<b>Cardiovascular</b>					
11. I respond to stressors with feelings of increased blood pressure.	.43			.53	
12. I respond to stressors feeling of heart pounding or racing.	.53		.38	.50	
13. I respond to stressors with rapid and/or shallow breath.	.49			.36	
<b>Gastronomical</b>					
14. I respond to stressors with stomach pain of extended duration.	.85				
15. I respond to stressors with stomach cramps.	.85				
16. I respond to stressors with stomach acid.	.76				
<b>Behavioral</b>					
17. I respond to stressors by using over-the-counter drugs.				.43	
18. I respond to stressors by using prescription drugs.				.70	
19. I respond to stressors alcohol.					.64
20. I respond to stressors by calling in sick.					.80

Table 7.

*Final Strain Factor Analysis*

Items	1	2	3	4
<b>Psychological Strain</b>				
1. I respond to stressors by feeling insecure.	.86			
2. I respond by feeling vulnerable.	.81			
3. I respond by feeling unable to cope.	.74			
4. I respond by feeling depressed.	.65			.43
5. I respond by feeling anxious.	.47			
<b>Behavioral Strain</b>				
6. I respond to stressors by sleeping more than usual.		.65		
7. I respond to stressors by procrastinating.		.61		
17. I respond to stressors by using over-the-counter drugs.		.41		
18. I respond to stressors by using prescription drugs.		.70		
<b>Fatigue</b>				
8. I respond to stressors by becoming fatigued in a very short time.			.81	
9. I respond to stressors with physical exhaustion.			.86	
10. I respond to stressors with physical weakness.			.72	
<b>Physiological Strain</b>				
11. I respond to stressors with feelings of increased blood pressure.		.46		.45
12. I respond to stressors feeling of heart pounding or racing.		.43	.40	.56
13. I respond to stressors with rapid and/or shallow breath.		.36		.51
14. I respond to stressors with stomach pain of extended duration.				.85
15. I respond to stressors with stomach cramps.				.85
16. I respond to stressors with stomach acid.				.76

Table 8.

Means, Standard Deviations, Reliabilities, and Correlations of Study Variables.

Variable	Mean	SD	1	2	3	4	5	6	7
1. Time Management	3.69	.66	(.76)						
2. Role Overload (S)	3.92	.87	.56**	(.81)					
3. Role Overload (G)	4.99	1.72	.27**	.53**	(.86)				
4. Role Conflict	3.65	1.46	.13	.27**	.34**	(.81)			
5. Role Ambiguity	4.68	1.17	-.02	-.13	-.17*	-.27**	(.75)		
6. Disc. & Motivation	2.84	.93	.26**	.33**	.17*	.24**	-.21**	(.86)	
7. Professional Issues	2.59	.83	.25**	.40**	.28**	.36**	-.16*	.32**	(.83)
8. Physiological Strain	1.88	.88	.19**	.23**	.08	.14*	-.13	-.25**	.27*
9. Psychological Strain	2.56	1.00	.27**	.31**	.18**	.21**	-.21**	.34**	.19**
10. Fatigue Strain	2.71	1.07	.33**	.36**	.27**	.14*	-.10	.32**	.24**
11. Behavioral Strain	1.94	.84	.17*	.23**	.11	.20**	-.14*	.20**	.19**
12. Stimulation	3.24	1.37	-.07	-.11	.00	.07	.09	-.09	.17*
13. Self-direction	4.92	1.02	-.01	-.07	.01	.09	.06	-.05	.16*
14. Benevolence	5.64	.93	.01	-.08	.00	-.02	.12	-.05	-.04
15. Tradition	4.05	1.33	.09	-.04	-.02	-.04	.11	.01	-.03
16. Achievement	4.90	1.17	.06	-.16*	.00	-.06	.19**	-.07	.06

Table 8 cont'd

	8	9	10	11	12	13	14	15	16
8. Physiological Strain	(.82)								
9. Psychological Strain	.42**	(.84)							
10. Fatigue Strain	.38**	.44**	(.83)						
11. Behavioral Strain	.50**	.44**	.41**	(.63)					
12. Stimulation	-.08	-.10	-.08	-.24**	(.61)				
13. Self-direction	-.02	-.09	.01	-.18*	.54*				
14. Benevolence	-.07	-.06	.03	-.06	.17*		(.70)		
15. Tradition	.12	.03	.07	.02	.13		.54**	(.66)	
16. Achievement	-.05	-.09	.01	-.19**	.38**		.43**	.45**	(.75)

Note. Reliabilities on diagonal in parentheses. RO(S) = Role Overload (Job-Specific); RO(G) = Role Overload (Generic).



Table 9.

*Achievement Values and Generic Role Overload on Fatigue*

Variables	$\beta$	$\Delta R$
Step 1 – Demographics		.083*
Age	-.164	
Type of class taught	-.088	
Gender	-.193*	
Years teaching at current site	.097	
Years of teaching experience	.167	
Masters degree	-.031	
Class size	-.025	
Step 2		.059**
Generic role overload (a)	-.404	
Step 3		.005
Achievement (b)	-.359	
Step 4		.017†
a x b	.797†	

† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ .

Table 10.

