PERCEIVED AND REPORTED OCCUPATIONAL STRESSORS AND COPING STRATEGIES OF SELECTED COMMUNITY COLLEGE BUSINESS FACULTY MEMBERS IN TEXAS

A Dissertation

by

GENEVIEVE J. ALLISON

Submitted to the Office of Graduate Studies
of Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

August 2004

Major Subject: Educational Human Resource Development

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Approved as to style and content by:

Kenneth E. Paprock (Chair of Committee)	Homer Tolson (Member)
Walter F Stenning (Member)	Ben D. Welch (Member)
Jim Scheurich (Head of Department)	

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ABSTRACT

Perceived and Reported Occupational Stressors
and Coping Strategies of Selected Community College
Business Faculty Members in Texas. (August 2004)
Genevieve J. Allison, B.S., Texas State University;
M.B.E., University of North Texas
Chair of Advisory Committee: Dr. Kenneth E. Paprock

Two primary purposes of this study were to explore and to identify the sources of occupational stressors and coping strategies perceived and reported by selected Texas community college faculty members and to generate current demographics about these faculty members that would be useful in understanding such stress. Another purpose of this study was to measure and to compare for possible relationships among stressors, coping strategies, and selected demographic characteristics.

Participants who received a three-part survey questionnaire consisted of 90 community college faculty members who were members of either Texas Business and Technology Educators Association or the Accounting Section of the Texas Community College Teachers Association. Each participant was sent a survey questionnaire consisting of three sections. Sections I and II were used to gather data pertaining to the sources of occupational stressors and the coping strategies used by the participants. Section III was designed to request information concerning personal and professional demographic characteristics of each research participant. An analysis of the data was completed on all three sections.

The major findings for the study indicated the following:

1. Community business teachers experienced high levels of stress from issues involving reward and recognition, time constraints, college/departmental influence, professional identity, and student interaction.
2. Community college business faculty members responded by identifying additional stressors, such as teaching inadequately prepared students to experiencing too heavy a teaching load. To relieve these stressors, these faculty members use coping strategies, such as talking to other persons about problems to experiencing nature.

Based on the findings of this study, this researcher's recommendations include the following:

1. Community college districts should provide stress management training to their faculty, especially the new faculty, along with some clerical assistance for all faculty members, especially during the beginning and ending of a semester.
2. Community college administrators should encourage the establishment of wellness programs.
3. Community college faculty members should be encouraged to develop and to utilize effective coping strategies to reduce the negative effects of their stress.

DEDICATION

This dissertation is dedicated to the memory of my parents and my brother, Lester, all of whom inspired me to be the best I could be, and to all dedicated and hard-working community college faculty members.

ACKNOWLEDGEMENTS

The essence of stress management is in the support that an individual receives. Without the support, assistance, and guidance of many individuals, this study would not have been completed.

My appreciation goes to the members of my doctoral committee, Drs. Kenneth R. Paprock, Walter Stenning, Ben Welch, and Homer Tolson. Their assistance and guidance provided major support in this endeavor.

Special thanks are extended to my fellow faculty members without whose assistance and input this study could not have been completed. Their responsiveness has always been positive and has provided me with insight that I could not have gained alone.

Most critical to this study was my chairperson, Dr. Kenneth Paprock, who provided me with support in managing my stress level and with encouragement to complete my study. In addition, special recognition goes to Dr. Walter Stenning and Homer Tolson for assisting me with the statistical support that I needed to analyze my research data. A special thanks to Drs. Tolson and Andrea Berndt for helping me to assemble, interface with SPSS, and interpret the results. A resounding thanks to Janice Emery for helping me proofread my paper.

My appreciation and thanks are extended to my husband, John Wedin, and my son, Gary Allison, Jr., for their love and patience in serving as sounding boards and supporting my efforts to complete this study. I would also like to thank my parents, Lester and Elva, and my brother, JR, who died before I reached this goal, for their encouragement and love of learning. I know that as I receive my diploma in August 2004 they will be with me in spirit.

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CHAPTER I

INTRODUCTION

Background of the Study

A vast number of studies and surveys confirm that occupational stress for American adult men and women still exists and has continued to increase for the past twenty years. An annual report entitled "Attitudes in the American Workplace VIII" reveals that 80 percent of workers felt job stress and almost half reported the need to learn how to manage stress; 14 percent felt the need to strike a coworker during the past year, but did not (La Freniere, 2000). Twenty-five percent felt the need to scream or shout because of their job stress. Nine percent are aware of a workplace assault or a violent act, 18 percent have experienced some type of threat or verbal browbeating during the past year, and 10 percent were worried about a fellow worker they feared could become violent (Allerton, 2000).

A 1999 National Institute for Occupational Safety and Health (NIOSH) report reveals that 40 percent of workers reported their job to be very or extremely stressful. Twenty-five percent perceived their jobs to be the number one stressor in their lives, three-fourths of workers thought today's employees have more on-the-job stress than the former generations, and 29 percent felt quite a bit of stress or were extremely

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stressed on the job (Sauter, Murphy, Colligan, Swanson, Hurrell, Scharf, Sinclair, Grubb, Goldenhar, Alterman, Johnston, Hamilton, & Tisdale, 1999).

American workers are working more hours on the job than any other industrial nation. For example, Americans are working almost a month longer than Japanese workers work but three months longer than German workers work. In addition, the number of hours that Americans work increased in one generation by 8 percent, averaging 47 hours per week, while some workers work a 49-hour week on a regular basis (Sauter, et. al, 1999). Many writers reported that individuals are spending the majority of their waking hours at their workplaces and are being subjected to higher demands not only in terms of time but also in terms of performance standards and personal sacrifices (Harris & Brannick, 1999). Allerton (2000) reported that Americans are more stressed than ever. Stress is responsible for the absenteeism of one million employees each day, culminating in a loss of over $200 billion annually to American businesses. Ultimately, stress is responsible for 50 percent of employee burnout and 40 percent of employee turnover.

Occupational stress is thought to be responsible for 30 percent of workers suffering from back pain, 20 percent feeling fatigued, 17 percent with muscular pains, 13 percent with headaches, 40 percent of job turnover, and 60 percent to 80 percent of on-the-job injuries. Fifty percent of employees report that job stress reduces their productivity and those workers who report high job stress are three times more likely to suffer from frequent illness. Moreover, stress-related illnesses cost companies about $200 billion a year in increased absenteeism, tardiness, and the loss of gifted workers.

Approximately 70 percent to 90 percent of employee visits to primary care physicians are stress related, with job tension directly related to a lack of productivity and loss of competitive edge (Allerton, 2000).

Bourne (1995) cites the reasons for the overall level of today's stress may relate to several specific issues. "First, our environment and social order have changed more in the last 30 years than they have in the previous 300 years. The increased pace of modern society and the increased rate of technological changes have deprived people of adequate time to adjust to these changes (p. xi)." In addition, some writers report that another aspect that makes the situation even worse is the lack of standards and rules that had been traditionally sanctioned by society and religion. This lack of standards and rules may leave a vacuum in which people are left to decide various ethical and moral issues for themselves. Most people who have experienced stress will probably agree that stress seems to be increasing in today's society and is causing a multitude of social, personal, and psychological problems (Susic, 2003).

Educators worldwide are also experiencing expanding levels of stress (Dinham, & Scott, 1998; Gmelch, 1993; Kyriacou, 2001). Community college faculty members are no exception to this development. The demanding roles of community college faculty is causing them to experience increasing stress levels, which are being reported more frequently by researchers (Claggett, 1980; Davis & McCracken, 1999; Mitchell, 1980; Olsen, 1993; Outcalt, 2002; Thompson & Dey, 1998).

Besides job stress, teachers experience stress from outside forces that they bring with them to their workplace. The accumulation of stress experienced by teachers,

involving both work and non-work roles and events, imposes a greater effect on a person than a single individual stressor like a telephone call (Gmelch, 1993).

Some researchers report that stress is at times good and does produce positive effects (Gmelch, 1995; Selye, 1974; Thompson & Dey, 1998); however, research data has mostly supported negative stress (Allcorn & Diamond, 1997; Happ & Yoder, 1991; Olsen, 1993; Thompson & Dey, 1998; van Dick, Wagner, Petzel, Lenke, & Sommer, 2001). Gmelch (1993) reported that an increase in stress is not necessarily bad. He believed that stress is necessary to exist but must remain at the appropriate level. His prescription is to increase the stress intake when an individual is under stimulated and to decrease the stress intake when the individual is over stimulated. Other researchers reported that stress adversely affects an individual's physical and psychological well-being, resulting in low morale, poor job performance, low productivity, and job dissatisfaction. In this frustrated state, individuals, such as faculty members, have sought employment elsewhere, thus leaving behind other disgruntled faculty who frequently become unhappy and unproductive (Batlis, 1980; Mcbride, Munday, & Tunnell, 1992). Dissatisfied faculty can transfer their emotions to other employees (Mitchell, 1980; Westman, & Etzion, 1999). Not only is stress costly to faculty members but it is also costly to their institutions (Allcorn & Diamond, 1997; Batlis, 1980; McBride et al., 1992; Perlberg & Keinan, 1986).

Stress is a major fact in today's life and a major problem in the workforce. The world of work is constantly changing and is filled with insecurities of downsizing, takeovers, and fierce competition. Many researchers wrote that this stress is

unrelenting. Stress is important in performing jobs; however, prolonged stress can become unacceptable and lead to burnout (Jones, 1980).

Early stress research was based on the experience of people working in human services and health care. Human services and health care workers' goal is to provide aid and service to needy people and is characterized by emotional and interpersonal stressors. Preliminary reports were written by Freudenberger, a psychiatrist working in an alternative health care agency, and by Maslach, a social psychologist studying emotions in the workplace. Freudenberger provided first-hand accounts of the process by which he and others experienced emotional depletion and a loss of motivation and commitment. He labeled it "burnout" (Maslach, Schaufeli, & Leiter, 2001). Maslach interviewed a wide range of human services workers about the emotional stress of their jobs and discovered that their coping strategies had important implications for individuals' professional identity and job behavior.

Since burnout research had its roots in care-giving and service occupations and its job nucleus is a relationship between provider and recipient, this interpersonal context of the job meant that, from the beginning, burnout was studied not so much as an individual stress response but in terms of an individual's relational contacts in the workplace. Additionally, interpersonal context focused attention on the individual's emotions and on the motives and values underlying his or her work with a recipient (Marslach, et al., 2001).

The work environment for community college faculty is also one in which a provider and a recipient relationship exists. This work environment is also one in

which change, relating to instructional innovations and technological advances in American education, is continual. Additional demands on faculty time for tutoring and advisement, along with conflicts of instructional changes have created a climate of increased stress and anxiety for many faculty members (Alfred, 1986; Huber, 1998; Outcalt, 2002). According to many authors, an occupation as a teacher is one in which a high degree of work-related stress exists (Outcalt, 2002; Hollingsworth, 1990; Wadlington, & Partridge, 1998).

Continual changes in the academic life of individual faculty cause potential conflicts between what is and what should be. Ames and Watkins (1983) describe these conflicts as the "shadow side of teaching." The outgrowth of these conflicts may be a decline in individual performance, which in turn, may result in affecting student learning and an institution's effectiveness in achieving its mission. Stress often causes teachers to lower their level of time and energy in performing their teaching responsibilities (Abel & Sewell, 1999; Blasé, 1986). Some theorists claimed that individuals intrinsically impose higher stress levels on themselves in accordance with their perception of threatening events (Beehr & Bhagat, 1985; Pines & Aronson, 1981). Some researchers have reported that teachers hold high standards and accept responsibility for self-regulation; all of which are also known to be stress-producing conditions (Bayer & Braxton, 1998). Additionally, researchers report that the results of prolonged teacher stress contributes to job dissatisfaction, reduced teacher-student rapport, and decreased teacher effectiveness in meeting educational goals (Kyriacou & Sutcliffe, 1978a).

Helping occupation personnel like nurses, teachers, social workers, and supervisors have a tendency to hold idealistic goals. Their inability to achieve these goals causes these helping professionals to experience frustration and possible burnout. Today's large, complex organizations, coupled with a constantly changing world filled with uncertainties of downsizing, takeovers, and fierce competition, cause many workers to feel that they are experiencing too much stress (Cruse & Hoare, 1999). If workers' job stress goes unrecognized, their job stress may lead to burnout. If the signs of burnout go unrecognized, the workers' job stress may lead to burnout. Some of the signs of burnout are confusion and frustration; emotional emptiness; erosion of relationships; decreased levels of achievement; and apathy, withdrawal, and despair (Frunzi & Savini, 1997).

A report entitled *Community College Faculty Attitudes and Trends, 1997*, by The Carnegie Foundation for the Advancement of Teaching, a national survey of community college faculty, revealed that community college faculty members are less likely to report stress on a wide variety of measures (Huber, 1998). The highest stress sources recently have been the "campus bureaucracy-institutional procedures and 'red tape'—and time allocation between work and family" (Huber, 1998, p. 30). Other stressors are teaching load, committee work, student demands, professional evaluations, and the promotion process. Other less stressful situations include trouble with collegiate relationships and evaluating colleagues for promotion. However, only one in ten of the college faculty surveyed reported that they would not choose to become a college teacher again.

The growth of America's community colleges has brought about the dramatic expansion of numerous community colleges. With this expansion, community college roles have also expanded. These colleges are expected to serve their communities in many and varied capacities. Their faculty members have also been forced to adapt to each change and new encounter; however, in many instances, community college faculty members have been the driving force behind the change process (Cohen & Brawer, 2003; Outcalt, 2002).

Community college faculty members are regarded as being a demanding and credible group (Cohen & Brawer, 2003; Outcalt, 2002). These faculty members place particular emphasis on teaching as well as intrinsic values associated with the instructional process. Although community college faculty members are thought only to be interested in the process of instruction, they are often more involved in research and service activities than most would believe (Huber, 1998). Researchers have found faculty members to be highly professional and to hold high standards for both teaching and college duties. Holding high standards and being responsible for self-regulation are also known to be stress producing (Bayer & Braxton, 1998).

Certain demographic and career faculty characteristics are considered to affect job-related stress and, consequently job performance. These characteristics may be characterized as either personal or professional in nature. Some of these personal characteristics may include age, gender, and marital status. Professional characteristics may include teaching field, academic rank, tenure status, and years of service at an institution (Bayer & Braxton, 1998; Gmelch, Wilke, & Lovrich, 1986;

Happ & Yoder, 1991; Iiacqua, Schumacher, & Li, 1995; Jenkins, 1996; Thomspon & Dey, 1998).

Community college teaching is a unique calling. One that many faculty members find especially satisfying, despite obvious frustrations that include such factors as underprepared students; lack of cohesiveness in transfer of credits between institutions; and adjunct faculty who devote too little time to students (Huber, 1998). As community college faculty are charged with carrying out the academic program of the institution and are the ones who are closest and most continuously in contact with the students. Faculty stress levels and satisfaction are very important factors in the overall success of the institution (Filan, Okun, & Witter, 1986; Huber, 1998). The well-being of faculty can certainly be a basis for enhancing the mission of the college and being beneficial and positive influences in the professional and personal lives of community college faculty members (Filan et al.; Locke, 1976; Huber, 1998).

Even though community colleges have been growing and the assertion that the "strength of these colleges is in their faculty, very little research has been done in recent years to provide insight into this group of academic professionals" (Fugate & Amey, 2000, p. 1). Additionally, literature that addressed stressors affecting community college faculty members is scarce. In fact, no studies specifically addressing stressors and coping strategies of community college business faculty members were found in the literature.

Theoretical Framework

Stress research has been of interest to social scientists for over six decades. One particular branch of stress research, occupational stress, has become a very important part of stress research for over twenty years. For example, occupational stress research in education has included groups from faculty members to administrators in elementary, secondary, and postsecondary educational environments.

Selye (1984) was able to identify the changes in the body's physiology in reaction to stress. He summarized this stress response into a three-stage process that he called GAS or general adaptation syndrome (p. 38). The three stages of GAS consist of alarm, resistance, and exhaustion. The alarm stage is the call to fight or flight; the resistance stage renews and replenishes the body's energy resources to continue the emergency state; and the adaptation energy is the exhausted state when bodily resources are depleted. A theoretical model developed by McGrath (1976) is composed of a four-stage model linking processes between each stage. The first stage begins with a set of specific demands. If an individual perceives that this particular demand produces stress, stage two begins an appraisal process. At this point, the individual may decide that he or she does not have the physical or mental resources to meet the demand that he or she has perceived. The stress created by this incongruity between demand and personal resource results in stage three, a stress or coping response that takes the form of psychological, physiological, or behavioral reactions. The final or fourth stage is the consequences, "the intensity and long-range effects of stress" (Gmelch, Wilke, & Lovrich, 1984, p. 4).

The theoretical model selected for use in this study was the four-stage model developed by Gmelch et al. (1984) and was based on the McGrath (1976) model that examined interactions between the individual and the environment. This model was developed specifically for teachers. Gmelch et al. (1984) described how the four-stage stress process was developed, analyzed, and adapted for teachers in the following steps:

- Stage 1: The researchers developed a questionnaire to measure sources of faculty stress through relevant facets of job-related strains, along with supplemented items selected from a review of the literature and from items suggested by teachers' logs. Then, the researchers used a factor analysis to cluster identified stress items into five categories: (1) Reward and recognition, (2) Time Constraints, (3) College/Departmental Influences, (4) Professional Identity, and (5) Student Interaction.
- Stage 2: Researchers interpreted the stressors based on their perception of the situation.
- Stage 3: Researchers gathered responses from a group of teachers to use as coping strategies. Then, the researchers used raters to perform a content analysis on the coping strategy list, separating the coping strategies into distinct categories. At this stage, individuals decided on a response (coping strategy) based on their determination of the situation in Stage 2.