*Benevolence Values and Time-Management on Psychological Strain*

Variables	$\beta$	$\Delta R$
Step 1-Demographics		.087*
Age	-.144	
Type of class taught	.166**	
Gender	-.178**	
Years current teaching experience	-.107	
Years total teaching experience	.236*	
Masters degrees	-.002	
Class size	.069	
Step 2		.059**
Time-management (a)	-.984*	
Step 3		.003
Benevolence (b)	-1.123**	
Step 4		.041**
a x b	1.676**	

\*p&lt;.05; \*\*p&lt;.01

Table 11.

*Benevolence Values and Generic Role Overload on Physiological Strain*

Variables	$\beta$	$\Delta R$
Step 1 - Demographics		.086*
Age	-.044	
Type of Class taught	.126	
Gender	-.058	
Years teaching at current site	.086	
Years of teaching experience	.224*	
Masters degree	-.086	
Class size	.000	
Step 2		.002
Generic role overload (a)	-1.185**	
Step 3		.005
Benevolence (b)	-.582**	
Step 4		.034**
a x b	1.338**	

\*p&lt;.05; \*\*p&lt;.01

Table 12.

*Benevolence Values and Generic Role Conflict on Physiological Strain*

Variables	$\beta$	$\Delta R$
Step 1 - Demographics		.086*
Age	-.036	
Type of class taught	.093	
Gender	-.053	
Years teaching at current site	.091	
Years of teaching experience	.249*	
Masters degree	-.050	
Class size	-.022	
Step 2		.013
Generic role conflict (a)	-1.043*	
Step 3		.005
Benevolence (b)	-.505*	
Step 4		.027*
a x b	1.240*	

\*  $p < .05$ ; \*\*  $p < .01$

Table 13.

*Stimulation Values and Generic Role Ambiguity on Physiological Strain*

Variables	$\beta$	$\Delta R$
Step 1 - Demographics		.086*
Age	-.071	
Type of Class Taught	.115	
Gender	-.052	
Years Teaching at Current Site	.073	
Years of teaching experience	.281**	
Masters degree	-.072	
Class size	.012	
Step 2		.028*
Generic Role Ambiguity (a)	-.470**	
Step 3		.001
Stimulation (b)	-.599*	
Step 4		.025*
a x b	.698*	

\*  $p < .05$ ; \*\*  $p < .01$

Table 14.

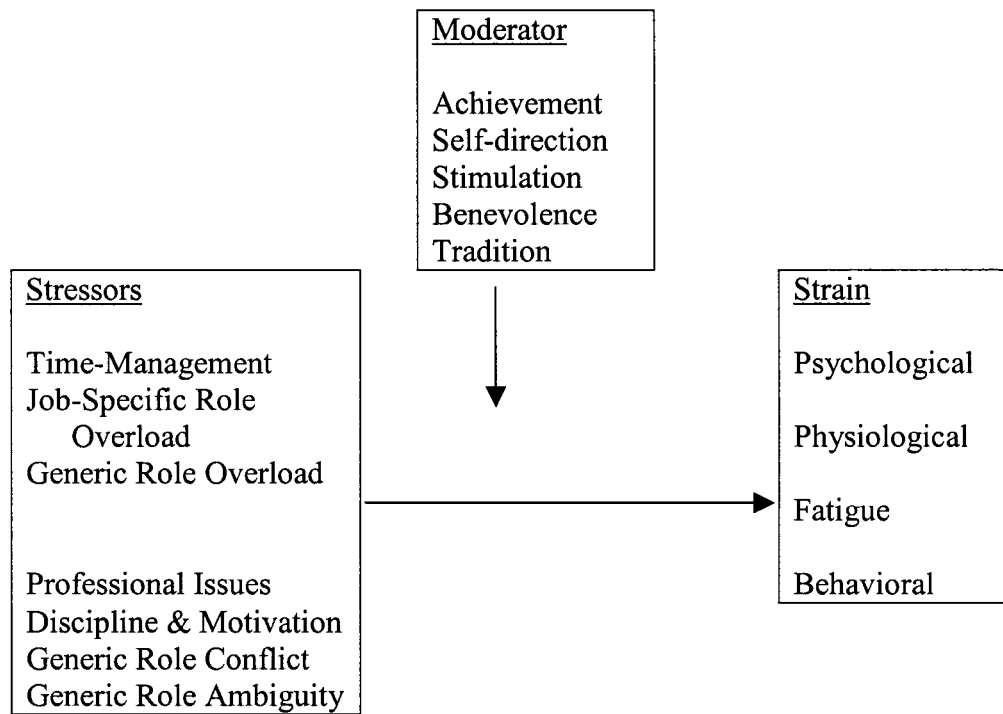
*Tradition Values and Discipline & Motivation on Physiological Strain*

Variables	$\beta$	$\Delta R$
Step 1 - Demographics		.086*
Age	-.034	
Type of Class taught	.153	
Gender	-.045	
Years teaching at current site	.056	
Years teaching total	.195	
Masters degree	-.080	
Class size	.048	
Step 2		.049**
Discipline & Motivation (a)	-.187	
Step 3		.016†
Tradition (b)	-.250	
Step 4		.015†
a x b	.585†	

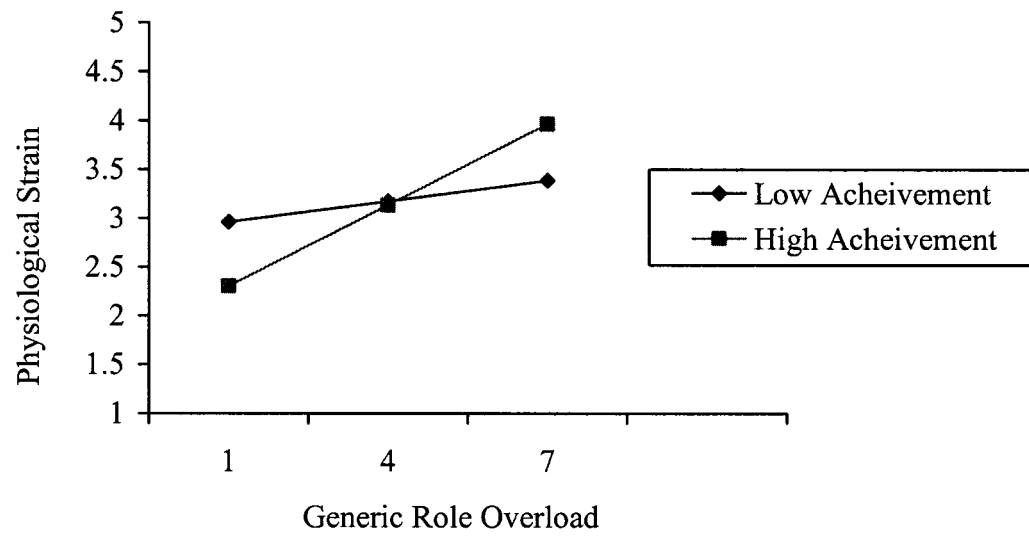
† $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ .

Figure 1.

Framework for Studying Values as Moderators of Stressor-Strain Relationships



*Figure 2.*  
The Relationship between Generic Role Overload and Physiological Strain as Moderated by Achievement Values





*Figure 3.* The Relationship Between Time-Management and Psychological Strain as Moderated by Benevolence Values

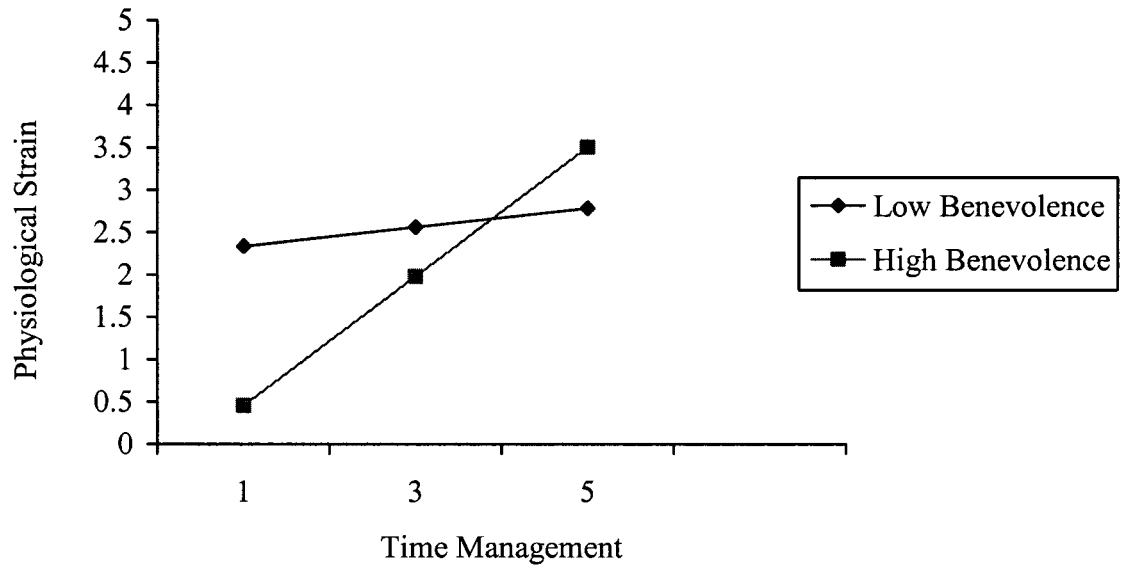


Figure 4. The Relationship Between Generic Role Overload and Physiological Strain as Moderated by Benevolence Values