- Stage 4: At this stage, individuals' health and well-being began to show the consequences of prolonged stress.

The body of theoretical research by Selye, McGrath, and Gmelch was used to form the foundation of this study. This study focused on the first, second, and third stage of the model developed by Gmelch et al. The first stage concerned the development of, clustered factors that represented the components of stressors in teachers' jobs. Gathering and analyzing data about the perceptions of stress exemplified the second stage. The third stage involved gathering, performing a content analysis, and separating the coping strategies into distinct categories and composites.

Statement of the Problem

Gmelch and Chan (1994) predict that in the twenty-first century educators will face more pressure, aggression, change, and conflict than in any other period in history. Additionally, several researchers recommended that employers and employees through anonymous surveys or face-to-face meetings try to solve stress sources and do something concrete to change the way work is done (Koff, Laffey, Olson, & Cichon, 1981; Karasek, 1990). This recommendation has also been voiced by researchers who study teacher stress. Another issue that concerns other educators is teacher burnout (Byrne, 1994).

Few studies address stressors and coping strategies of community college faculty. No researchers directly addressed stressors and coping strategies of community college business faculty members. Addressing stress by identifying

effective coping strategies may reduce injurious effects of stress (Scott & Spooner, 1989; Gerdes, 1995). There is, therefore, a need to extend the study of stress to community college business faculty members to measure their stressors and to know which coping strategies they use to deal with their occupational stressors. Knowing which stressors affect community college business faculty members in Texas might benefit not only these faculty members but also their administrators and chairpersons who oversee each faculty member's work environment to keep stress from advancing to the burnout stage. In addition, knowing which coping strategies faculty members use to lessen the impact of their stressors may assist administrators and department chairpersons in adopting relevant, new stress management intervention techniques.

Purpose of the Study

The primary purpose of this study was to explore and to identify the sources of occupational stressors perceived by selected Texas community college faculty members and to generate current demographics about these faculty members that would be useful in understanding such stress. A second purpose was to explore and to identify the coping strategies these faculty members use to alleviate their stressors. A third purpose of this study was to measure and to compare for possible relationships among stressors, coping strategies, and demographic characteristics. An analysis of these demographic variables will determine if there are any commonalities or unique barriers in the workplace of community college faculty members' workplace.

Research Questions

This study addressed the following questions:

1. What is the demographic profile of the survey respondents?
2. What are the perceived levels of occupational stress for selected Texas community college business faculty members?
3. What coping strategies do selected Texas community college business faculty members use to manage their occupational stressors?
4. What are the occupational stressors as perceived by selected Texas community college faculty members that relate to selected demographic characteristics?
5. Is there a relationship among stressors, coping strategies, and selected demographic characteristics, such as gender, age, educational level, tenure status, years in teaching, and professional rank, of selected Texas community college business faculty members?

Operational Definitions

Areas of Responsibility: Duties community college business teachers must perform as part of their job descriptions.

Burnout: The state of fatigue or frustration brought about by devotion to a course, a way of life, or relationship that failed to produce the expected reward (Freudenberger, 1980).

Community Colleges: Accredited institutions at which the highest degree offered are usually associate degrees. These colleges are primarily designed to serve a community or region in which they are located. The academic curricula of these colleges may include academic transfer programs, vocational-technical education, remedial education, continuing education, and services to or for economic development of the community or region (Cohen & Brawer, 2003).

Community College Business Faculty: Individuals whose main teaching loads consist of business courses, such as accounting, business communication, keyboarding, business management, and computer software application packages related to word processing, spreadsheets, databases, and accounting.

Community College Faculty: Individuals who hold regular, full-time or part-time faculty positions at a community and who hold ranks of instructor, assistant professor, associate professor, or professor. Faculty members consist of employees of community colleges whose primary responsibility is to prepare and instruct or teach in a discipline area in which at least a master's degree is usually required. Additional responsibilities besides teaching include committee work, office hours for availability to students, student advisement, and student, community, and professional activities (Cohen & Brawer, 2003). Even though increasing numbers are involved in research pursuits (Huber, 1998), they are usually not required to conduct research or scholarly inquiry or to write and publish (Cohen & Brawer, 2003).

College Environment: The climate in which community college teachers perform their teaching duties.

Coping: An individual's struggle to attempt to overcome problems and difficulties.

Coping Strategies: Strategies that are used to cope with stressors encountered in the community college environment and areas of responsibility of the community college teacher.

Demographic Background: The information about community college teachers that includes such factors as age, marital status, gender, academic rank, tenure, years of teaching experience, and level of education.

Stress: An internal chronic, excessive, and reactionary state of an individual caused by an imbalance between environmental demands and the individual's abilities to meet those demands, resulting in either positive or negative consequences.

Stressors: Are contributing sources of stress derived from daily living and working experiences that are appraised as significant, harmful, or threatening but can be helpful or pleasing to an individual's well-being.

Teacher Stress: Is an internal chronic, excessive, and reactionary state of a teacher caused by an imbalance among environmental demands of the workplace, students, administrators, other teachers, and other humans and the teacher's abilities to meet those demands that results in both positive and negative consequences.

Assumptions and Limitations

Assumptions

This study was based on the following assumptions:

1. The instrumentation provided data that was valid for the purpose of the study.
2. Each surveyed respondent understood the survey instrument and had the ability to self-report, and to respond objectively and honestly.
3. The researcher's interpretation of the data appropriately reflects the actual perceptions intended by those who are surveyed.

Limitations

1. This study is limited to community college business faculty who are employed full time in Texas community colleges.
2. Full disclosure of the Texas community college business faculty members' perception toward their own job stressors and coping strategies may be hindered by the individuals' reluctance to disclose their feelings.

Significance of the Study

Workplace stress is related to stress-related illnesses that reduce productivity (Booth, 1987; Allerton, 2000; Levine, 2001). The Center for Social Epidemiology in Santa Monica, California, reports that prolonged stress has a high cost to workers who can suffer from health problems ranging from burnout to cardiovascular disease (Levine, 2001). Increasing demands faced by community college faculty members, such as teaching more hours, shouldering more work overloads, holding high professional standards, assuming responsibility for self-regulation, along with the information explosion and ever changing technology, have added to their stress (Bayer

& Braxton, 1998). Not only does burnout have negative consequences for teachers, but it also has consequences for students (Burke, Greenglass, & Schwarzer, 1996) and for teachers' families (Westman, 2001). By researching the link between stressors and performance, community college business faculty could learn to control their stress to achieve more success and balance in their lives.

Knowing what stresses Texas community college business teachers in their work environment might benefit them personally. In addition, this knowledge might be beneficial to their department chairpersons and administrators in planning topics for employee development days and for hiring and retaining faculty. Moreover, knowing which coping strategies community college faculty use to relieve their stressors might assist department chairpersons and administrators in adopting relevant stress management intervention strategies to prevent burnout in their faculty, thus gaining more productive faculty members.

The results of this study can benefit not only chairpersons and administrators but also community college business teachers. Stress management strategies that include professional seminars, training programs, and effective in-service meetings can turn stress from a counterproductive dimension to a productive one.

Currently, a proliferation of job-related stress research exists concerning all kinds of professions; however, job-related stress research specific to the academic profession seems to be lacking, even though the academic environment contains unique pressures and demands in higher education (Gmelch et al., 1986). Much can be gained by studying community college faculty members as a vital part of the professoriate at

large because they hold high ideals and strive to improve both instruction and the teaching profession (Huber, 1998). This first of a kind study concerning stress and community college business teachers could contribute significantly to the knowledge and understanding of administrators who supervise community college business faculty members. The knowledge and understanding that college administrators develop concerning community college faculty members can encourage a more productive work environment and institutional effectiveness (Gmelch et al., 1984).

Contents of the Dissertation

This dissertation is divided into five chapters. Chapter I contains an introduction, a statement of the problem, a need for the research, specific objectives, limitations and assumptions, and operational definitions. Chapter II includes the literature review. The methodology and procedures are found in Chapter III. Chapter IV holds analyses and discussions about data collected for this research. Chapter V contains the researcher's summary, conclusions, and implications.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter presents a synopsis of the literature pertaining to stressors and coping strategies as they relate to community college faculty. The topics of stress and coping strategies are discussed separately. Then, the relationship of the stress and coping strategies in the community college setting is investigated. In addition, several studies were interpreted and discussed that relate to the development of the American community college. Further, demographics relating to community college faculty, such as gender, marital status, years of teaching service, faculty rank, and tenure, were also discussed.

Synopsis of Stress and Coping

This section contains the background of stress, along with the origination of stress study models, stress, and stressor definitions. In addition, an overview of workplace stress research, elements of stressful workplaces, as well as definition of coping strategies, stress studies and research, were included in this chapter.

Background of Stress

Researchers have studied stress for over sixty years but have met with extreme difficulty because individuals tend to experience and react differently to the stressors they encounter. Numerous researchers contend that individuals need a certain amount

of stress to remain productive (Alley, 1980; Goodall & Brown, 1980; Kaiser & Polczynski, 1982; Selye, 1984; Terry, 1997). Early stress research began in 1914 with the research of Walter Cannon, an early pioneer of stress and a noted physiologist employed at the Harvard Medical School (Seaward, 1997, p. 6). Cannon was the first to describe the body's reaction to stress. He identified this stress reaction as "fight or flight," an involuntary response that occurs in an emergency situation in which an individual must either confront or escape a dangerous situation (Seaward, 1997, p. 6).

A young endocrinologist in 1925, Hans Selye, interested in Cannon's fight-or-flight response, began a study using rats and exposing them to stressors, factors with the potential to cause stress (Greenberg, 1996; p. 4). Based on his studies, Selye was able to identify the changes in the body's physiology in reaction to stress. He summarized this stress response as a three-stage process that he called GAS or the general adaptation syndrome (Selye, 1984, p. 38). The three stages of GAS consist of alarm, resistance, and exhaustion. The alarm stage is the call to fight or flight; the resistance stage renews and replenishes the body's energy resources to continue the emergency state; and the adaptation energy is the exhausted state when bodily resources are depleted (Selye, 1984). Selye was the first to recognize that stress could be good stress, which he named "eustress," or bad stress, which he named "distress." His research was the first significant breakthrough in stress research and provided the foundation for future stress research (Seaward, 1997).

Selye's research attracted large numbers of followers. One of the followers in the 1960s was Simeons, who linked evolution to psychosomatic or mental disease and

published his findings in *Man's Presumptuous Brain* (Greenberg, 1996, p. 5). In his book, Simeons argued that the human brain had failed to develop fast enough to respond to symbolic stressors of the twentieth-century life and presented as an example the idea of self-esteem. He explained that when an individual's self-esteem is threatened the human brain prepares the body for fight- or flight-response. This threat, he believed, could begin with fear or embarrassment during a public speaking engagement in which neither fight nor flight are appropriate reactions. In this example, the individual's body prepares itself physiologically but to do something that the body's psychology prohibits. At this point, unused stress products break down the body, and a psychosomatic disease may be a result (Greenberg, 1996, p. 5).

Other researchers who have added to the studies of Cannon, Selye, and Simeons pertaining to the relationship of stress to body processes have helped society to understand that illnesses and diseases can be associated with stress and to develop methods to prevent these conditions from escalating. In the early 1950s, Harold Wolff researched the question of why only one hundred prisoners of war held by the Germans during World War II died before release, while thirty-three out one hundred held in Japanese camps died before their release. Wolff found that emotional stress was much greater in Japanese prisoner-of-war camps than in German ones (Greenberg, 1996, p. 5).

Others who have helped to explain and to clarify the effects of stress included Steward Wolf, who established the effects of stress on digestive functions. A second person was LeShan (1956), who studied stress effects in the development of cancer.

Engel, who studied stress and ulcerative colitis, is a third person. Other individuals who contributed to the effects of stress were Friedman and Rosenman, who established a relationship between stress and coronary heart disease; and Stewart Wolf and Harold Wolf, who studied stress and headaches (Greenberg, 1996, pp. 5-42).

Origination of Stress Study Models

Past stress research has been defined and developed through stress study models by Kahn and McGrath. These early researchers' efforts turned more toward the social-psychological aspects of stress, rather than on its physical and physiological attributes. Kahn selected both individuals and organizations as objects of stress, while McGrath developed a comprehensive framework using different definitions and applications of stress.

Kahn (1970) based his model on the idea that both individuals and organizations were considered as objects of stress. Also, he believed that stress was a process that could be learned through a series of events. These events began with some incident in an objective environment that made a demand on an individual or organization. Then, the individual or organization responded to the perceived demand. The outcome was the effect the series of events had on the individual or the organization (pp. 88-99).

The comprehensive framework that McGrath (1976) used was composed of a four-stage analysis of the stress process with linking processes between each stage. The appraisal process linked Stages 1 and 2. This process he called subjective

analysis. Stages 2 and 3 were linked by a decision-making process. Decision making is the point where an individual considers available alternatives and chooses a response. McGrath described the linking point between Stages 2 and 3 as the response or performance process that evaluated the performance level in terms of quantity, quality, and speed. He positioned the outcome process between Stages 3 and 4. This fourth process included not only a change in an individual's behavior but also a change in factors outside the control of the individual (pp. 1356-1357). McGrath's concept sorted complex sets of responses and outcomes for various stress events. His framework relates to occupational stress and lays the foundation for exploring stress in the academic environment.

Stress and Stressor Definitions

In this section, more than twenty authors and their definitions are presented, as well as types and effects of stress. Ivancevich and Matteson (1982) noted that the first individual who used the word stress was Selye. Selye (1984), a pioneer in stress research, identified stress as "the nonspecific response of the body to any demand made upon it" (p. 74). His work was the first significant breakthrough in stress research and set the foundation for future stress research.

Stress has been defined in many other ways by various philosophers, researchers and writers. Eastern philosophers considered stress to be "absence of inner peace," while Westerns defined stress as "a loss of control" (Seaward, 1997, p. 5)." A well-known researcher, Lazarus (1984), defined stress as a state of anxiety produced

when events and responsibilities exceed one's coping abilities. Many writers have tried to find words to define stress more clearly. Some of these include adaptation, distress, eustress, response, strain, stimulus, transition, and others. Lazarus and Folkman (1984) viewed stress as an external event that ignores individual differences in the perception or appraisal of stress. They define stress as the extent of an environmental demand and the resources that an individual has to cope with that demand. In theory, the person first recognizes a problem; then, the person determines what resources are required to meet the problem. The theory developed by Lazarus and Folkman (1984) has five types of appraisal: (1) harm, (2) threat, (3) loss, (4) challenge, and (5) compassion. The result is stress that is caused by an imbalance between the requirements of the environmental situation and the individual's ability to cope.

Writers in the field of holistic medicine have expanded Selye's and Lazarus's definitions to define "stress as the inability to cope with perceived or real or imagined threat to one's mental, physical, emotional, and spiritual well-being which result in a series of physiological responses and adaptations" (Seaward, 1997, p. 5). This holistic definition confirms that stress is very complex and affects the whole person as well as many other aspects, "some of which may not yet even be recognized" (Seaward, 1997, p. 5).

Lazarus (1984) and Zajonc (1984) debated the idea that cognitive or emotional reactions are important in stress reactions. Lazarus contended that cognitive processes of appraisal are central in determining if a situation is potentially threatening or

harmful. He, therefore, believed that cognition determined both the perception of stress and the individual's emotional reaction to it. Zajonc disagreed and stated that simple awareness should not be equated with cognition and that emotional reaction to stress occurs before and may even be at odds with cognitive reactions. In reality, the answer is both because individuals may react first and think later; on the other hand, individuals may not become upset until they finally realize the full meaning of the threat to their situation (Aldwin, 1994). Mason (2001) defined stress as the way a body responds to negative influences. His studies showed that "external stress may be positive or negative (pleasure, challenge, divorce, work responsibilities)" (p. 316).

McGrath (1976) examined stress from a psychological point of view and explained stress as an interaction of the individual and the environment. He felt that stress existed only when there was doubt or uncertainty as to whether the opportunity would be seized, the constraint removed, or the demand conquered or the loss avoided. He, however, felt that stress is not static but is dynamic since important outcomes can change from day to day.

In addition to McGrath's view of stress, Jex, Beehr, and Roberts (1992) noted that stress is a stimulus or a job stressor in which a response or strain, or a stimulus-response or the interaction between job stressor and strains. Buunk, de Jonge, Yberma, and Wolf (1998) call this stress definition a mediational approach.

Basically, three types of stress have been defined. The three types of stress are physiological, psychological, and psychosocial. Physiological stress involves stressors in the environment and includes factors such as extremes in temperature,

environmental pollution, constant noise, or electric shock. Researchers also categorize physiological factors as physical stress; examples include injury, surgery, hypoglycemia, prolonged exercise, or an inadequate supply of oxygen. Psychological stress stems from the way individuals feel, their attitudes, and the way they react toward anything that is threatening to them, whether the threat is real or imagined. For example, the roller coaster may cause one person to react calmly, while another may become extremely stressed. Psychosocial stress involves stressors from interpersonal relationships, arguments or conflicts with family members, neighbors, employers, friends, or other people around us. Psychosocial stress may result from intense social interactions, but it can also occur when there is isolation as a result of inadequate social interactions (Asterita, 1985).