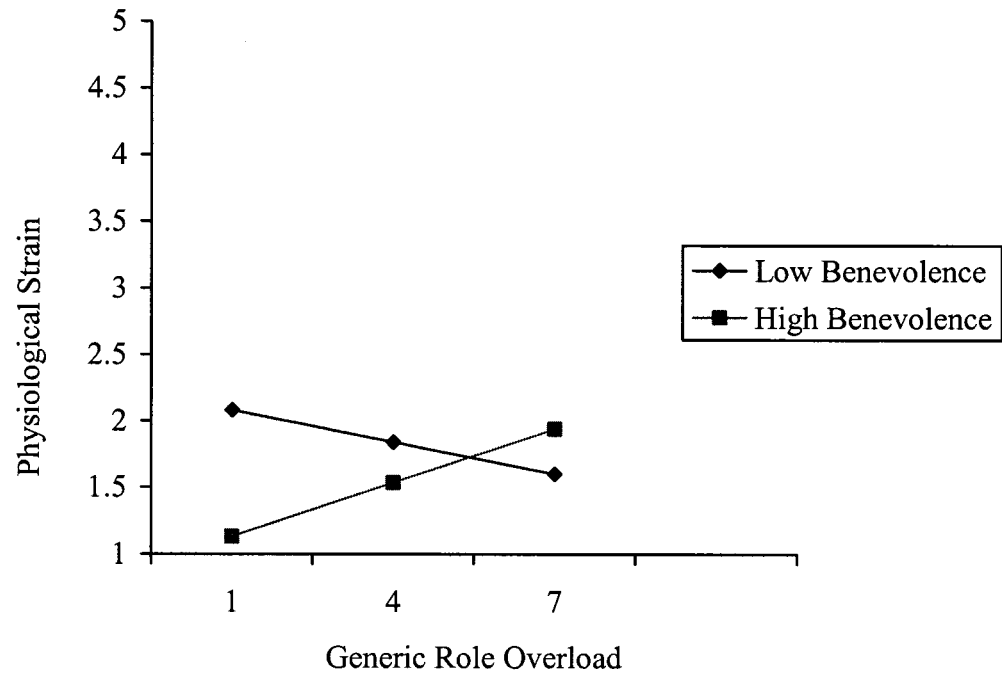


Figure 5. The Relationship Between Role Conflict and Physiological Strain as Moderated by Benevolence Values

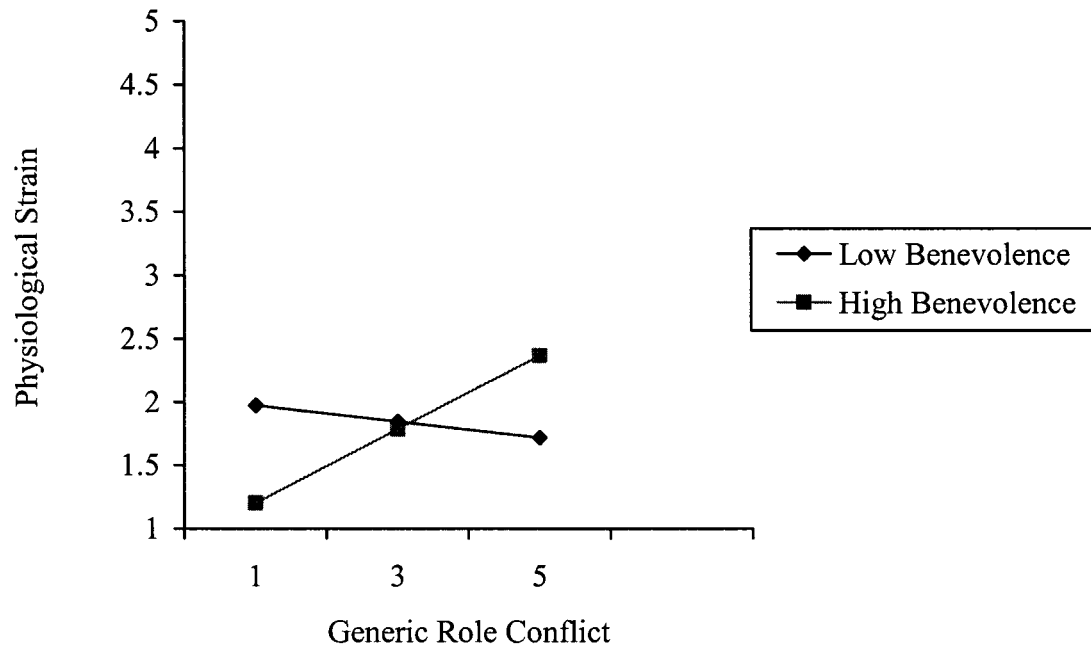


Figure 6. The Relationship Between Role Ambiguity and Physiological Strain as Moderated by Stimulation Values

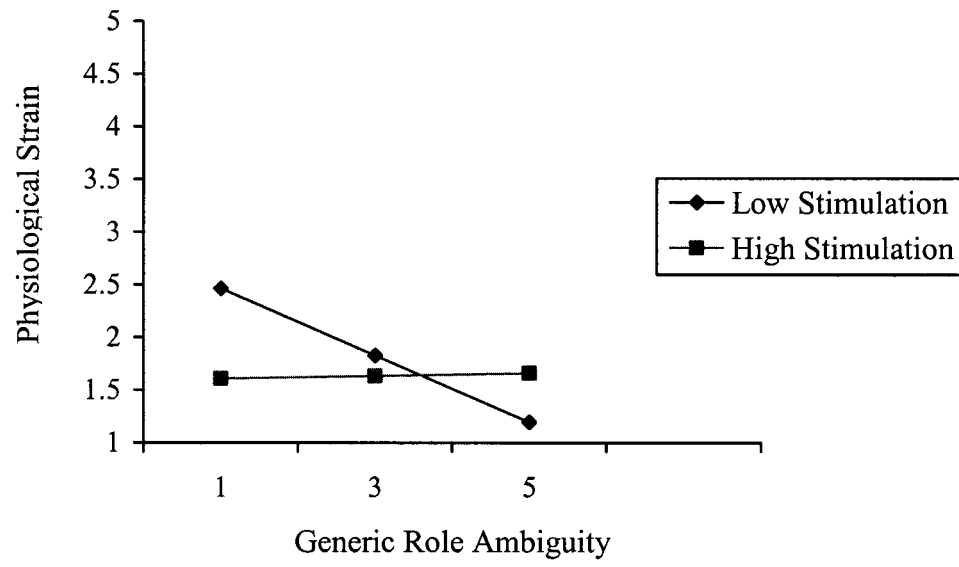
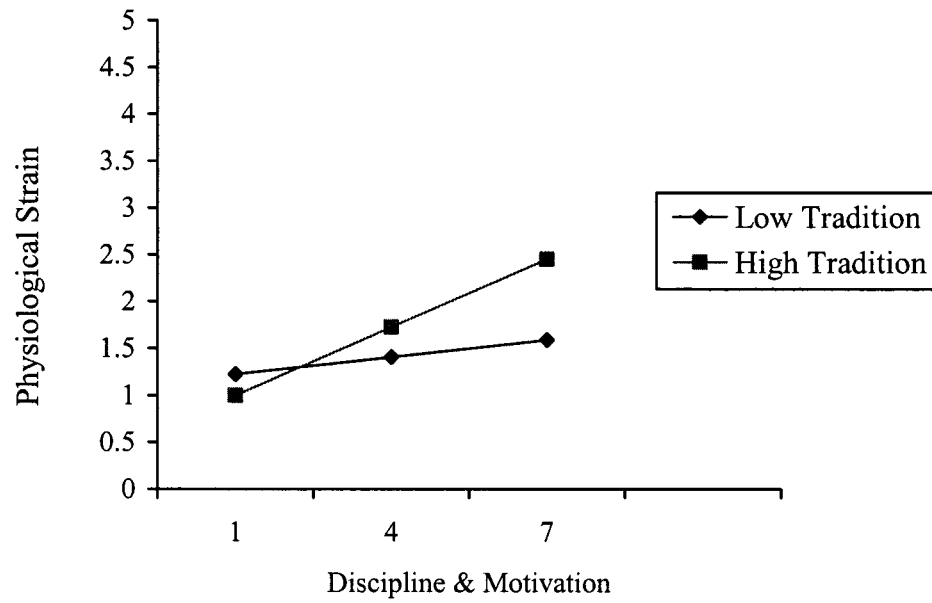


Figure 7. The Relationship Between Discipline & Motivation and Physiological Strain as Moderated by Tradition Values



# **What causes teachers to feel STRESSED?**



What changes in the work setting might decrease teacher stress? Do work values affect stress? These are important questions we are addressing in a research study.

Please help us better define teacher stress in the workplace.

Your school has been chosen randomly from the population of Mesa's 4,000 teachers.

Participation is voluntary, your responses are anonymous, no identifying information will be collected.

*Thanks in advance for helping*

- Troy X20243

R & E



**PROFESSIONAL DISTRESS**

15. I lack promotion and/or advancement opportunities.	1	2	3	4	5
16. I am not progressing in my job as rapidly as I would like.	1	2	3	4	5
17. I need more status and respect on my job.	1	2	3	4	5
18. I receive an inadequate salary for the work I do.	1	2	3	4	5
19. I lack recognition for the extra work and/or good teaching I do.	1	2	3	4	5

**DISCIPLINE AND MOTIVATION**

I feel frustrated...

20. ...because of discipline problems in my classroom.	1	2	3	4	5
21. ...having to monitor pupil behavior.	1	2	3	4	5
22. ...because some students would do better if they tried.	1	2	3	4	5
23. ...attempting to teach students who are poorly motivated.	1	2	3	4	5
24. ...because of inadequate/poorly defined discipline problems.	1	2	3	4	5
25. ...when my authority is rejected by pupils/administration.	1	2	3	4	5

**PROFESSIONAL INVESTMENT**

26. My personal opinions are not sufficiently aired.	1	2	3	4	5
27. I lack control over decisions made about classroom/school matters.	1	2	3	4	5
28. I am not emotionally/intellectually stimulated on the job.	1	2	3	4	5
29. I lack opportunities for professional improvement.	1	2	3	4	5



**MANIFESTATIONS (Emotional, Physical, Behavioral)**

I respond to stressors...