Olsen (1993) reported that stress generally implies a physiological or psychological response to some aspect in the environment that an individual perceives as exceeding personal resources. Allen (1983), however, perceived stress as more than just physiological reactions and included events that triggered mental or cognitive arousal that resulted in psychogenic stress. These reactions, he believed, had possibilities of involving the entire body not just certain parts. Seaward (1997) concurred with Allen's perception of stress and reported that he perceived stress as the sum of the individual's physical and emotional reactions to any stimulus that disturbs the body's balance. Bradley & Boles (1999); however, defined stress as an external or an internal pressure to act. She stated that the body throughout evolution has responded to stress by "activating a complex system that produces an array of

hormones and neutrotransmitters, which are intended to help the heart and brain work better physiologically to meet the demand" (p. 1233-1234).

Stress definitions included not only these three stresses but also cognitive ones. Newell (1979) defined stress as a somatic demand that included such reactions as fear, frustration, pain, grief, marital discord, and job-related stress and job pressures. Moreover, Newell referred to surgical operations, burns, and loss of blood as somatic demands (pp. 16-17). Burchfield (1979) noted that stress is "anything which causes alteration of psychological homeostatic processes" or mental balance (p. 662).

Selye's definition, however, does not make a distinction between pleasure and pain in invoking the stress response; and Selye believed that both appear to produce the same indiscriminate stress response in the body. Moreover, Selye's definition mirrored the same biochemical reaction when the situation produced good stress (eustress) as when it produces bad stress (distress). Kieve and Kohn (1979) explained that pleasant stress is not harmful. Selye (1984) felt that individuals need a certain amount of stress to have meaning in their lives and to motivate them. According to Terry (1997), few people think of stress as a pleasant experience.

Aldwin (1994) incorporated most of the elements of various stress definitions into one definition that she believed researchers used to identify and to study the effects of stress. Aldwin defined stress as that quality of experience, produced through a person-environment transaction that through either over arousal or under arousal, results in psychological or physiological distress. Pearlin and Schooler (1978) used stressors to refer to external events, but strain or stress to refer to internal stressful

states. Aldwin (1994) argued that from a performance viewpoint the disparity between external and internal states is hard to validate because of the importance of cognitive appraisal processes in the perception of stress.

Other researchers defined stress as a demand that requires adjustment or adaptation (Witkin, 1991), while Kindler and Ginsburg (1994) characterized stress as the response to external and self-regulated events that push individuals' abilities and resources to cope. Davidson (1997) labeled stress as wear and tear on the body; however, Looker and Gregson (1997) identified stress as an adaptive response by the body to changes in the environment. They reasoned that stress is a condition in which a mismatch occurs between perceived demands and perceived ability to cope.

Other researchers, Miller and Smerglia (1998), defined stress as an individual's general feeling of uneasiness or displeasure in response to an upsetting life event and the accumulation of other related problems or changes. They divided stress into two concepts. These two concepts are added stress or coincidental contextual stresses and event stresses that are the reactions directly related to a stressful life event. Added or coincidental contextual stress is a result of addition problems and changes that occur simultaneously with the event or primary stress.

Selye (1984) was the first known researcher to introduce the word "stressor" as a contributing source of stress. Too, he was one of the first to viewed stress and strain as concepts related to physics and stress and stressors as concepts in biology and medicine (p. 81). On the other hand, Hogan and Hogan (1982) believed that stressors were stimulus variables that produce stress responses. They felt that physical stressors

related to physical stimuli and psychological stressors to psychological generators that anticipate harm.

Aldwin (1994) presented the idea that psychologists and sociologists view psychosocial stress differently. Psychologists view stress as involving stressful live events, like losing a job, that occur randomly or as a result of an individual's psychological problems, while sociologists are more likely to speculate that the source of life events are implanted in the social structure. Pearlin (1989) maintained that stressors can arise from the distributing of social resources by either increasing the probability of a stressful life event or enhancing a stressful life event's stressfulness once it occurs.

Pearlin (1989) used students as an example to explain his idea of distributing social resources. Students typically have little money to buy new cars, so they may buy a second-hand car with high mileage for transportation to obtain work. They have to work because they need additional funds to pay for tuition and living expenses. This used car is likely to break down (a stressful event) and need repairing. The students must then decide to make the needed repairs or skip paying rent or buying food (an increasingly stressful event). If the car is not repaired, the students could lose their jobs. According to Pearlin's definition, a primary stressor (car trouble event) links with a secondary stressor (losing a much-needed job). The primary stressor may be a more important stressor than the secondary stressor or vice versa.

Another example of a sociocultural stressor derived by Calhoun (1962) came from an early study of stress of external environments from his study of the effects of

crowding in rats. He found by letting rats over reproduce in a restricted environment that social diseases among rats increased. Rats became aggressive, but their aggression increased markedly when Calhoun reduced the rat's access to basic necessities like food and water by providing only one entrance. This study demonstrated that low levels of resources sufficient to sustain life but distributed inequitable are very challenging and can lead to increased aggressive behavior.

Pearlin (1989) found that personal and social environments are instrumental in determining the outcome of sociocultural stressors. Pearlin identified four role strain (stressor) types that came from these environments. The first role strain was overload that consisted of having too much to do. Interpersonal conflict, the second role strain, arose from arguments with a spouse, child, or co-worker. Third was interrole conflict that occurred in juggling parenting and work roles. The last role was captivity. This role may be the most challenging of the sociocultural stressors and refers to an individual's being unable to quit a difficult job due to financial obligations or person obligations like being a caretaker for a parent.

Social environments can also emanate from environmental role stressors like living in poor or violent neighborhoods and from informal or elective role stressors that include arguments with friends or fellow members of a social organization (Pearlin, 1989). Both personal and social environments are necessary to determine the outcome of a stressor. Some role exits may be positive stressors. For example, an individual's exit from a stressful role, such as leaving a job that an individual dislikes or a difficult marriage are all examples of the outcomes of positive stressors. Pearlin 1989) stressed

60that the evaluation of stressors requires the knowledge of both social and personal environments.

Physical stressors, according to Aldwin (1994), include both aversive and trauma environmental conditions. Aversive environmental conditions may have subtler but nonetheless harmful effects like pollutants and noise, while trauma threatens immediate bodily harm, such as speeding cars, tornadoes, or fires (p. 35).

Aldwin noted that a subtle physical stressor could be a "sick building" (p. 35). This type of building is one in which all windows are sealed and workers are exposed to low levels of harmful chemicals like formaldehyde, paint resides, cleaning compounds, or copy machine fumes that are not immediately noticeable. Aldwin warned that the outcomes of working in such a building could include headaches, irritated eyes, rashers, and viral infections (p. 35).

Evan and Jacobs (1982) suggested that physical stressors interacted with social stressors, resulting in a symptomatology stressor. Evan and Jacobs studied Los Angeles residents who lived in an area with poor air quality. They found these Los Angeles residents had more symptoms when exposed to stressful life events than did residents who lived in areas with cleaner air.

Ivancevich & Matteson (1982) defined stressors by dividing them into two separate stressor factors, intraorganizational and extraorganizational. The first set of stressor factors, intraorganizational stressors factors, consists of four stressor groups. The first stressor group relates to the physical environment like light, noise, and pollution. The second stressor group connects to the individual stressor factors of

uncertainty, goal discrepancy, overload, responsibility for people, and role conflict. A third stressor group contained group stressors that convey dissatisfaction, group conflict, lack of cohesiveness, and status incongruence. The organizational level is the fourth stressor group and consists of characteristic, climate, job design, and management style. Some of these economic concerns are family life, residential problems, and race and class positioning.

Researchers, such as Anisman and Merali (1999), defined a stressor as a situation or event judged as being adverse because it elicits a stress response. This response or stressor overworks an individual's physiological or psychological resources that might have a potential of provoking a subjective state of mental or physical tension. Anisman and Merali classified these stressors as neurogenic and psychogenic. Neurogenic stressors generally involve a physical stimulus, while psychogenic stressors require an appraisal of a situation that involves high-level cognitive processing of incoming sensory information.

In 1997, a heuristic model, developed by Cohen, Keesler, and Gordon, illustrated the potential integration of three approaches to stress measurement. These three approaches were environmental, psychological, and biological. This model illustrated the way in which individuals evaluate the demands of possible threats in the environment with the coping strategies they have available. In addition, the model is mainly unidirectional and flows from environmental demands to disease but does not include all possible paths linking these concepts.

For example, if individuals decide that a situation is one in which they find the environment to be "taxing or threatening, and at the same time view their coping resources as inadequate, they perceive themselves as under stress" (Cohen et al., 1997, p. 10). At this moment, these individuals are believed to have experienced a negative emotional state. If this state is extreme, the perceived danger may "trigger behavioral or physiological responses" that put these individuals at risk for psychiatric and physical illness (Cohen et al., 1997, p. 10). The model in Figure 1 provides a stress process of sequential components that indicate each stress process is closer to and thus more predictive of the illness outcome. The authors state that "a disease-relevant biological stress-response measure should be a better predictor of a disease outcome than measures of stressful life events or perceived stress" (Cohen et al., 1997, p. 10).

In addition to the above explanation, the model in Figure 1 is designed to characterize the possible existence of environmental stress individuals may experience which, in turn, can also put them at risk for disorders even if their appraisal of a demand or a threat does not end in perceptions of stress and negative emotional responses. According to several researchers, the coping process itself may directly result in physiological and environmental changes that place person at risk for disease (Cohen, Evans, Krantz, & Stokols, 1996; Cohen, Tyrrell, & Smith, 1993).

One loop in Figure 1 suggests that emotional circumstances may alter appraisals, such as depressed affect may result in negatively biased views of either the threat posed by stressor or the adequacy of one's own resources. A second loop, arousal of a physiological nature, may alter appraisal and emotional responses like

individuals may mistakenly attribute their arousal to drugs, exercise, or nonrelevant emotional responses to a stressor (Schachter & Singer, 1962).

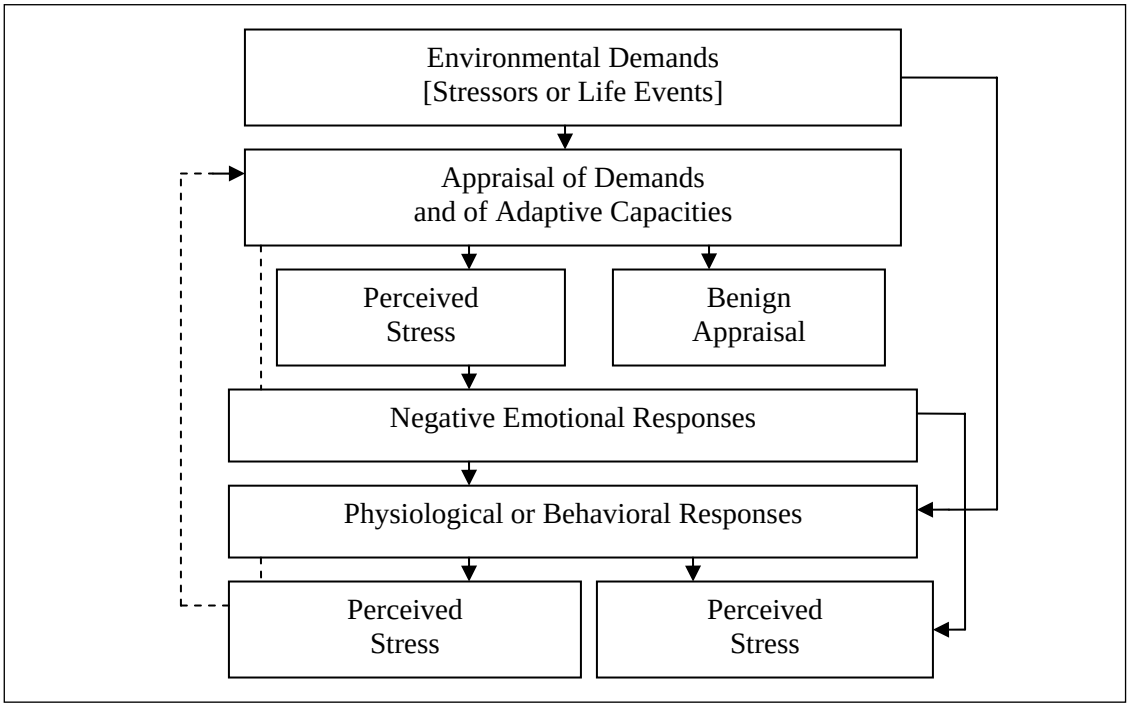

Figure 1. A Heuristic Model of the Stress Process
Adapted from: *Measuring Stress: A Guide for Health and Social Scientists* by Cohen, Kessler, and Gordon, 1997.

Stressors can be both negative and positive, yet many authors agree that stressors are a necessary part of life. Even though all of these stress definitions are related, there appears to be a lack of consensus by researchers, practitioners, and experts on the concept and definition of stress. Table 1 contains over two dozen definitions of stress and stressors as recorded by authors. These definitions are listed in alphabetical order by author.

Table 1. Stress Definitions by Author

Author	Definition
Aldwin, 1994	Stress is that quality of experience, produced through a person—environment transaction, that through either overearousal or underarousal, results in psychological and physiological distress. Physical stressors include both trauma, which threatens immediate bodily harm (such as speeding cars, tornadoes, or fires), and aversive environmental conditions, which may have subtler but nonetheless harmful effects, such as pollutants, noise, and the like.
Allen, 1983	Stress is a physiological state that is a response to an event or stimulus (stressor) resulting in psychogenic stress.
Anisman & Merali, 1999	A stressor is a situation or event judged as being an aversion because it elicits a stress response.
Asterita, 1985	Stress is of three types: physical, psychological, and psychosocial.
Beehr & Bhagat, 1995	Stress is a cognitive state in which an individual confronts a decision-making or problem-solving situation characterized by high levels of uncertainty associated with obtaining important outcomes and, in which existence of such uncertainties are long in their duration.
Burchfield, 1979	Stress is anything which causes alteration of psychological homeostatic processes.
Buunk, de Jonge, Yberma, & de Wolf, 1998	Using the definition of Jex, Beehr, and Roberts, stress is the mediational approach.
Davidson, 1997	Stress is wear and tear on the body.
Evans & Jacobs, 1982	Stressors are physical stressors that interact with social ones.
Looker & Gregson, 1997	Stress is an adaptive response by the body to changes in the environment.
Hogan & Hogan, 1982	Stressors, in behaviorist language, are stimulus variables that may produce stress responses.
Ivancevich & Matteson, 1982	Stressors are intraorganizational and extraorganizational factors.

Table 1. (continued)

Author	Definition
Jex, Beehr, & Roberts, 1992	Stress is a stimulus, a response, or a stimulus-response.
Kiev & Kohn, 1979	Stress covers the whole spectrum from stage fright to virtuoso performance and can even stimulate creativity and increase efficiency and productivity.
Kindler & Ginsburg, 1994	Stress is a response to external and self-regulated events that push abilities and resources of individuals to cope.
Lazarus, 1984	Stressors or hassles are experiences and conditions of daily living that are appraised as salient and harmful or are threats to a person's well-being.
Lazarus & Folkman, 1984	Stress depends upon the extent of the environment demand and the amount of resources that an individual has to cope with that demand.
Newell, 1979	Stress is a somatic demand and refers to such reactions as fear, frustration, pain, grief, marital discord, and job-related stress and job pressures. Other somatic demands are surgical operations, burns, and loss of blood.
Pearlin, 1989	Stressors can arise from a distributing function of social resources by either increasing the probability of a stressful life event or enhancing its stressfulness once it occurs. Primary events may lead to secondary stressors.
Seaward, 1997	Stress is the perceived sum of the individual's physical and emotional reactions to any stimulus that disturbs the body's balance.
Selye, 1984	The stressor is the contributing source of stress. whereas, stressors are concepts in biology and medicine
Schuler, 1982	Stress is a dynamic condition in which an individual is confronted with an opportunity, a constraint, or a demand on being/having/doing what he/she desires and for which the resolution is perceived to have uncertainty but which will lead (upon resolution) to important outcomes.
Skillern, Richardson, Wallman, Prickett, & Marion, 1990	Stress is an adaptive response in which a person's body prepares or adjusts to a threatening situation.
Witkin, 1991	Stress is a demand that requires adjustment or adaptation.

Adapted from Solis, 1986

In summary, more than two dozen different definitions of authors who write about stress and stressors were researched and defined. From these stress definitions, this researcher derived the following stress definition: Stress is an internal chronic, excessive, and reactionary state of an individual caused by an imbalance between environmental demands and the individual's abilities to meet those demands that result in either positive or negative consequences. Additionally, from the stressor definitions, this researcher was able to create the following definition: Stressors are contributing sources of stress derived from daily living and working experiences that are appraised as significant, harmful, or threatening but can be helpful or pleasing to an individual's well-being.

Components of the Stress Process

Most of the previous stress concepts can be classified as stimulus, response, or stress-response, and transactional models. To this end, Aldwin (1994) developed a table to display the various components of the stress process based on Mason's (2001) categorization, which is displayed in Table 2. The first category of this table is stress, the second is stressor, and the third is transaction. Stress links to physiological and emotional reactions. Physiological reactions focus on the peripheral and central nervous system, as well as the neuroendocrine and immune system. This activating effect can be perceived as being negative or positive, depending on the individual's perception and related factors (Aldwin, 1994, p. 23).