30. ...by feeling insecure.	1	2	3	4	5
31. ...by feeling vulnerable.	1	2	3	4	5
32. ...by feeling unable to cope.	1	2	3	4	5
33. ...by feeling depressed.	1	2	3	4	5
34. ...by feeling anxious.	1	2	3	4	5
35. ...by sleeping more than usual.	1	2	3	4	5
36. ...by procrastinating.	1	2	3	4	5
37. ...by becoming fatigued in a very short time.	1	2	3	4	5
38. ...with physical exhaustion.	1	2	3	4	
39. ...with physical weakness.	1	2	3	4	5
40. ...with feelings of increased blood pressure.	1	2	3	4	5
41. ...with feeling of heart pounding or racing.	1	2	3	4	5
42. ...with rapid and/or shallow breath.	1	2	3	4	5
43. ...with stomach pain of extended duration.	1	2	3	4	5
44. ...with stomach cramps.	1	2	3	4	5
45. ...with stomach acid.	1	2	3	4	5
46. ...by using over-the-counter drugs.	1	2	3	4	5
47. ...by using prescription drugs.	1	2	3	4	5
48. ...by using alcohol.	1	2	3	4	5
49. ...by calling in sick.	1	2	3	4	5

**Instructions:** Please indicate the extent to which you agree or disagree with the following statements by circling the appropriate number, from 1 (strongly disagree) to 7 (strongly agree)

**JOB-RELATED PRESSURES**

Strongly Disagree 1	Neither Agree Nor Disagree 4	Strongly Agree 7
---------------------------	---------------------------------------	------------------------

50. I receive an assignment without the manpower to complete it.	1	2	3	4	5	6	7
51. I am given enough time to do what is expected of me on my job.	1	2	3	4	5	6	7
52. It seems like I have too much work for one person to do.	1	2	3	4	5	6	7
53. On my present job, the amount of work seems							

to interfere with how well I can do the job.	1	2	3	4	5	6	7
54. I often notice a marked increase in my workload.	1	2	3	4	5	6	7
55. I have to do things that should be done differently.	1	2	3	4	5	6	7
56. I work with two or more groups who operate quite differently.	1	2	3	4	5	6	7
57. I receive incompatible requests from two or more people.	1	2	3	4	5	6	7
58. I do things that are apt to be accepted by one person and not accepted by others.	1	2	3	4	5	6	7
59. I work on unnecessary things.	1	2	3	4	5	6	7
60. I feel certain about how much authority I have.	1	2	3	4	5	6	7
61. I have clear, planned goals and objectives for my job.	1	2	3	4	5	6	7
62. I know I have divided my time properly.	1	2	3	4	5	6	7
63. I know exactly what is expected of me.	1	2	3	4	5	6	7
64. Explanation is clear of what has to be done.	1	2	3	4	5	6	7

### **SOCIAL SUPPORT**

**Directions:** The following questions concern how your Co-workers/Supervisors behave towards you. Please circle the number that represents how often your co-workers behave in the way described in the statement.

#### **CO-WORKERS**

Not At All	A Little	Somewhat	Very Much
------------------	-------------	----------	--------------

65. How much do other people at work go out of their way to do things to make your work life easier for you?	1	2	3	4
66. How easy is it to talk with other people at work?	1	2	3	4
67. How much can other people at work be relied on when things get tough at work?	1	2	3	4
68. How much are other people at work willing to listen to your personal problems?	1	2	3	4

#### **ADMINISTRATORS**

69. How much do administrators at work go out of their way to do things to make your work life easier for you?	1	2	3	4
70. How easy is it to talk with administrators at work?	1	2	3	4
71. How much can administrators at work be relied on when things get tough at work?	1	2	3	4
72. How much are administrators at work willing to listen to your personal problems?	1	2	3	4

### ***Teacher Concerns Inventory Cont'd Culture Values***

In this section you are to ask yourself: "What values are important to ME as guiding principles in MY life, and what values are less important to me?" There are two lists of values on the following pages. These values come from different cultures. In the parentheses following each value is an explanation that may help you to understand its meaning.

Your task is to rate how important each value is for you as a guiding principle in your life. Use the rating scale below:

**0**--means the value is not at all important, it is not relevant as a guiding principle for you.

**3**--means the value is important.

**6**--means the value is very important.

The higher the number (0, 1, 2, 3, 4, 5, 6), the more important the value is as a guiding principle in YOUR life.

**-1** is for rating any values opposed to the principles that guide you.

**7** is for rating a value of supreme importance as a guiding principle in your life; ordinarily there are no more than two such values.

In the space before each value, write the number (**-1, 0, 1, 2, 3, 4, 5, 6, 7**) that indicates the importance of that value for you, personally. Try to distinguish as much as possible between the values by using all the numbers. You will, of course, need to use numbers more than once.

Before you begin, read the values in List I, choose the one that is most important to you and rate its importance. Next, choose the value that is most opposed to your values and rate it -1. If there is no value, choose the value least important to you and rate it 0 or 1, according to its importance. Then rate the rest of the values in List I.

#### **AS A GUIDING PRINCIPLE IN MY LIFE, this value is:**

<b>opposed to my values</b>	<b>not important</b>	<b>important</b>					<b>very important</b>	<b>of supreme importance</b>
<b>-1</b>	<b>0</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>
_ 1	____EQUALITY (equal opportunity for all)							
2	____INNER HARMONY (at peace with myself)							
3	____SOCIAL POWER (control over others, dominance)							
4	____PLEASURE (gratification of desires)							
5	____FREEDOM (freedom of action and thought)							
6	____A SPIRITUAL LIFE (emphasis on spiritual not material matters)							
7	____SENSE OF BELONGING (feeling that others care about me)							

**AS A GUIDING PRINCIPLE IN MY LIFE, this value is:**

- | <b>opposed<br/>to my<br/>values</b> | <b>not<br/>important</b> | <b>important</b>                                             |          |          |          |          | <b>very<br/>important</b> | <b>of supreme<br/>importance</b> |
|-------------------------------------|--------------------------|--------------------------------------------------------------|----------|----------|----------|----------|---------------------------|----------------------------------|
| <b>-1</b>                           | <b>0</b>                 | <b>1</b>                                                     | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> | <b>6</b>                  | <b>7</b>                         |
| 8                                   | _____                    | SOCIAL ORDER (stability of society)                          |          |          |          |          |                           |                                  |
| 9                                   | _____                    | AN EXCITING LIFE (stimulating experiences)                   |          |          |          |          |                           |                                  |
| 10                                  | _____                    | MEANING IN LIFE (a purpose in life)                          |          |          |          |          |                           |                                  |
| 11                                  | _____                    | POLITENESS (courtesy, good manners)                          |          |          |          |          |                           |                                  |
| 12                                  | _____                    | WEALTH (material possessions, money)                         |          |          |          |          |                           |                                  |
| 13                                  | _____                    | NATIONAL SECURITY (protection of my nation from enemies)     |          |          |          |          |                           |                                  |
| 14                                  | _____                    | SELF RESPECT (belief in one's own worth)                     |          |          |          |          |                           |                                  |
| 15                                  | _____                    | RECIPROCATION OF FAVORS (avoidance of indebtedness)          |          |          |          |          |                           |                                  |
| 16                                  | _____                    | CREATIVITY (uniqueness, imagination)                         |          |          |          |          |                           |                                  |
| 17                                  | _____                    | A WORLD AT PEACE (free of war and conflict)                  |          |          |          |          |                           |                                  |
| 18                                  | _____                    | RESPECT FOR TRADITION (preservation of time-honored customs) |          |          |          |          |                           |                                  |
| 19                                  | _____                    | MATURE LOVE (deep emotional & spiritual intimacy)            |          |          |          |          |                           |                                  |
| 20                                  | _____                    | SELF-DISCIPLINE (self-restraint, resistance to temptation)   |          |          |          |          |                           |                                  |
| 21                                  | _____                    | PRIVACY (the right to have a private sphere)                 |          |          |          |          |                           |                                  |
| 22                                  | _____                    | FAMILY SECURITY (safety for loved ones)                      |          |          |          |          |                           |                                  |
| 23                                  | _____                    | SOCIAL RECOGNITION (respect, approval by others)             |          |          |          |          |                           |                                  |
| 24                                  | _____                    | UNITY WITH NATURE (fitting into nature)                      |          |          |          |          |                           |                                  |
| 25                                  | _____                    | A VARIED LIFE (filled with challenge, novelty and change)    |          |          |          |          |                           |                                  |
| 26                                  | _____                    | WISDOM (a mature understanding of life)                      |          |          |          |          |                           |                                  |
| 27                                  | _____                    | AUTHORITY (the right to lead or command)                     |          |          |          |          |                           |                                  |
| 28                                  | _____                    | TRUE FRIENDSHIP (close, supportive friends)                  |          |          |          |          |                           |                                  |
| 29                                  | _____                    | A WORLD OF BEAUTY (beauty of nature and the arts)            |          |          |          |          |                           |                                  |
| 30                                  | _____                    | SOCIAL JUSTICE (correcting injustice, care for the weak)     |          |          |          |          |                           |                                  |

### VALUES LIST II

Now rate how important each of the following values is for you as a guiding principle in YOUR life. These values are phrased as ways of acting that may be more or less important for you. Once again, try to distinguish as much as possible between the values by using all the numbers.

Before you begin, read the values in List II, choose the one that is most important to you and rate its importance. Next, choose the value that is most opposed to your values, or--if there is not such value--choose the value least important to you, and rate it -1, 0, or 1, according to its importance. Then rate the rest of the values.

**AS A GUIDING PRINCIPLE IN MY LIFE, this value is:**

<b>opposed to my values</b>	<b>not important</b>			<b>important</b>			<b>very important</b>	<b>of supreme importance</b>
-1	0	1	2	3	4	5	6	7