Stressors, the second category, connect to the external environment. Earlier studies focused on major trauma like combat and natural disasters. Later, researchers revised this category to include major events, such as marriage, divorce, bereavement, or job layoffs. Then, some researchers characterized this area as a noxious environment, linking it to noise, overcrowding, or pollution. Some researchers use this characterization to focus on common problems related to a bad marriage or impoverishment; however, other researchers use this category to examine daily hassles or stressors (Aldwin, 1994, pp. 23-24).

A third category is experience that arises from a reaction between a person and an environment. In this arrangement, an individual's cognitive appraisal of stress must be present for any emotional physiological reaction to occur (Aldwin, 1994, p. 24). Some researchers focused on how stress was perceived, or appraised, on perceived characteristics, such as threat, harm, or loss, and on the severity of the problem (Aldwin, 1994, p. 24). The stress component process is displayed in Table 2.

Table 2. Components of the Stress Process

Stress		**Stressor**		**Reaction**	
Physiological Reactions	Emotional Reactions	Types of Stress	Temporal Dimensions	Cognitive Appraisals	Intensity of Feelings
Sympathetic activation	Negative affect	Trauma	Duration	Harm	Weak
Para-sympathetic suppression	Emotional numbing	Life events	Rapidity of onset	Threat	Moderate
Other neuroendo-crine stimulation suppression	Positive affect	Aversive physical environments	Linkage	Loss	Strong
Immuno-suppression-enhancement		Chronic role strain		Challenge	Ambiguous
		Hassles		Benign	
				Concern for others	
				Nuisance	

Adapted from: S*tress, Coping, and Development: An Integrative Perspective*, by Aldwin, 1994.

Overview of Workplace Stress Research

Past Workplace Stress Research

One of the popular areas of stress research that has received much attention is the study of stress in the workplace. These studies concerned characteristics of the environmental stressors, various perceptions and appraisal of stressful situations, the individual's reactions to stress, and how to reduce stress.

Job stress and employee health studies examined the interaction of workplace characteristics, such as certain jobs, work environments, and personal qualities that were assumed to be contributing factors in job stress. These causal factors were classified as extra-organizational, organizational, task-related, and individual stressors. Extra-organizational stressors were found to come from outside the individual's organization. Organizational stressors were identified as arising from within the individual's organization. Stressors classified as task-related stressors were identified as pertaining to an individual's job duties and responsibilities. Individual stressors were acknowledged as being part of the personal difficulties within an individual that are magnified by work roles. These are the stressors that can lead to adverse physical, psychological, or behavioral consequences for individuals. West and West (1989) found that work organization can be negatively affected since the effects of stress are manifested in employee performance measures and absenteeism.

Further, some researchers feel that work-related stress has increased because of greater demands and pressures on workers over longer periods of time, along with rapid changes in workers' jobs by the introduction of new technologies, downsizing, global competition, market fluctuations, and governmental budget cuts (Sauter et. al, 1999). Furthermore, numerous stress studies relating to work-related stress have brought this subject to the public's attention, especially unrelenting stress that has contributed to physiological and psychological illnesses.

The United Nations' International Labor Organization defined work-related stress as a global epidemic. Physical effects of this epidemic are startling, but the

economic effects are even more alarming. The cost of workplace stress to employers of the United States is estimated to be $200 billion per year due to employee absenteeism, lower production rates, employee turnover, workers' compensation, medical insurance, and other stress-related expenses (Maxon, 1999).

Stress is a part of everyone's life, especially during important events such as marriage, divorce, buying a home, or having a baby. By using the Holmes-Rahe Life Events Scale, a scale that rates levels of stress caused by these important events, researchers have rated events that related to the workplace as being the most stressful. Some of these workplace events include job insecurity, business readjustments, changes in financial status, altered responsibilities, changing jobs, trouble with the boss, an aging workforce, increasing presence of females in the workforce, changes in work hours or conditions, retirement, and vacations (Maxon, 1999; Sauter, et al., 1999).

Rosch (1997) defined work-related or job stress as "duties in which an individual perceives as having a great deal of responsibility, yet little or no authority or decision-making latitude" (p. 4). A rather recent study by Rosch found that job stress is at an all-time high in business and industry because of the 1990s corporate mergers, restructuring, and downsizing. Furthermore, he noted the job security that people had a generation or two ago was only a myth.

Leak (1998) discussed briefly *The Mitchum Report on Stress in the '90s.* She noted this report revealed that 90 percent of the people who were studied reported high levels of stress at least once a week; that major over-the-counter drug purchases were

for stress-related headaches; and approximately 75 to 90 percent of visits to primary care physicians were for stress-related disorders. Leak further reports that stress is on the rise due to sensory overload and states that:

> . . . We live in an age of nanosecond communication: faxes, cellular phones, voicemail, e-mail, Ethernet, web sites, conference calling, video conferencing, sky paging and voice mail, computer docking, computer shopping, personal computing, Internet . . . the very technologies that promised to simplify our lives are making it the much more complicated (p. 1).

Silcox (2003) noted that one in five human resource managers remarked that work-related absences were growing and were, in fact, their biggest problem. Moreover, research of 430 organizations by IRS Employment Review found that half of the managers did not believe their employees were actually sick. Human resource managers state that “workplace health has become an increasingly important part of their job, particularly when dealing with issues connected to stress" (Silcox, 2003, p. 19).

Most importantly, however, is the fact that work-related problems consume the most stress in Americans’ lives. As stated earlier, the cost of workplace stress in terms of work productivity costs $200 billion each year. Additionally, 60 to 80 percent of all industrial accidents are stress induced, and over 90 percent of all office visits to primary care physicians are for stress-related illnesses (Seward, 1997, p.17). Workers’ compensation claims related to stress are increasing rapidly, with 90 percent of all claims receiving some kind of settlement (Seaward, 1997, p. 17).

Gmelch (1993) related that all stress is not necessarily bad as stress can motivate people to become creative and productive. In the words of Ostermann, professor of psychology at Fairleigh Dickinson University, "No one reaches peak performance without being stressed, whether an athlete, an office worker, or a manager" (Maxon, 1999). The normal pattern of human behavior is to experience a stressful event, react to the increased stress, and then to return to a relaxed state; however, the problem occurs when this pattern is broken and the stressful situation becomes overpowering or constant. This situation can lead to prolonged, stress-induced diseases or death (Selye, 1984).

Workplace stress is responsible not only for on-the-job stress but also for conflicts between work and home life. A study conducted by the U. S. Department of Labor found that 10 percent of married individuals or those living with children under the age of 18 experienced severe conflicts between work and home, with 25 percent reporting moderate levels of conflict (Maxon, 1999). Ostermann reported that less stress exists in developing countries than in developed countries. Individuals who live in developed nations value money, while developing nations hold strong values for family. These strong values of family provide support for individuals of developing nations so that they are able to deal with greater amounts of stress than those individuals who live in developed nations (Maxon, 1999).

Several stressors contribute to workplace stress. Those reported by the National Safety Council included the following:

- *Commuting and traffic problems*
- *Corporate downsizing, restructuring, or job relocation*
- *Inability to voice concerns*
- *Inadequate child care*
- *Inadequate time to complete job responsibilities*
- *Inadequate training*
- *Keeping pace with technology*
- *Lack of appreciation*
- *Lack of clear job descriptions*
- *Lack of creativity and autonomy*
- *Poor working conditions (lighting, noise, ventilation)*
- *Sexual harassment and racial discrimination*
- *Too much responsibility with little or no authority*
- *Too much to do with too little resources*
- *Unrealistic expectations, deadlines, and quotas*
- *Workplace violence*

According to the American Psychological Association (2003), occupational stress is a multidisciplinary issue that is often difficult to measure and to identify the factors that cause it. To illustrate, Karasek's (1979) study revealed that the amount of job decision latitude or control employees have relates to the employees' ability to handle their workloads. Karasek found that workers whose jobs were simultaneously low in job decision latitude and high in job demands were the workers who reported

exhaustion at the end of a work day, had trouble awakening in the morning, and experienced depression, nervousness, anxiety, and insomnia or disturbed sleep. When workplace supervisors finally realized that occupational stressors can affect health and well-being and reported the matter to their organizations, many organizations began to implement programs designed to enhance employee control and well-being.

Karasek's research is also important because it suggests that if companies give their employees some control over their work place it may be possible to improve job-related mental health without sacrificing productivity. Karasek's research also found that change in the decision-making structure of an organization is another way to increase mental and physical health of employees. For example, Telework allows its employees to control where, and to some extent, when, they complete their work. The International Telework Association and Council reported an increase from 2000 to 2001 in the number of telecommuters in the United States. This number increased 17 percent or to 28.8 million. When Telework employees were given some control over their jobs, they seemed to be more productive and more satisfied (American Psychological Association, 2003).

Other organizations, such as American Express, AT&T, IBM, and Merrill Lynch, employ a significant number of employees who take advantage of this form of employee control. American Express researchers, for example, found that telecommuters handled 26 percent more calls and produced 43 percent more business than their office-based counterparts. Even IBM managers reported that mobile work and telecommuting saved the company $100 million annually. At IBM's Canada

facility, approximately 20 percent of its workforce reported that they commuted. IBM managers found their employees were 50 percent more productive when they worked in telework environments. AT&T researchers surveyed their managers in 1999 to determine the success of telecommuting within their organization and found that 68 percent of their managers reported that productivity had increased. Moreover, 76 percent of the AT&T employees reported that they were happier with their jobs and 79 percent reported they were also happier with their careers in general. Seventy-nine percent of the AT&T employees reported higher satisfaction with their personal and family lives. In addition, AT&T found that they saved an average of $3,000 per teleworker, along with reportedly reducing employee stress and improving employee morale (American Psychological Association, 2003).

Research indicates that some people manage to be resilient to stress, while others exhibit what scientists call "hardiness," an ability to resist the ill effects of stress. Research has also indicated that there are ways to help people cope better with stressors. It is important to know the factors that lead to stress, the physiological reactions of the body when under stress, and the way that stress can compromise the immune system and lead to illness (Brodsky, 1990).

Occupational stress research has been shown to emanate from four kinds of organizational demands in the workplace. These demands are physical, task, role, and interpersonal. The first demand is physical and includes inadequate lighting, poor working conditions, uncomfortable chairs, and temperatures that are too cold or too hot. Task is the second demand and emanates from repetition, too many or too few

changes, job insecurity, or work overload. Role demands, the third kind of occupational stress, results from conflict or role ambiguity about the employee's role in the workplace. Interpersonal demands are the fourth kind of workplace stressor and are linked to working for an abrasive boss or having to function under passive leadership (Asterita, 1985). In addition to the four major stresses listed, O'Donnell (2001) researched and wrote the book entitled *Health Promotion in the Workplace*. His research showed that other major occupational stresses include task ambiguity or task rigidity; too-much or too-little responsibility; negative competition or no competition; constant change or boring stability; contact with stress carriers or social isolation; a corporate climate of suppressed hostility; lack of upward mobility; and daily stressors at work such as meetings and phone calls.

Clearly, the boss and the boss's style affect the mediating effects of a stressful situation on the job. Researchers studied nearly 200 AT&T employees during the tumultuous breakup period. Those with supportive bosses suffered only half the illness of those with unsupportive bosses. Employees with unsupportive bosses, in fact, suffered two times the illness, obesity, sexual problems, and depression than did their colleagues with supportive bosses (Good boss, good health, 1990).

Another researcher focused on personnel problems. In a 1995 speech, Dear, an administrator at the Occupational Safety and Health Administration, reported research linking workplace stress as a major contributor to employee personnel problems. In addition, Dear (1995) reported that excess stress caused employees, as well as their managers, to be distracted from displaying drive, customer focus, and creativity

required in today's workplace. These problems have a distinct cost to business in the United States. This cost is estimated to range from $200 to $300 billion a year (pp. 39-42).

Current Workplace Stress Research

Keita and Hurrell (1996) reported that current research strategies related to workplace stress are very broad and are linked to past workplace studies by two major bodies of research. The first body defined stress and studied individual employee's response mechanisms and coping strategies, while the second body tried to determine a casual link among economic, demographic, or other social characteristics of workplace stresses.

Some stress level has possibly been part of the human experience since the beginning of time; however, most researchers in various fields would conclude that stress seems more prevalent today and seems to have more impact upon the daily lives of most individuals. Easton (1997), a spokesperson for the National Institute of Mental Health, stated that "stress has been shown to play a key role in the onset and maintenance of an ever-increasing list of health problems like depression, hypertension, and heart disease" (p. 187-188) and reports that 40% of all absences from work are stress related. Research conducted by the National Institute of Mental Health has shown that anxiety disorders are the number one mental health disorder among American women and second only to alcohol and drug abuse among men (Bourne, 1995).

The reasons that the overall stress level is at an all time high may be related to several issues. First, our environment and social order have changed more in the past 30 years than in the previous 300 years. The pace of modern life and increased rate of technological change have deprived individuals of adequate time to adjust to these changes (Bourne, 1995, p. xi). Many Americans have cited that today's world lacks standards and rules that have been traditionally sanctioned by society and religion, leaving a vacuum in which individuals are left to decide various ethical and moral issues for themselves. These issues are causing massive amounts of social, personal, and psychological problems (Bourne, 1995).

Currently, researchers' are focusing on women's experience with workplace stress as well as the added stresses they face in entering male-dominated organizations (Flowers, 2001; Jick & Mitz, 1985; Nelson & Hitt, 1992). Yang (1998) is expanding his current research to reflect a more global perspective and to include stressor types that women encounter in the workplace, relating to culture and cross culture impacts. Previous research had focused on women's stress issues that related to home and family (Van Fossen, 1981; Bielski, 1996).

A very significant and very pressing problem in the United States business environment is that of productivity. Keita and Hurrell (1996) reported that absenteeism, turnover, and health-related problems resulting from work-related stress have impacted productivity negatively. A report by Northwestern National Life Insurance Company (1991) estimated that 75 to 90 percent of visits to physicians are stress related. Over 40 percent of the workers surveyed by Northwestern felt their jobs

were very or extremely stressful. Northwestern believes that such concerns lead to decreased performance, such as increased absenteeism, tardiness, and theft; elevated use of drugs and alcohol on the job; and lower commitment to the organization. Translating these facts to the level of an organization reveals that decreased productivity, higher turnover rates, worker conflict, and higher health care costs are becoming commonplace in today's workplace (Smith, Kaminstein, & Makadok, 1995).

After an examination of research performed by the St. Paul Fire and Marine Insurance Company, Kamp (1996) reported that more Workers' Compensation claims of all kinds may occur. Kamp found that different work climate factors of a negative nature could cause employees to become stressed. An analysis of these results suggests that company sites with lower overall stress ratings will likely experience less Worker's Compensation claims than those with higher stress incidences (Kamp, 1996).

Current workplace stress is best summarized by DeFrank and Ivancevich (1998). They wrote:

> The accelerated and hectic pace of modern lifestyles has subjected us to frequent and intense stress. Fears about AIDS, environmental pollution, random crime, and nuclear accidents are growing concerns. Other factors include social isolation and loneliness, a steadily growing segment of the population that is elderly and chronically ill, and rapid and abrupt cultural and technological change. Researchers have shown that such stresses can, in turn, produce illness through their impacts on the physiological functioning of the

> body. Organizations that ignore the impact of stress on their employees and their productivity do so at their own peril (p. 55).

Teacher Stress Research

Over the past thirty years, researchers have gradually become more interested in examining stress as it applies to the teaching profession. This increased interest by researchers suggests that teachers experience excessively high levels of stress (Coates & Thoresen 1976; Kyriacou, 2001; Borg 1990). An abundance of job-related publications, research, and workshops emphasize the importance of understanding stress and its power on the performance of all professions. There is a lack of information concerning stress in the area of academic life. A proliferation of research has been conducted among other professionals, such as nurses (Guppy & Gutteridge, 1991), managers (Turnage & Spielberger, 1994) and police officers (Schaufeli & Enzmann, 1998).

Studies relating to teachers stress began to appear in the 1960s. The first published review of research with the title referencing the term “teacher stress” appeared in the 1978 issue of E*ducational Review* (Kyricou & Sutcliffe, 1978b, p. 299). Kyricou 2001) related that a reasonable number of publications referring directly to stress in teaching began to appear in the mid-1970s; that studies reporting teacher stress grew rapidly in the 1980s; and that research literature on teacher stress became voluminous in the 1990s.

One of the best models of teacher stress is a model by Richard Lazarus and his co-workers (Lazarus & Launeri, 1978; Lazarus & Folkman, 1984), which was simplified by Kyraicou and Sutcliffe (1978a). In this model, the stressors were seen as previous circumstances of teacher stress. The effects of these stressors are mediated by coping strategies. Kyraicou and Sutcliffe distinguish between stressors that are primarily physical, such as many students in a class, and those that are basically psychological like poor relationships with colleagues. Coping strategies try to help teachers to deal with stressful conditions that teachers perceive are a threat to their well-being. If coping strategies are inappropriate, stress then occurs.

Teacher stress is generally viewed as a negative affect with diverse psychological (job dissatisfaction), physiological (high blood pressure), and behavioral (absenteeism) correlates (van Dick et al., 2001, p. 244). "In the long run, these negative stress effects lead to physiological and biochemical changes accompanied by psychosomatic and even chronic symptoms like coronary heart diseases" (van Dick et al., 2001, p. 244). In addition, the biographical characteristics of teachers are thought to influence the process. Beneath these biographical characteristics are other factors like self-efficacy beliefs or the perception of social support. The model depicted in Figure 2 is a simplified version of the Lazarus model (van Dick & Wagner, 2001, p. 244).

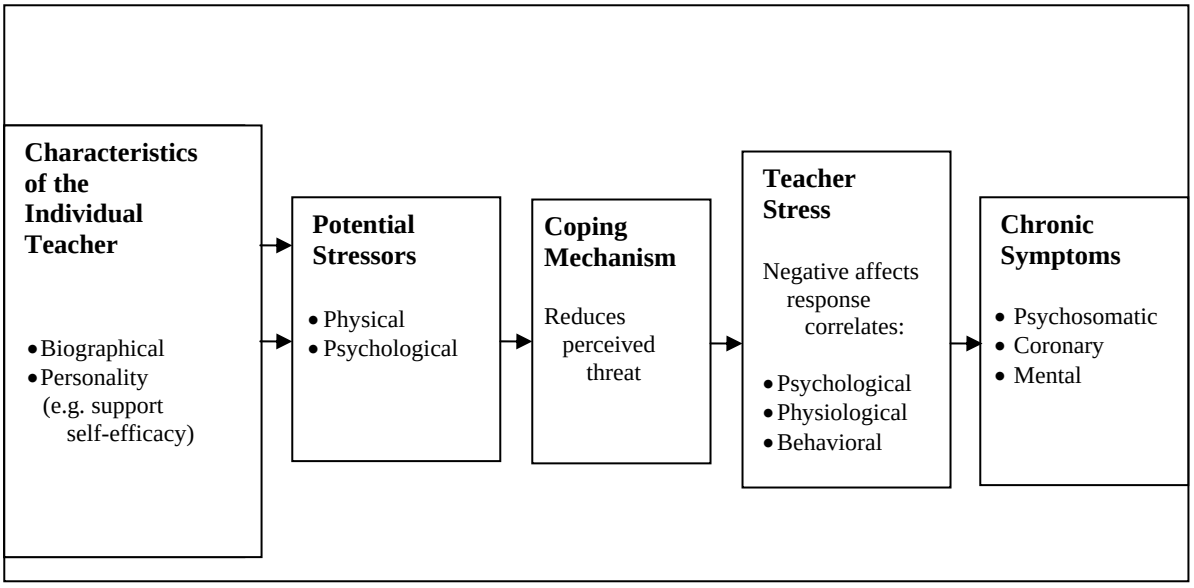

Figure 2. A Model of Teacher Stress
Adapted from: A model of teacher stress. *Educational Studies*, *4*, 3, by Kyriacou & Sutcliffe, 1978a.

Kyricou (2001) defined teacher stress as a teacher's experience in relating to unpleasant, negative emotions. This definition is explained by Figure 1 and gives the observer a view of teacher stress as a negative emotional experience triggered by teacher's perceptions that his or her work situation constitutes a threat to his or her self-esteem or well-being (Kyricou, 2001).

Black (2003) reported that some of the physical effects of stress may include "headaches, fatigue, ulcers, upset stomach, and insomnia, as well as more serious nerve disorders, increased heart rates, and cardiovascular disease (p. 2). Other effects include psychological effects that include "outbursts of anger, bouts of depression, unremitting tension and anxiety, confusion, indecisiveness, and constant worry" (Black, 2003, p. 2). In addition, stress effects can take the form of behavioral characteristics like deterioration in work performance or in interpersonal relationships (Wiley, 2000).

Researchers have continued to convey the importance of analyzing teachers' internal characteristics in evaluating stress (Fielding & Gall, 1982) because internal characteristics may dictate how individuals will react to stressful events (Fimian, 1982). Most stress research, however, has supported negative aspects of stress (Allcorn & Diamond, 1997; Happ & Yoder, 1991; Olsen, 1993; Thompson & Dey, 1998). The amount of stress that individuals need to be productive and the amount of stress that causes them to be unproductive is as individual as their personalities.

Other researchers have found that stressors common to the teaching profession emanated from a sense of inequity in sharing ideas between teachers and from interpersonal and work relationships. When teachers' perspective of their investments in their students, colleagues, and depersonalization outweigh what they received in return, teachers may experience emotional, psychological, and professional consequences (Taris, Peeters, LeBlanc, Schreurs, & Schaufeli, 2001).

Stress takes a toll on teachers not only in the classroom but also outside the classroom as well. In a recent study by a research firm, approximately 40 percent of the respondents reported high levels of job stress. Respondents also reported that their job stress affected their personal and family life as well. Attridge (2000) found in a recent study that job stress affected teacher health, job performance, and mental health. He also found that teachers' job stressors affected their students' achievement. In fact, Attridge (2000) found that only 12 percent of the teachers he surveyed reported low or very low levels of stress.

Too much stress over a long period of time may lead teachers to burnout. Maslach and Jackson (1981) define burnout as feeling a lack of achievement, feeling drained by work, feeling emotional exhausted, and feeling depersonalized. In fact, according to Mearns and Cain (2003), burnout is defined as a response to chronic stress, especially in jobs where individuals work with people.

A recent researcher contended that teacher burnout relates to negative and affective consequences that include cynicism, emotional exhaustion, depression, impaired occupational functioning, and dissatisfaction with teaching as a career. Not only does burnout have negative consequences for teachers, but burnout also has consequences for students (Burke, et. al, 1996) and for teachers' families (Westman, 2001).

Other researchers, van Dierendonck, Schaufeli, & Buunk (2001), explained that job stressors relating to inequities in relationships strongly affected the emotional exhaustion component of burnout. This affect may spread throughout the workplace when teachers discuss work-related or student problems with other teachers or administrators (Maslach, Schaufeli, & Leiter, 2001).

Other researchers proposed that high levels of job stress do not always end in teacher burnout because some teachers actually thrive under stress (Pithers, 1995; Whitehead & Ryba, 1995). However, the ones who are most vulnerable to burnout seem to be new teachers. Black (2003) theorized that personal problems, an inability to live up to lofty ideals, or difficult working conditions could be the reasons why new teachers left the teaching profession. Moreover, a study by Friedman (2000) reported

that new teachers who impose impossibly high standards on themselves often fail to live up to their ideals and end up emotionally and physically exhausted. Wiley (2000) found some teachers' stress was caused by a school's culture and climate and suggested some ways in which teacher stress could be reduced. Some of these ways could include designing clearer administrative guidelines and responsibilities, mentoring new teachers, providing different kinds of social support, and having teachers participate in the decision-making process in hiring and goal setting. Another suggestion from Wiley's is to match newly hired teachers and their job assignments with seasoned teachers of the same philosophy.

In 1996, The National Commission on Teaching and America's Future issued a report that at least one-third of all beginning teachers leave the teaching profession before their fifth year of teaching. Furthermore, one-third of public school teachers nationwide quit in the first three years, with a growing number citing stresses from unanticipated demands in and beyond the classroom, according to "Teaching for America's Future," a September report of the National Commission on Teaching and America's Future. A recent study by Flowers (2001), confirmed that one of the main reasons teachers are leaving the teaching profession is job stress. Those teachers who leave may be the ones, Flowers believes, who have the greatest promise for success in teaching today's youth.

In summary, this researcher was able to create from this discussion and the writers' definitions, along with the literature review, a definition of teacher stress. This derived definition is as follows: Teacher stress is an internal chronic, excessive, and

reactionary state of a teacher caused by an imbalance between environmental demands of the workplace, such as students, administrators, other teachers and humans, the physical environment, and the teacher's abilities to meet those demands that result in both positive and negative consequences.

Teacher stress has been defined as multidimensional by many researchers (Abel & Sewell (1999); Boyle, Borg, Falzon, & Baglioni, 1995; Kyracou & Sutcliffe, 1978b). Several researchers define multidimensional teacher stress as "composed of emotional exhaustion, depersonalization, and reduced personal accomplishment" (Abel & Sewell, 1999, p. 288). "Emotional exhaustion is increased feelings of depleted emotional resources and feelings of not being able to provide oneself to others at a psychological level, while depersonalization occurs when individuals develop negative attitudes toward students because of depleted emotional resources" (Abel & Sewell, 1999, p. 288). According to several researchers, reduced personal accomplishment is linked to "suppressed feelings of personal accomplishment and a negative evaluation of oneself" (Abel & Sewell, 1999, p. 288).

In a 1976 study, Coates and Thorsen found common teacher stressors to include the following:

- *Time demands*
- *Clerical duties*
- *Difficulties with pupils*
- *Motivation and control of students*
- *Large classes*

- *Financial constraints*
- *Lack of educational supplies*

Today's teachers report that stress primarily emanates from pupil misbehavior, workload, and time-resource allocation (Borg, Riding, & Falzon, 1991, Boyle et al., 1995). Abel and Sewell (1999) found that urban school teachers' stress emanated from (1) poor working conditions like inadequate salary and poor promotion prospects, (2) lack of recognition for good teaching, (3) a lack of or inadequate equipment and resources for teaching; (4) poor staff relations, such as lack of friendly atmosphere among staff and (5) lack of support among colleagues and from the administration (p. 292).

In the rural area, Abel and Sewell (1999), found that rural school teachers experienced more stress from poor working conditions and time pressures; whereas, urban school teachers experienced more stress from student misbehavior and poor working conditions. Able and Sewell's research supported earlier studies concerning teacher stress, including the following: (1) "relationships between difficult classes, problem students, and classroom climate in general; (2) poor working conditions related to shortages in resources and lack of recognition; (3) inordinate demands on time with symptoms of burnout" (p. 292).

Occupational Stress in Higher Education

Excessive demands to perform many tasks at once, poorly defined work-role boundaries, and time pressures are causing college faculty members to suffer from job

stress (Olsen, 1993). Olsen's study found that new faculty faced higher job demands and higher levels of stress than did experienced faculty. He also found that work stress was related to time pressures, work conflicts, low salaries, job security, and lack of feedback from administrators.

Gmelch (1993) created a four-stage stress model that represents faculty stress. Stage 1 is the beginning of the stress process that has a set of specific demands called stressors. His list of the ten most troublesome stressors are:

- *Attending too many meetings*
- *Feeling progress in career is not what it could be*
- *Having insufficient time to keep abreast with developments in the field*
- *Having too heavy a workload*
- *Imposing excessively high self-expectations*
- *Job demands interfering with personal activities*
- *Receiving insufficient salary*
- *Receiving interruptions from telephone and drop-in visitors*
- *Securing financial support for scholarship*
- *Striving to publish one' scholarship* (p. 24)

Gmelch's Stage 2 is the faculty member's perception of these demands. At this stage, if the faculty member does not have the mental resources to meet the demand, the faculty member perceives the demand as a stress trap. Thus, the faculty member's stress creates a discrepancy between demand and his or her personal resources that result in a specific stress response, Stage 3. At Stage 3, the faculty member uses a

coping strategy to elevate the stressor. If the stressor is not elevated, then Stage 4, the consequences takes over. This is the stage when the faculty's health and well-being begin to show the consequences of prolonged stress.

"Teaching school is a highly stressful occupation," reported Mearns and Cain (2003, p. 71). Other researchers presented reasons to explain why faculty members are stressed. Their findings include:

- *Administrative red tape*
- *Amount of required paperwork*
- *Bureaucracy*
- *Discipline problems in the classroom*
- *Diversity of required tasks*
- *Interpersonal demands*
- *Lack of professional recognition*
- *Lack of resources*
- *Lack of support*
- *Time pressures*
- *Workload* (Burke et al., 1996; Carlson & Thompson, 1995; Chan, 1998; Pithers, 1995)

Blix, Cruise, Mitchell, and Blix (1994) studied stress levels among university faculty members and found that emotional exhaustion was the primary cause of high stress among faculty members. These researchers also found that faculty members who experienced emotional exhaustion also experienced higher job stress, increased

health problems, lower productivity, and were more likely to consider changing jobs. Almost half of the university faculty who participated reported some form of health problem due to job stress. These researchers also found that the number of years of teaching at the university related to faculty retention. Seventy-two percent of faculty members who had 10 or more years of service did not plan to change jobs, while 28 percent who had 10 or less years did plan to change jobs. In addition, a 1996 study conducted by McElreath, Boissoneau, Roof, & Whipple noted that low salaries were also related to job stress.

McCracken (2001) studied a group of community college faculty from five community colleges in east Tennessee using Gmelch's Faculty Stress Index. She mailed out 637 survey forms but received responses from only 327, a response rate of 51.3 percent. Over 38 percent were males, while over 60 percent were females. The total of married respondents was over 76 percent and the single totaled over 23 percent. Over 78 percent of the respondents were forty or more years of age. Of the respondents, almost 60 percent were tenured and over 41 percent were not. Almost all reported some type of professional tenure.

The ten highest stressors McCracken found for these community college faculty included the following:

- *Receiving inadequate salary to meet financial needs*
- *Having insufficient time to keep abreast of current developments in my field*
- *Feeling that I have too heavy a workload load, one that I cannot possibly finish during the normal work day*

- *Imposing excessively high self-expectations*
- *Teaching/advising inadequately prepared students*
- *Having inadequate time for teaching preparation*
- *Attending meetings that take up too much time*
- *Having job demands that interfere with other personal activities*
- *Participating in work-related activities outside regular working hours*
- *Assignment of duties that take me away from my office* (p. 85)

Researchers in a 2003 MIT faculty stress study reported that faculty members were more stressed than business executives. The report also revealed that more than 60 percent of the 1,000 professors surveyed reported feeling drained at the end of the day. Sixty-six percent felt unhappy with their work pressure, 78 percent felt they could not finish each day's work, and more than half believed their work pressures hurt their family life (Orlans, 2003).

Gmelch (1993) noted that Pelletier (1977) explained stress as beginning in an individual as normal levels of resistance until the individual experienced a stressor, reacted to it, and relaxed after the stressor was resolved. Then, the stress level returned to normal. The process of stress remained at the normal level until the next stressor attacked (Gmelch, 1993, p. 5). Pelletier advised that stressor attacks "can be analyzed in terms of both time of reaction and the intensity of the response" (Gmelch, 1993, p. 5). This stress response is shown in Figure 3.

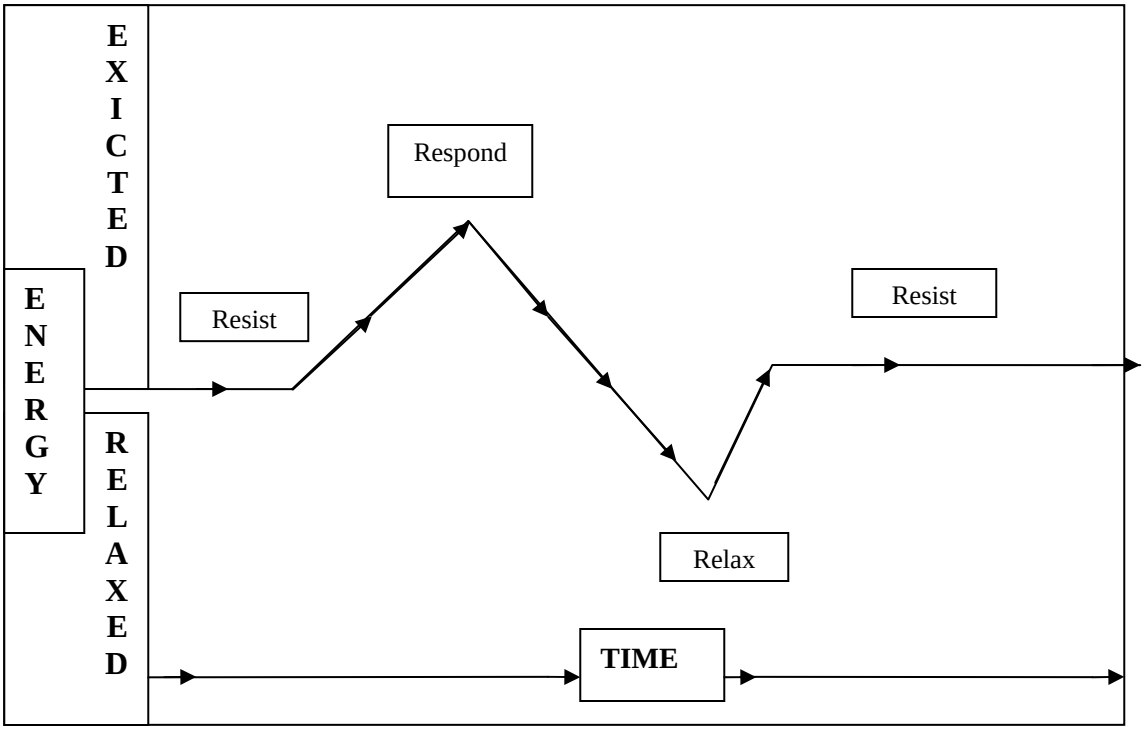

Figure 3. Type I: Healthy, Short-Term Stress
Adapted from: *Coping with Faculty Stress* by Walter H. Gmelch (1993).

Coping Strategies

Coping strategies are almost as elusive as are the definitions of coping. The literature has a wealth of broad information concerning coping strategies, but little research has dealt with the usefulness of these strategies to eliminate stress. An overview of coping strategies with focuses listed in alphabetic order is displayed in Table 3.