- 31 \_\_\_\_\_INDEPENDENT  
(self-reliant, self-sufficient)
- 32 \_\_\_\_\_MODERATE  
(avoiding extremes of feeling & action)
- 33 \_\_\_\_\_LOYAL (faithful to my friends, group)
- 34 \_\_\_\_\_AMBITIOUS (hard-working, aspiring)
- 35 \_\_\_\_\_BROADMINDED (tolerant of different ideas and beliefs)
- 36 \_\_\_\_\_HUMBLE (modest, self-effacing)
- 37 \_\_\_\_\_DARING (seeking adventure, risk)
- 38 \_\_\_\_\_PROTECTING THE ENVIRONMENT  
(preserving nature)
- 39 \_\_\_\_\_INFLUENTIAL (having an impact on people and events)
- 40 \_\_\_\_\_HONORING OF PARENTS AND ELDERS  
(showing respect)
- 41 \_\_\_\_\_CHOOSING OWN GOALS  
(selecting own purposes)
- 42 \_\_\_\_\_HEALTHY (not being sick physically or mentally)
- 42 \_\_\_\_\_CAPABLE  
(competent, effective, efficient)
- 44 \_\_\_\_\_ACCEPTING MY PORTION IN LIFE  
(submitting to life's circumstances)
- 45 \_\_\_\_\_HONEST (genuine, sincere)
- 46 \_\_\_\_\_PRESERVING MY PUBLIC IMAGE  
(protecting "face")
- 47 \_\_\_\_\_OBEDIENT  
(dutiful, meeting obligations)
- 48 \_\_\_\_\_INTELLIGENT (logical, thinking)
- 49 \_\_\_\_\_HELPFUL (working for the welfare of others)
- 50 \_\_\_\_\_ENJOYING LIFE (enjoying food, sex, leisure, etc.)
- 51 \_\_\_\_\_DEVOUT (holding to religious faith & belief)
- 52 \_\_\_\_\_RESPONSIBLE (dependable, reliable)
- 53 \_\_\_\_\_CURIOUS (interested in everything, exploring)
- 54 \_\_\_\_\_FORGIVING (willing to pardon others)
- 55 \_\_\_\_\_SUCCESSFUL (achieving goals)
- 56 \_\_\_\_\_CLEAN (neat, tidy)
- 57 \_\_\_\_\_SELF-INDULGENT  
(doing pleasant things)

Demo

Gender a. female b. male

Age \_\_\_\_\_

Ethnicity

- a. african am
- b. asian amer
- c. caucasian
- d. hispanic
- e. native American
- f. other

years teaching at current site \_\_\_\_\_

years teaching experience \_\_\_\_\_

Highest degree earned

- a. bs
- b. ms
- c. phd

Type of credential

- a. permanent
- b. emergency
- c. other

Type of class taught

- a. special ed
- b. regular ed

Class size

- a. 1-10
- b. 11-20
- c. 21-30
- d. 31 Or more

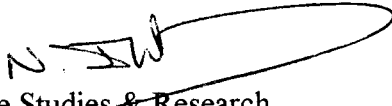


**San José State**  
UNIVERSITY

**Office of the Academic  
Vice President**  
**Academic Vice President**  
**Graduate Studies and Research**

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To: Troy Buchanan  
4619 E. Crocus Dr.  
Phoenix, AZ 85032

From: Nabil Ibrahim,   
AVP, Graduate Studies & Research

Date: March 28, 2003

The Human Subjects-Institutional Review Board has approved your request to use human subjects in the study entitled:

“The Relationship of Values and School-Site Conditions to  
Stress Levels of Elementary School Teachers.”

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to any and all data that may be collected from the subjects. The approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Nabil Ibrahim, Ph.D. immediately. Injury includes but is not limited to bodily harm, psychological trauma, and release of potentially damaging personal information. This approval for the human subjects portion of your project is in effect for one year, and data collection beyond March 28, 2004 requires an extension request.

Please also be advised that all subjects need to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate, or withdrawal will not affect any services that the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact me at (408) 924-2480.



Reply-To: "Sharon Glazer" <sglazer@email.sjsu.edu>  
From: "Sharon Glazer" <sharon.glazer@usa.net>  
To: "Troy G Buchanan" <tgbuchan@mpsaz.org>  
Subject: Fw: Questions  
Date: Tue, 30 Jul 2002 16:00:10 -0700  
Organization: Healthy Organization  
X-Mailer: Microsoft Outlook Express 5.00.2615.200

Sharon Glazer, Ph.D.  
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----- Original Message -----

From: Shalom Schwartz <shalom.schwartz@mscc.huji.ac.il>  
To: Sharon Glazer <sglazer@email.sjsu.edu>  
Sent: Tuesday, July 30, 2002 4:34 AM  
Subject: Re: Questions

> Hi!  
>  
> Your student is welcome to use the survey. I would not approve any  
> modification without seeing it first, however. What seems cosmetic to some  
> can be significant.  
>  
> Best regards, Shalom  
> Prof. Shalom Schwartz  
> Department of Psychology  
> The Hebrew University  
> Jerusalem 91905, Israel  
>  
> Ph: 972-2-5882964 (O)  
> 972-2-5817892 (H)  
> Fx: 972-2-5881159 (O)  
> 972-2-5817892 (H)  
>  
> e-mail: Shalom.Schwartz@mscc.huji.ac.il  
>

July 29, 2002  
Sharon Glazer, Ph.D.  
San Jose State University  
One Washington Square  
San Jose, CA

Dear Dr. Glazer:

On July 29, 2002, I met with Mr. Buchanan and reviewed his research proposal. The proposed study will provide the district with valuable information about teacher stress, values, and socioeconomic status among elementary schools. I am willing to endorse and sponsor his research. Furthermore, I understand that I will: provide help and guidance to the researcher following approval of the research; and ensure that research is done as proposed.

If you have any questions, please feel free to contact me at (480) 472-0242.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Abel".

Rob Abel PhD  
Director of Assessment and Special Projects  
Mesa Unified School District

cc: Howard Tokunaga, Ph.D.