Table 3. Coping Strategies

Focus	Source
Adopting time management strategies	Gmelch, 1993; Seaward, 2002
Assertive communication	Nagel & Brown, 2003
Avoidance	Long & Gessaroli, 1989
Avoid procrastination	Bliss, 1976
Being physically fit	Winder & Heinger, 1973
Cognitive restructuring	Allen, 1983
Creative problem-solving	Brightman, 1980
Distancing	Chan, 1994
Diaphragmatic breathing	Benson, 1974
Meditation	Benson, 1974
Minimize the impact of stress	Nagel & Brown, 2003
Passive wishful thinking	Chan, 1994
Problem solving	Chan, 1994; Gmelch, 1993; Long and Gessaroli, 1989
Prioritizing	Nagel & Brown, 2003
Social support	Chan, 1994; Pithers, 1995
"I" statements	McKay, Davis, & Fanning, 1983;
Ventilation	Chan, 1994

Overview of Coping Strategies

Defining coping is difficult because many researchers have defined the concept of coping in many different ways (Cohen & Lazarus, 1994; Lazarus & Folkman, 1984; McGrath, 1970; Pearlin & Schooler, 1978). Even though coping is principally a psychological concept, many of these definitions share the basic idea that coping is a struggle with demands involving some degree of thought by an individual. A

definition that combines both defensive and coping strategies is one by Lazarus and Folkman (1984) known as the transactional model. This model depends on the individual's cognitive appraisal of events and circumstances and on the ability to cope, resulting in a person's transaction with the environments. In this model, the individual's coping strategy is constantly changing to manage specific demands that are appraised as exceeding the individual's resources.

Measuring coping has also been difficult. Two approaches have emerged from research. These two coping measures are trait and situational assessments. Coping trait assessments refer to an individual's customary way to deal with a variety of stressful situations. Coping trait assessments are associated with an individual's personality to respond in a certain manner under a variety of conditions. Coping situational assessments align with strategies that individuals use in specific stressful situations and are differentiated from coping trait assessments by responses in which a flow of events occur (Cohen, 1987).

Some criticism of trait assessments concerns the assumption of consistency in coping behavior (Cohen & Lazarus, 1994). Folkman and Lazarus (1984) found some consistency in the use of coping responses for an individual in some situations; however, they found individuals' coping patterns were more variable than stable. Coping traits, therefore, do seem to have modest predictive value to the coping process (Lazarus & Folkman (1984). Cohen (1987), however, indicates that assessment of coping behaviors do not seem to be predictive of how individuals actually cope in stressful situations. Coping is a process that seems to change over time and is one in

which individuals may use a problem-focused strategy and then shift to an emotion-focused strategy or vice versa (Buettner, 1995).

In addition, two forms of coping strategies identified by Lazarus and Folkman (1984) are emotion-focused and problem-focused coping strategies. Emotion-focused strategies target the management of emotions caused by the stressor, while problem-focused strategies target the stressor. Emotion-focused strategies seem to do very little to change stressful outcome and are view as being less effective than problem-solving strategies. Problem-solving strategies, on the other hand, usually appear to have positive effects on mental and physical health (Folkman & Moskowitz, 2000). A published set of coping strategies by Gmelch (1993) advocates a seven-step approach to coping with stress as follows:

Step 1: Identify a stress trap to resolve

Step 2: Search for the causes of the stressful event

Step 3: Generate a set of possible solutions to remedy the causes.

Step 4: Specify a plan to alleviate a cause

Step 5: Develop a timetable to implement the plan

Step 6: Set a date and method to follow-up and evaluate the effectiveness of the plan

Step 7: Investigate potential problems or unintended consequences the plan may have created (pp. 29-30)

Gmelch (1993) pointed out that the individual is important and that no single coping strategy is effective for every faculty member in every institution. Other

helpful advice that Gmelch offered to faculty members to relieve their stressors were: (1) faculty can only change themselves, not the world; (2) faculty coping strategies must be sensitive to culture, gender, social, psychological, and environmental differences in individuals and institutions; (3) faculty who cope best are the ones who have a repertoire of coping techniques to use in different stressful situations; and (4) faculty's coping stress repertoire should represent a holistic approach to coping, such as exercise, social support, sound dietary practices, self-management skills, personal hobbies, and supportive attitudes (p. 28).

Other strategies that involve both emotional reduction and problem-solving strategies are found in people seeking social support. Seeking social support implies that a combination of strategies can support an individual by supplying problem-solving information, while simultaneously helping another individual manage emotions through social interaction with the support of other individuals.

Several categories describe coping; however, two discussed frequently in the literature are coping resources and coping strategies. Coping resources are those features that individuals may have reserved that will decrease chances of a demand being experienced as a stressor or will increase the strength and success of coping behaviors (Matheny, Gfroerer, & Harris, 2000). Coping strategies include any actions taken to avoid, to confront, or analyze the actual stressor or to deal with reactions to the stressor (Lazarus & Folkman, 1984, p. 178).

Coping Studies

According to Lazarus and Folkman (1984), coping is the method individuals use to manage environmental demands in their lives. Chan (1998) studied stress and coping among teachers in Hong Kong and found that the type of coping strategies teachers used reduced the effects of stress on their emotional well-being. Similar results were reported by Brenner, Sörbom, and Wallius (1985) in a Swedish study in which coping strategies were used to buffer the effects of occupational stress in teachers. Needle, Griffen, and Svendsen (1981) advised that making positive appraisals of individuals' work, then comparing one's work with that of others often helped to lessen stress. Burke et al., (1996) reported that teachers who sought social support by talking to others also found this type of social support to be beneficial in relieving teachers' stresses.

Westman and Etzion (1999) conducted research related to personality characteristics, such as sense of control and hardiness. They found that a sense of control seemed to moderate stress, while hardiness seemed to buffer the effects of occupational stress. Other researchers found that locus of control aggravated the relationship between stress and distress (Siu & Cooper, 1998). None of their research, however, related to teachers.

Mearns and Maurch (2003) studied teacher stress using primary and secondary teachers and the theory based on Rotter's social learning theory. This theory proposes that people believe they can alleviate the negative moods they experience. These researchers found that their results mirrored their previous research on negative mood

regulation expectancies, suggesting that occupational stress in teachers is a factor in their individual levels of burnout and distress. These researchers examined individuals' difference variables, such as mood regulation expectancies relating to predicted coping, burnout, and distress among teachers. For example, the researchers found that teachers with strong beliefs in their ability to regulate their negative moods reported they relied on more adaptive active coping strategies and experienced lower levels of burnout and distress than did the group with weak beliefs (Mearns & Cain, 2003, p. 80).

In summary, as teachers take a proactive position and use stress as a positive part of their personal and professional growth, stress can be a positive force to improve their lives. However, when stress becomes a chronic source of personal or professional erosion, stress becomes negative. Teachers, therefore, should understand stress and take necessary actions to grow from their stressful experiences using coping strategies that they develop from their experiences with stress.

In addition to the stress community college faculty members endure in their daily contact with their students, peers, administrators, and facility problems as well as the changes in their teaching field and their attempt to balance their work lives and home lives, these faculty members have also endured and weathered the creation, development, and continual changing nature of the American community college, as disclosed in the overview of the development of American community colleges.

An Overview of the Development of American Community Colleges

The development of American community colleges can be identified through five eras of educational history. These eras are Emergent Nation, University Transformation, Mass Higher Education, Contemporary Community College, and Comprehensive Community College. The era of the Emergent Nation, the first historical period, ran from 1790 through 1869 (Cohen, 1998; Palinchak, 1973). During this period, the early development of higher education began with a shift from the liberal arts curriculum to a more practical curriculum that supported economic and industrial expansion. Another development during this period was the organization of separate professional schools that supported science, engineering, and teaching. These professional schools developed primarily as a result of the influence of German universities and their educational models (Cohen, 1998). Also, this period of educational history ushered in a new educational organization, the public university.

One of the early supporters of the idea of junior colleges in the 1850s was Henry Tappan, of the University of Michigan. Tappan liked the German university model that emphasized graduate and specialist education. He thought that students needed two years of basic studies beyond high school to prepare them for the more difficult university programs (Cain, 1999, p. 28).

Federal and judicial decisions during this period legislated against nationalizing secondary and higher education, so states were given the power to create the quantity and types of educational institutions they believed to be appropriate (Palinchak, 1973). Many of the colleges during this period did not survive. The ones that did survive

reflected the diversity of each individual community's needs (Cohen, 1998). This shift during the embryonic period to a more functional and realistic educational experience led to the ideas that created community colleges. In this same era, early versions of two-year schools formed as private academies in the New England and southern states. Later versions of these two-year academies appeared in the Midwest, Southwest, and Western states as normal schools (Palinchak, 1973). These early academies, according to Palinchak (1973), offered a variety of courses that had overlapping functions with the colleges of that era to meet the need for skills and liberal arts education (pp. 22-23).

The University Transformation Period, the second major period of educational history, began around 1870 and ended in 1944. During this period, the passage of several legislative bills significantly influenced higher education. One bill was the Morrill Act of 1862 that established land-grant colleges. The second bill was the passage of the second Morrill Act in 1890 that withheld funds from any state that refused admission to land grant colleges based on race unless the states provided separate institutions for minorities. This act expanded public higher education to blacks who prior to this act were unable to attend college (Vaughan, 2000).

According to Brubacher and Rudy (1997), the Morrill Acts and the mission statements of the land-grant colleges mirrored the practical aspects of the educational spirit of this era. Higher education's philosophy of higher education was reflected in its mission statement with phrases like "open door," "practical curriculum," and "training in agriculture and the mechanical arts" (Brubacher & Rudy, 1997, pp. 62-64).

Parnell (1985) reported that the establishment of land-grant colleges combined theoretical education with practical education.

These two-year colleges were known by two generic names, junior college and community college. These colleges were at times identified by their sponsors and had names like city college, county college, and branch campus. Some of these colleges' names were based on the institutions' emphasis that had names like technical institute, vocational, technical, and adult education centers. Still, other names for these colleges took the form of nicknames like people's college, democracy's college, contradictory college, and opportunity college (Cohen & Brawer, 2003, p. 4).

Another university leader, John Burgess of Columbia University, declared in 1884 that American universities were attempting to do too much (Cain, 1999, p. 28). He felt that no institution could properly handle both general and specialized education. Burgess felt that general education belonged to the colleges and specialized education should be the duty of the universities (Cain, 1999, p. 28). A third important prominent leader involved in these discussions during this era was William Watts Folwell, of the University of Minnesota. He also believed that secondary schools should take over more of the burden of educating the first two years for the universities (Palinchak, 1973, p. 41).

Under the influence of William Rainey Harper, of the University of Chicago, the proposal of the junior college concept around 1900 was a result of the extensive discussions in the late 1800s of when students should leave their secondary education and begin their university or professional studies. Other factors, such as the

responsibility for the secondary schools and the university and when a person should be finished with school and be self-supporting, entered into the debate of what would be considered junior or senior college work. In addition, two other factors contributed to the formation of community colleges: (1) the "universities could not or would not matriculate everyone who sought upward mobility through higher education" and (2) "university leaders insisted that universities would not become true research and professional development centers as long as they held onto their freshman and sophomore classes" (Cohen, 1998, pp. 111-112).

Other events that encouraged the development of the community college during this period was an increasing demand for professional training, an increasing number of students who were graduating from high school, and a belief that higher education meant a rise from lower to middle class to upper class (Cohen, 1998, pp. 114-115). Thus, after many years of discussion and debate, the first junior college was founded in Illinois and was named Joliet Junior College. It is now the oldest public junior college in the United States (Vaughan, 2000).

Just before the third educational period from 1945 to 1975, the Mass Higher Education Era was ushered in and a third piece of legislative action known at the Serviceman's Readjustment Act or the GI Bill passed in 1944 making education available to World War II veterans (Cohen, 1998). The GI Bill committed the United States to making an investment in education for men and women who served in World War II. This bill was a milestone in federal funding for educating individuals (Vaughan, 2000). These federal funds made higher education more available and

provided increased learning power for individuals as well as potential revenue for the government (Parnell, 1985; Vaughan, 2000).

During this third era, another significant event occurred in the development of the community college that occurred as a result of the completion of a report by the Truman Commission in 1947. President Harry Truman assigned a commission the task of considering and recommending ways to provide students with educational opportunities that would fit their interests, abilities, and needs (Cohen, 1998, p. 195). This commission's recommendations included the establishment of a network of public community colleges that would charge little or no tuition, serve as cultural centers, offer comprehensive programs with emphasis on civic responsibilities, and serve the area where they were located. This report became the basic design for developing higher education in post-war America. Too, this report included the phrase "community college," popularizing the phrase and causing hundreds of two-year colleges to add community to their name (Parnell, 1985, p. 84; Vaughan, 2000, p. 21).

This era set the foundation for growth and reception of the idea that going to college was a worthy goal for most people. In addition, this era documented a large demand for higher education by a broader spectrum of American citizens than had been documented during previous eras. In fact, Snyder (1993) verified these trends by providing figures of growth from 1870 to 1945. He reported that the number of students enrolled rose from 63,000 to 1,677,000; the number of institutions grew from 250 to 1,768; and the number of degrees conferred from bachelor's to master's to doctoral degrees rose from 9,372 to 157,349. Snyder's data showed by this growing

number of individuals enrolled in higher education that getting an education beyond high school was becoming a much desired and worthy goal for a much broader spectrum of the American population.

In the 1950s and 1960s, the junior college name was "applied more often to the lower division branches of private universities and to two-year colleges supported by churches or organized independently," while community colleges eventually became to be known as "comprehensive, publicly supported institutions" (Cohen & Brawer, 2003, p. 4). By the 1970's, the name of community college was synonymous with both types.

In 1960, the Kellogg Foundation announced the funding of a series of grants to establish university centers for training two-year college leaders. Twelve universities established junior college leadership programs and graduated hundreds of future deans and presidents from their Kellogg Junior College Leadership Programs (Vaughan, 2000). By 1965, student aid legislation began with the enactment of the Higher Education Act of 1965. The federal government made it possible for many American to attend college. During this era, community colleges experienced "phenomenal growth," reaching 5 million students by 1975 (Cohen, 1998, p. 195). Community college growth was stimulated by many students who were unable or unwilling to pay for the high cost of liberal arts and proprietary schools. Students wanted more practical ways to continue their education. Community colleges were the answer for million of students.

A fourth era, the Contemporary Community College Era, began in 1975 and ended in 1995 (Cohen, 1998). This period favored expanded services and additional buildings. The expansive rush to create more community college by this period had passed. Now, community colleges were faced with deciding how they could best serve their existing and potential students (Cohen, 1998, pp. 312-313).

In 1972 and again in 1992 amendments for funding higher education helped to make a college education even more of a possibility for practically every American. Included in this legislation is the Pell Grant program that began in 1973; however, undergraduates were not eligible to receive this grant until 1976 (U.S. Department of Education, 2004).

During this fourth era, the Commission on the Future of Community Colleges issued the report "Building Communities: A Vision for a New Century." This report defined community as not only a region to be served but as a climate to be created, thereby issuing a challenge for community colleges to play an important role in creating the climate and serving its region (Vaughan, 2000).

The fifth period could be called the Comprehensive Community College era that began in 1996 but continues into today's world. This era's educational needs found students and employees faced with learning new technology and skills to remain competitive in the job market. Community colleges were quick to respond to their demands (Cain, 1999, pp. 12-15).

On September 11, 2001, the United States experienced a devastating attack from terrorists. This nation has since instituted many new security measures to keep its

people and its territories safe. Again, community colleges responded to this new demand. In 2002, Congress passed H.R. 3394, Cybersecurity Research and Development Act (Teles & Hovis, 2003). This legislation gave the National Science Foundation (NSF) the task of fostering and supporting research and educational activities to improve the security of networked information systems. The portion of this legislation that pertains to community colleges is that it:

- Establishes or enhances bridge programs in computer and network security between community colleges and universities in an effort to grow cybersecurity workforce
- Provides specific funds to enhance efforts in cybersecurity education at associate degreed-granting institutions under the Scientific and Advanced Technology Act of 1992 (Teles & Hovis, 2003)

With a predicted need to fill 2.7 million teaching positions by the end of this decade and a forecast of teacher shortages, community colleges are developing programs in response to the needs of local and statewide workforce to provide easier access to the baccalaureate for "students who are not always interested in, or capable of transferring to, traditional baccalaureate colleges or universities" (Walker, 2000, p. 19). On January 8, 2002, President George W. Bush signed the "No Child Left Behind Act" (NCLB Act) reauthorizing the Elementary and Secondary Education Act of 1965. This act gave U.S. schools a landmark educational reform based on the following principles:

- *Stronger accountability for results*
- *More freedom for states and communities*

- *Encouraging proven education methods*
- More choices for parents (U.S. Department of Education, 2001, p. 1)

In addition, this act addressed the issue of quality in teacher preparation and specified that each state receiving assistance under the act is required to ensure that all teachers teaching in core academic subjects in each state are highly qualified not later than the end of 2005-06 school year" (Townsend & Ignash, 2003, pp. 9-10).

Once again, the community college, already with a long history of participation in teacher training, answered the call to assist the workplace by branching out and providing the first two years of teacher education. In some states, community colleges have developed and are now offering baccalaureate degrees in teaching education or are providing alternative teacher certification. With the reluctance or inability of many four-year colleges to prepare more teachers, community colleges will in the future have a more important voice concerning decisions about preparing kindergarten through twelfth grade teachers. Predictions are that the community college, coupled with its willingness to offer nontraditional paths in degree and program offerings, will increase its range of teacher education preparation programs in creative ways so that more students will become teachers (Townsend & Ignash, 2003, p. 14).

This historic overview outlined the evolution, growth and development of American community colleges as distinctive providers of higher educational services and programs to supportive communities in their areas. America's community colleges are sensitive to their communities' needs and are providing essential and valuable services to their clientele who want and need additional education beyond their high

school experience but who want to remain in their own local communities. A chronological perspective of the history of community colleges by historical dates and periods, rationale, and sources is presented in Table 4.

Table 4. A Chronological Perspective of the History of Community Colleges

Dates	Historical Periods	Rationale	Sources
1790 – 1869	Emergent Nation Era	Shift from liberal arts to supporting economic and industrial expansion Establishment of professional schools supporting science, engineering, and teaching	Cohen, 1998
		States were given power by federal and judicial decisions to create educational institutions	Palinchak, 1973
1790 – 1869		Earliest versions of two-year schools: • Earliest private academies in New England and southern states • Later versions of two-year academies appeared in Midwestern, Southwestern, and Western states as normal schools	Palinchak, 1973
		Shift to more practical and applied educational experience marked early ideas of creating community colleges	Cohen, 1998
1870 – 1944	University Transformation Era	Morrill Acts: An Act of 1862 provided for establishment land-grant colleges, reflecting philosophies of open door, practical curriculum, and training in agriculture and mechanical arts	Vaughan, 2000
		Act of 1890 withheld funding to land-grant colleges that refused admission of blacks unless separate institutions were provided	

Table 4. (continued)

Dates	Historical Periods	Rationale	Sources
1870 – 1944	University Transformation Era (Continued)	Passage of GI Bill in 1944 provided education for those who served in the military • Helped to make a college education more available • Increased potential earning power for individuals • Added more potential revenue to governmental funds	Vaughan, 2000
1945 - 1975	Mass Education Era	1973 – Pell Grant program began but undergraduates not eligible to receive the grant until 1976	U.S. Depart. of Education, 2004
1976 – 1995	Contemporary Era	1988 – Report by Commission on Future of Community Colleges	Vaughan, 2000
		2002 – No Child Left Behind Act	U.S. Depart. of Education 2002
		2002 – Congress passed HR 3394, Cybersecurity Research and Development Act	Teles & Hovis, 2003

Demographics of Community College Faculty

According to the 1997 National Center for Postsecondary Improvement Study, the ratio of male faculty to female faculty was 53 to 47 percent (Huber, 1998, p. 16). The majority of the surveyed faculty members were middle-aged with an age range of 49 to 51. These faculty members had worked for their current college for an average of 14.5 years and had served an average of 18 years beyond the teaching assistant level in higher education. Forty-six percent of the surveyed community college faculty

members have earned the rank of professor, associate professor, or assistant professor, while thirty-eight percent of these faculty members hold professional rank as instructors or lecturers. The highest degree earned by the majority of the community college faculty was the master's degree. Almost 30 percent of the faculty members reported earning nothing outside their faculty salaries (Huber, 1998, p. 16).

Community college faculty members from all types of colleges reported that their students could be better prepared for college work and that very few of their students possess good literacy or math skills. Under preparedness seems to rank higher at community colleges than at four-year colleges or universities because community colleges "are open to any who wishes to enroll" (Huber, 1998, p. 19). Even though community college teaching undoubtedly has unique problems, the community college faculty state:

> I wouldn't trade for teaching in a four-year university. I love the challenge and rewards of teaching the variety of ages and skill levels. These students are often unsure of what they want to do and often uncommitted to college. When we spark the excitement of learning and thirst for knowledge in them, we know we've really taught (Huber, 1998, p. 21)

Each week community college faculty members spend approximately 15 hours teaching, 11.5 hours preparing to teach, 5 hours tutoring students, 4 hours in academic advising, and 6 hours in research. Seventy-eight percent of community college faculty worked as paid or unpaid consultants with a variety of organizations, such as educational institutions, business or industry, or local government and private social

service agencies. Community college faculty members do not feel that they have much conflict among professional activities because they have a strong commitment to teaching. Over four-fifths of community college faculty members feel that teaching effectiveness should be the key measure for promotion of faculty members. Thirty-eight percent think that faculty evaluation should give appropriate weight to teaching, research, and service; moreover, at least half of the community college faculty members desire their departments to give more recognition to the role of professional service and applied aspects of knowledge (Huber, 1998, p. 26).

Few faculty members reported being pressured by their institution to publish; however, 27 percent report that to be a good teacher one should be involved in research activities. In addition, few faculty members reported that service activities beyond their institutions to be a distraction that competed with their other academic duties (Huber, 1998, p. 26).

Institutional Policies and Practices: Results from the 1999 National Study of Postsecondary Faculty, a study conducted by The National Center for Educational Statistics, studied the faculty practices and policies of over 3,000 postsecondary institutions, using the following criteria:

- The institution was Title IV, participating, degree-granting institution in the 50 states or the District of Columbia
- The institution provided formal instructional programs of at least 2-years' duration
- The college or university was public or private not-for-profit (p. 1)

This national study points out that "faculty remain the core of the educational enterprise" (p. 1) and that the role of the faculty who work in these postsecondary institutions is "critical to the success of postsecondary education in the United States" (p. iii). The study reports that over one-million faculty members worked in 3,400 degree-granting institutions in 1998 (p. 1). Of this number, about one-third or 33 percent were two-year public degree-granting postsecondary institutions. These two-year public institutions employed about one-fifth or 29 percent of the total faculty members employed in postsecondary institutions (p. 4). About 35 percent of these were full-time faculty, while approximately 65 percent were part-time (p. 9). It would, therefore, appear that public two-year institutions mainly meet their instructional needs with part-time faculty. In researching the number of credit hour both full-time and part-time faculty members taught, this researcher found that full-time faculty taught 67 percent of the credit hours, while part-time faculty taught 32 percent (p. 16).

Approximately, 80 percent of public two-year institutions use student measures to evaluate teaching performance of their faculty. These student measures consist of 58 percent from student evaluations, 12 percent from student test scores, 11 percent from student career placement, and 19 percent from other measures of student performance (p. 17).

Between 1997 and 1998, two-year public institutions reduced their full-time faculty by about 40 percent (p. 22). Of this percentage 50 percent retired and 50 percent left for other reasons (p. 24). However, between 1993 and 1998, 52 percent of two-year public institutions remained about the same in faculty size, with 38 percent reporting an

increase but 9 percent reporting a decrease (p. 26). By fall of 1998, these public institutions reported 6 percent newly hired full-time faculty who were from outside the institution as well as 23 percent full-time who had previously been part-time (p. 27).

Around 61 percent of the two-year public colleges surveyed had a tenure system and were more likely to hire faculty into full-time, tenure-track positions than in nontenure positions (p. 34). For example, 43 percent were hired into tenure-track positions as opposed to 12 percent into nontenure positions (p. 37). In 1998, 27 percent of tenure-tracked faculty members were considered for tenure. Of these two-year institutions, 88 percent imposed some kind of limited time on tenure tract. Some institutions, about 46 percent, allowed less than 5 years; 19 percent allowed 5 years; 28 percent allowed either 6 or 7 years; and 1 percent allowed more than 7 years (p. 41). Furthermore, 51 percent of the full-time faculty and 27 percent of part-time faculty had union representation (p. 4).

Summary

An overview of the literature pertaining to stressors and coping strategies, stressful working environments, as they relate to community college faculty members, was discussed in this chapter. A synopsis of stress and coping was discussed and reviewed concerning the background of stress, origination of stress study models, background of stress, and definitions of stress and coping strategies. Also, discussed and review were components of the stress process, an overview of past and current stress research in the workplace, teacher stress, occupational stress in higher education,

stressful working environments, and coping definitions, strategies, and studies. In addition to the topics of stressors and coping strategies, studies were interpreted and discussed relating to the development of the American community college, along with an overview of community college faculty attitudes and trends that relate to their demographics.

CHAPTER III

METHODOLOGY

The primary purpose of this study was to explore the sources of occupational stressors as perceived by business faculty who work in Texas community colleges. A secondary purpose was to explore and to identify the coping strategies these faculty members use to alleviate their stressors. A third purpose of this study was to determine if relationships exist among stressors, coping strategies, and selected demographic characteristics, such as gender, age, educational level, tenure status, years in teaching, and professional rank.

This chapter contains the research methods used to accomplish this study. The chapter is divided into four sections composed of population surveyed, the survey instruments, procedures, and the data analysis.

The main focus of this research was to answer five questions concerning Texas community college business faculty and their sources of teaching stressors, the coping strategies they use to relieve these stressors, and to determine if a relationship between selected demographic variables and teaching stressors and coping strategies exists.

Each research question was addressed independently. Research questions one through five were as follows:

1. What is the demographic profile of the survey respondents?
2. What are the perceived levels of occupational stress for selected Texas community college business faculty members?

3. What coping strategies do selected Texas community college business faculty members use to manage their occupational stressors?
4. What are the occupational stressors as perceived by selected Texas community college faculty members that relate to selected demographic characteristics?
5. Is there a relationship among stressors, coping strategies, and selected demographic characteristics, such as gender, age, educational level, tenure status, years in teaching, and professional rank, of selected Texas community college business faculty members?

To answer questions one through four, this researcher calculated frequencies for all 54 stressors, 48 coping strategies, and 15 demographic characteristics. The means and standard deviations were calculated as well. Then, the data was analyzed and placed by subgroups into appropriate tables, with data ranging from highest items to lowest items. This procedure was discussed in more detail in Chapter IV.

Research question five is as follows: Is there a relationship among stressors, coping strategies, and demographic characteristics, such as gender, age, educational level, tenure status, years in teaching, and professional rank, of selected Texas community college business faculty members? To answer this question, comparisons of the five-factor stressor groupings and the nine-factor coping strategy groupings for differences among selected personal and professional demographic characteristics were made through t-tests for independent samples. Also, Levene's Test for Equality of Variances was used to test for homogeneity of variances. When the probability level

for Levene's Test for Equality of Variances was greater than .05, the t-test for assumed equal variance was used. With a probability of less than or equal to .05, Levene's Test for Equality of Variances was considered to be significant, and equal variances were not assumed. When equal variances were not assumed, an adjusted t-test was used.

An ANOVA was used when there were more than two levels of the independent variables. Each comparison of the independent variable and the dependent variable were made through ANOVA testing. In the event the assumption of equal variances was violated, there was no alternative testing mechanism used as ANOVA is considered to be relatively robust to violations of assumption of equal variances. When ANOVA detected statistically significant differences, Post Hoc Tests were performed to determine which of the individual parings showed significant differences. Statistically significance ANOVAs only point to a significant difference between multiple variable categories, not to specific pairings within the categories. In addition, the association of the levels of each of the independent to the dependent variable was judged utilizing Partial Eta Squared (Winer, Brown, & Michels, 1991).

Qualitative data were reported from each respondent. To alleviate a concern that all stressors and coping strategies were not identified, a blank area was provided on the survey form for respondents to write in additional open-ended responses for stressors and for coping strategies. Using traditional content analysis techniques, common ideas were placed in groups regarding relationships. A qualitative analysis and discussions of the data will be presented in Chapter IV.

Population Surveyed

For the purposes of this study, questionnaires were sent to all Texas community college business teachers who were members of Texas Business and Technology Educators Association (TBTEA) and the Accounting Section of Texas Community College Teachers Association (TCCTA) who were employed by community colleges in Texas. The two lists were analyzed for duplicate names so that each participant received only one survey form. The population numbered 90, 36 participants were from the TBTEA list and 54 were from the TCCTA list .

Before the survey form was administered, it was necessary to establish methods that would facilitate data collection and statistical analysis. First the survey items were analyzed for clarity. Then, the survey form items were selected, clarified, or developed. These issues are addressed in the next sections of this chapter.

Design of the Instrument

The survey instrument, Community College Business Faculty Stress and Coping Survey (see Appendix A), was developed to elicit information from the respondents in three separate sections: (1) occupational stressors, (2) coping strategies, and (3) demographic data. Section I, an instrument developed by Walter Gmelch (1993), known as the *Faculty Stress Index* was adapted to measure community college faculty members' stressors. Specifically, Items 1, 4, 7, 22, 37, and 40, were divided into two separate questions. This adapted version was e-mailed to and approved by Gmelch in 1999. A copy of this e-mail is in Appendix B.

This *Faculty Stress Index* has a reliability coefficient of 83 percent (Gmelch et al., 1986). Gmelch and his researchers analyzed this instrument by utilizing principal-components, varimax-solution (rotation) factor analysis on the original 45-item scale. Five distinct dimensions were indicated to account for the 86 percent variance of the common variance. The five factors were: (1) Reward and Recognition, (2) Time Constraints, (3) College/Departmental Influence, (4) Professional/Identity, and (5) Student Interaction (Gmelch et. al, 1986).

In constructing questionnaire items, Gall and Borg (2002) suggested that questions may be either the closed form, in which questions permit only certain responses like multiple choice questions or the open form in which subjects make any response they wish in their own words similar to essay questions. These researchers suggest that little research on the relative merits of closed and open form questions has been reported.

Open form questions were utilized in this study in Sections One and Two, as an addition to the closed form questions. Most survey questions were given in the closed form so that respondents could more easily respond to the survey form. Information was gathered to determine the perceptions of the community college business faculty members concerning stressors and coping strategies or practices. According to Gay (1992), for certain topics or purposes, unstructured items may be necessary, and questionnaires may contain both structured and instructed items.

To more accurately measure each respondent's stress levels, this researcher, after discussions with four Texas A & M University professors, modified the survey

instrument to conform to a Likert-type scale ranging from one to indicate a measure of "not stressful" to five, which indicate "extremely stressful," to create a more accurate and useful scale. The scale used by Gmelch and his fellow researchers, however, was based on a Likert-type scale with the scale ranging from one to two to indicate "slight pressure"; three to four to indicate "moderate pressure"; five to indicate "extreme pressure." These researchers also added a "not applicable" choice to which was assigned a zero, thus making a range from zero to five.

Coping strategies resulted from a review of the literature and input from a focus committee of ten community college business faculty members that resulted from several separate conferences, as well as a conference with four professors from Texas A & M University. Originally, coping strategies were listed above each page of the stressors so that participants could choose at least three of these strategies they would use to alleviate each stressor they had ranked but with no open form questions. A pilot test of ten community college business faculty members revealed that linking stressors with coping strategies was an impractical task because on any given day they reported that they may not necessarily choose the same coping strategies. This group recommended creating a separate section for coping strategies and inserting open form questions as well. These suggestions were, after discussions and approval of four professors from Texas A & M University, incorporated into the questionnaire and placed into Section 2, Coping Strategies.

Section 3, Demographic Data, was a result of a search of the literature and suggestions from the focus group and professors from Texas A & M University. From

these discussions, a further division of age and additional questions relating to additional training and working a second job were added. Following this review, Section 3 was revised.

The entire survey questionnaire was pilot tested using a group of community college business teachers. Following this pilot test, the questionnaire was again revised after suggestions to number the questions in Sections 1 and 2 separately, instead of continuing the numbers from Section 1 into Section 2. The questionnaire incorporated this suggestion. Then, the questionnaire was pilot tested a second time using another group of community college business faculty members in order to cross validate and to observe the length of time required to complete the questionnaire.

In analyzing the results of the second pilot test, two suggestions or comments emerged. The first was to ensure that the pages of the questionnaire be numbered at the bottom of each page, and the second was to add a code number at the top of the first page on all forms to more efficiently track respondents. These suggestions were incorporated into the questionnaire's format. After a final review and approval by the dissertation committee, the questionnaire was felt to be ready for printing and distribution. The questionnaire was printed front and back on 8 ½ x 11 inch pages to reduce mailing, and copies were reproduced by a professional copier company. The instrument can be viewed in Appendix A.

Procedures for Data Collection

After the instrument was finalized, cover letters and packets of questionnaires were prepared and mailed to each Texas community college business faculty member. The cover letter explained the significance and design of the study. In addition, each participant was offered a copy of the summary of the study.

The survey packets included the cover letter and the questionnaire. Packets were addressed to individual faculty members at the addresses given by the Texas Business and Technology Educators Association and the Accounting Teacher Section of Texas Community College Teachers Association. Also, a self-addressed, stamped envelope was enclosed with each mailing; and each respondent was requested to return his or her completed survey to the researcher. Follow-up letters were mailed to respondents who did not return their surveys by the designated date. These procedures were followed in an attempt to maximize the return rate and to eliminate bias in the study.

Data Analysis

Methods and procedures utilized for analyzing the data were consistent with procedures recommended in the literature for exploratory research. Both descriptive and inferential statistics were calculated on all quantitative data. Descriptive statistics were used to manage the data in the form of frequencies, proportions, percentages, means, and standard deviations.

For data analysis, the Statistical Package for the Social Sciences (SPSS-X) was the statistical package chosen. This software package provides a system for data storage, data modification and programming, statistical analysis, report writing, and file management. The statistical procedures included descriptive statistics (SPSS-X User's Guide, 2003).

Summary

This chapter contained the methods of the study of stress and coping strategies as perceived by selected community college business faculty in Texas. In addition, the survey instrument construction, data collection procedures, and research design, as well as the description of the instrument and data analysis procedures used in this study were detailed in this chapter. Chapter IV contains the analyses of data, including a detailed discussion of the research questions and findings.

CHAPTER IV

PRESENTATION OF FINDINGS

The purpose of this study was to explore and to identify the sources of occupational stressors perceived by selected Texas community college faculty members and to ascertain current faculty demographics that might be useful in understanding such stress. A second purpose was to explore and to identify the coping strategies these faculty members use to alleviate their stressors. A third purpose of this study was to determine if relationships exist among stressors, coping strategies, and demographic characteristics.

A survey form (see Appendix A) served as a tool to gather data. The analyses used to obtain the research results are presented in this chapter. This research tool was divided into three sections. These three sections consisted of (a) Section 1, which was used to gather data pertaining to the sources of occupational stressors perceived by the participants in their teaching occupations; (b) Section 2, which was used to gather data pertaining to the coping strategies used by the participants to relieve their teaching stressors; and (c) Section 3, which was used to request information concerning personal and professional demographic characteristics of each research participant.

According to psychometric theory, psychological measurement must apply rules for assigning numerical values to properties to represent actual quantities of attributes to reflect reliability and consistency of measurement (Derogatis, 1987). By assigning numerical value to the levels of intensity to items related to stressors, coping

strategies, and to demographic characteristics, each could be measured as reported by individual respondents.

Of the 90 survey forms mailed, 50 were returned. Of these 50, only one survey was deemed unusable because the respondent answered only Section I. Forty-nine or 54.4 percent of these survey forms were analyzed for this study. Data from some of the respondents were missing for some of the study questions, which accounts for discrepancies in total number of responses from one item to the next.

The following five questions were addressed in this study:

1. What is the demographic profile of the survey respondents?
2. What are the perceived levels of occupational stress for selected Texas community college business faculty members?
3. What coping strategies do selected Texas community college business faculty members use to manage their occupational stressors?
4. What are the occupational stressors as perceived by selected Texas community college faculty members that relate to selected demographic characteristics?
5. Is there a relationship among stressors, coping strategies, and selected demographic characteristics, such as gender, age, educational level, tenure status, years in teaching, and professional rank, of selected Texas community college business faculty members?

The following is a summary of the results relating to each research question. Findings presented in tables were discussed as percentages because they provide an immediate comparison among varying degrees on a five-point Likert scale.

Research Question #1

What is the demographic profile of the survey respondents? The demographic profile of these respondents was determined from the data gathered from the survey questions pertaining to demographic data supplied by the respondents. Frequency distributions were used to analyze responses to questions concerning selected demographic characteristics and are summarized in Tables 5 and 6. Demographic data were divided into personal and professional characteristics of the respondents. Analyses associated with personal descriptors, such as gender, marital status, number of dependent children living at home, health, and age, are summarized in Table 5. The other analyses associated with professional descriptors like tenure status, educational level, faculty rank, years of experience as a community college business faculty members, professional rank, and employment status are summarized in Table 6.

Personal Characteristics

In viewing the data presented in Table 5, more than 67 percent of the respondents were female, and less than 33 percent were male. Of the 49 respondents, 75.5 percent were married, 10.2 percent were single, and 14.3 percent were divorced. More than 28 percent had dependent children living at home, while approximately 70

percent had no dependents living at home, with one respondent who did not answer. Even though these faculty members did not reveal their exact ages on the survey form, categories were obtained by using a range from 20 to 75 years of age. The survey instrument contained ten age groupings; however, some age groupings contained small numbers or no numbers; therefore, to more evenly process data concerning age, these age ranges were regrouped into four age groups. The four age groups were as follows: (1) 20 to 40, (2) 41 to 55, (3) 56 to 60, and (4) 61 to 75. The age group of 41 to 55 contained the largest percentage of respondents at 55.1 percent. Only 4.1 percent were in the age group of 20 to 40; 26.5 were in the age group of 56 to 60; and 14.3 percent were in the 61 to 75 age group. More than 95 percent of the respondents were more than 41 years of age.

When the respondents were surveyed concerning their health during the last six months, their responses ranged from 44.9 percent reporting "good" to 2 percent who reported their health to be "very bad," with 10.2 percent responding that their health was "not good or bad." Moreover, the respondents' answers to the question concerning their health at the beginning of their teaching experience reflected 65.3 percent reporting their health to be the "same." More than 24 percent reported their health to be "worse," with 4.1 percent reporting "very much worse health." Only 6.1 percent reported their health to be "better." When asked if they would choose teaching again as a career, 87.8 percent of the respondents answered that they would again choose teaching as a career.

Table 5. Frequency Distribution of Respondents' Personal Demographic Characteristics

Personal Characteristics	Frequency	Percentage
Gender		
Male	16	32.7
Female	33	67.3
Total Participants	49	100.0
Marital Status		
Single	5	10.2
Married	37	75.5
Divorced	7	14.3
Total Participants	49	100.0
Dependent Children at Home		
Yes	14	28.6
No Response	1	2.0
Total Participants	49	100.0
Age Group		
20 – 40	2	4.1
41 – 55	27	55.1
56 – 60	13	26.5
61 – 75	7	14.3
Total Participants	49	100.0
Health for Last Six Months		
Very Bad	1	2.0
Bad	1	2.0
Not Good or Bad	4	8.2
Fair	7	14.3
Good	22	44.9
Very Good	14	28.6
Total Participants	49	100.0
Health at Beginning of Teaching Experience		
Very Much Worse	2	4.1
Worse	12	24.5
The Same	32	65.3
Better	3	6.1
Very Much Better	0	0.0
Total Participants	49	100.0
Choosing Teaching as a Career Again		
Yes	43	87.8
No	6	12.2
Total Participants	49	100.0

Note: N=49.

Professional Characteristics

In observing the results from the analyses presented in Table 6, the years of teaching experience in a community college ranged from one to thirty-five years of experience. The group with 21 to 25 years of experience held the largest percentage of respondents at 24.5 percent, followed by groups of 1 to 5, 6 to 10, and 11 to 15 in which each group held 14.3 percent of the respondents. Those faculty members with teaching experience in groups 21 to 25 and 31 to 35 comprised almost 45 percent of the total respondents. In this study, 55.1 percent of the respondents' teaching experience ranged from 1 to 20 years; and 44.9 percent of the respondents' teaching experience ranged from 21 to 30 years.

The majority or 87.8 percent of the respondents held a master's degree. The percentage of those respondents who held a bachelor's degree or a doctorate was 6.1 percent respectively. No respondent reported holding only an associate degree.

The percentage responding with tenure status was 38.8 percent, with 57.1 percent reporting no tenure and 4.1 percent who did not respond to this question. The percentage of those working a second job was 34.7 percent, with 65.3 percent who were not working at a second job. More than 12 percent or 12.3 percent were working on an additional certification; 85.7 percent were not, with one not responding to this question. Slightly more than 59 percent or 59.2 percent held the rank of instructor, 8.2 percent were assistant professors, 2 percent were associate professors, and 30.6 percent were professors. All the respondents were full-time faculty.

Table 6. Frequency Distribution of Respondents' Professional Demographic Characteristics

Professional Characteristics	Frequency	Percentage
Years of Teaching Business Subject in Community College		
1 – 5	7	14.3
6 – 10	7	14.3
11 – 15	7	14.3
16 – 20	6	12.2
21 – 25	12	24.5
26 – 30	10	20.4
31 – 35	0	0.0
36 – 40	0	0.0
Total Participants	49	100.0
Highest Degree Achieved		
Associate Degree	0	0.0
Bachelor Degree	3	6.1
Master Degree	43	87.8
Doctorate Degree	3	6.1
Total Participants	49	100.0
Working on an Additional Degree		
Yes	4	8.2
No	45	91.8
Total Participants	49	100.0
Tenure Status		
Yes	19	38.8
No	28	57.1
No response	2	4.1
Total Participants	49	100.0
Working at a Second Job		
Yes	17	34.7
No	32	65.3
Total Participants	49	100.0
Working on Other Certifications		
Yes	6	12.3
No	42	85.7
No response	1	2.0
Total Participants	49	100.0
Professional Rank		
Instructor	29	59.2
Assistant Professor	4	8.2
Associate Professor	1	2.0
Professor	15	30.6
Total Participants	49	100.0
Employment Status		
Full Time	49	100.0
Total Participants	49	100.0

Note: N=49.

Research Question #2

What are the perceived levels of occupational stress for selected Texas community college business faculty members? Respondents were asked to indicate whether the occupational stressors listed in the questionnaire had caused them stress. Their choices were: 1 = Not stressful, 2 = Somewhat stressful, 3 = Considerably stressful, 4 = Decidedly stressful, and 5 = Extremely stressful. The sources of stress as perceived by faculty members in selected Texas community colleges are summarized in Table 7 by frequency, mean, and standard deviation.

Table 7. Stressor Items as Perceived by Respondents

Stressor Item and Description	Frequency	Mean	SD
S01 – Participating in departmental committees	49	2.00	.90
S02 – Participating in college committees	49	2.33	1.088
S03 – Participating in work activities after regular hours	49	2.43	1.080
S04 – Meeting social obligations related to my job	48	2.10	1.189
S05 – Complying with dept rules and regulations	49	1.86	1.021
S06 – Complying with college rules and regulations	49	2.02	1.127
S07 – Inadequate facilities (office, library, labs, class)	48	2.31	1.257
S08 – Evaluating students' performance	49	2.12	.904
S09 – Presentations at professional conferences	47	2.66	1.203
S11 – Excessively high self-expectations	48	2.46	1.051
S12 – Inadequate recognition for community services	49	1.86	.957
S13 – Student evaluation of my teaching performance	49	2.16	1.106
S14 – Resolving differences with faculty members	48	2.42	1.007
S15 – Insufficient time for w/current developments	49	2.84	1.087
S16 – Insufficient authority to do responsibilities	49	1.98	1.164

Table 7. (continued)

Stressor Item and Description	Frequency	Mean	SD
S17 – Not progressing in my career as I should or could	49	1.96	1.098
S18 – Assignment of duties that take me from my office	49	2.04	.999
S20 – Securing financial support for research	43	1.60	1.094
S22 – Teaching inadequately prepared students	49	3.14	1.137
S23 – Advising students	49	2.06	.988
S24 – Preparing manuscript for publication	41	2.07	1.292
S25 – Being unclear as to the scope and responsibilities of my job	46	1.80	1.108
S29 – Having repetitions in teaching assignments	49	1.45	.818
S30 – Having repetitions in job assignments	49	1.41	.705
S31 – Writing letters and memos, and responding to other paperwork	49	1.84	.657
S32 – Insufficient time for service functions	48	2.10	.857
S33 – Feeling that I have too heavy a workload, one that I cannot possibly finish during the normal workday	49	2.45	1.156
S34 – Meetings which take up too much time	49	2.80	1.174
S35 – Program changes that impact my job	49	2.71	1.080
S36 – Reduced enrollment impacts my job	48	2.65	1.313
S37 – Insufficient recognition for teaching performance	49	2.18	1.219
S38 – Influence chairperson's actions that affect me	45	1.78	1.042
S39 – Influence chairperson's decisions that affect me	44	1.75	1.059
S40 – Not having clear criteria for evaluating service activities	46	1.85	.965
S41 – Resolving differences with chairperson	44	1.70	.978
S42 – Lacking congruency in institutional goals	48	2.02	1.120
S43 – Incongruent departmental goals	48	1.69	.903
S44 – Incongruent personal goals	47	1.55	.880
S45 – Insufficient preparation to teach subject matter	45	1.82	1.051
S46 – Insufficient institutional recognition for research	39	1.41	
S47 – Lacking personal impact on institutional decision making	47	1.98	1.093
S48 – Lacking personal impact on departmental decision making	47	1.83	1.090
S49 – Unclear how chair evaluates my performance	43	1.74	1.115
S50 – Receiving inadequate salary to meet financial needs	47	2.60	1.393
S51 – Unclear criteria to evaluate research/publication	39	1.41	.785

Table 7. (continued)

Stressor Item and Description	Frequency	Mean	SD
S52 – Having job demands which interfere with other personal activities	47	1.89	.938
S53 – Having job demands which interfere with family	46	1.98	1.085
S54 – Being drawn into conflict between colleagues	47	2.09	1.265

Note: N=49. Some frequencies do not add up to 49 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Respondents were asked to indicate if the occupational stressors listed in the questionnaire had caused them stress. Their choices were: 1 = Not stressful, 2 = Somewhat stressful, 3 = Considerably stressful, 4 = Decidedly stressful, and 5 = Extremely stressful.

By using the table sorting function of Microsoft Word and performing a Column 5 sort in descending order, the ten highest stressors emerged. The data was analyzed, summarized, and placed into Table 8. All means are listed in order from the highest to the lowest stressful item. On a five-point scale, the mean of the ten highest indicated sources of stress fell between 3.14 and 2.45. The item most frequently reported as causing high levels of stress pertained to S22, *teaching inadequately prepared students*, with a mean of 3.14 (*SD=1.137*), relating to external stressors and Student Interaction. The three stressors that were observed to have high sources of stress are closely linked by mean scores of 2.48 to 2.45 and apply to internal stressors relating to Time Constraints and Professional Identity. These stressors included (1)

S27, *having inadequate time for teaching preparation,* (2) S11, *imposing excessively high self-expectations,* and (3) S33, *feeling that I have too heavy a workload, one that I cannot possibly finish during the normal workday.*

Table 8. Ranked Means for the Ten Highest Sources of Stress as Perceived by Respondents

Rank	Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	49	3.14	1.137
2	S15	Insufficient time to keep abreast of current developments in my field	49	2.84	1.087
3	S34	Attending meetings which take up too much time	49	2.80	1.174
4	S35	Dealing with program changes that impact my job	49	2.71	1.080
5	S09	Making presentations at professional conferences	47	2.66	1.203
6	S36	Dealing with reduced enrollments that impact my job	48	2.65	1.313
7	S50	Receiving inadequate salary to meet financial needs	47	2.60	1.393
8	S27	Having inadequate time for teaching preparation	48	2.48	1.255
9	S11	Imposing excessively high self-expectations	48	2.46	1.051
10	S33	Feeling that I have too heavy a workload, one that I cannot possibly finish during the normal workday	49	2.45	1.156

Note: N=49. Some frequencies do not add up to 49 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

In addition to closed-end questions on the survey form, respondents were asked to give independent listings of responses to open-ended questions. (See Appendix A for Items 55 through 58.) A content analysis of the qualitative responses by community college business faculty members to open-ended questions revealed 40 additional stressors. Of the 40 additional stressors, many concerned departmental, institutional, and state supportive issues, such as the following:

- *Insufficient web space for web-based classes*
- *Limited technical support for computer problems*
- *Imposing unrealistic deadlines on faculty*
- *Dealing with teacher evaluations*
- *Working with new administrators*
- *New mandates by State Coordinating Board*
- *Lack of healthy temperature-controlled environment to facilitate learning*
- *Lack of laptop or projector to adequately present class material*
- *Budget cutbacks by the state*

A sample of other respondent comments concerned student-related interactive issues and included the following: (1) *meeting needs of on-line students*, (2) *lack of adequate tutoring for severely disabled students*, and (3) *prejudged as being wrong if students complain to department chair*.

Other stressful open-ended occupational stressor responses reflected issues involving *lack of department support* and *additional responsibilities beyond the*

regular workday. Those stressors rated less stressful included the following responses in alphabetical order:

- *Being expected to stay late in the evenings to register and advise students*
- *Developing courses for on-line teaching*
- *Developing on-line testing*
- *Difficulty encountered by students in transferring credits from community colleges to universities*
- *Evaluating on-line students while maintaining high standards*
- *Insufficient classrooms and office space for new faculty and staff*
- *Lack of technical support for computer problems*

In Items 59 and 60 of the survey instrument, respondents were asked to assess the level of the stress they typically experienced in their work life and their home life. Their ranking choices were: 1 = Not stressful, 2 = Somewhat stressful, 3 = Considerably stressful, 4 = Decidedly stressful, and 5 = Extremely stressful. Forty-eight respondents completed these two items, responding that work life was more stressful with a mean of 2.27 *(SD=.939)* than was home life. One respondent did not answer this question. The respondents' choices by highest mean are summarized in Table 9.

Table 9. Ranked Means for Assessed Degrees of Stress in Work Life and Home Life as Perceived by Respondents

Rank	Description	Frequency	Mean	SD
1	Degree of stress in work life	48	2.27	.939
2	Degree of stress in home life	48	1.88	.959

Note: N=49. Some frequencies do not add up to 49 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Respondents were asked in Item 61 on the survey form to list in ranking order their top five most stressful situations from the previous list of 54 stressors. Their ranking choices were: 1 = Not stressful, 2 = Somewhat stressful, 3 = Considerably stressful, 4 = Decidedly stressful, and 5 = Extremely stressful. A content analysis was performed on responses to Item 61 and summarized in Table 10.

Stressors S22, *teaching inadequately prepared* students, S15, *having insufficient time to keep abreast of current developments in my* field, and S09, *making presentations at professional conferences*, were three of the ten highest stressors reported in Table 8 that respondents identified and that matched those obtained from SPSS. Stressor 22 was the stressor that was chosen most often by the respondents. The disproportional size of the respondents could have affected the results of this analysis because out of 49 respondents only 25 respondents fully participated, 9 offered limited responses, and 4 did not respond. Surprisingly, respondents chose S07, *having*

inadequate facilities, as their third highest ranked stressor; and ranked S23, *advising students*, as their fifth ranked highest stressor. These two stressors had previously been ranked as somewhat stressful according to information obtained from SPSS. The overall results for these five-ranked stressors as identified by the respondents are summarized in Table 10.

Table 10. Top Five Most Stressful Stressors as Ranked by Respondents

Rank	Stressor Item and Description	
1	S22	Teaching inadequately prepared students
2	S15	Having insufficient time to keep abreast of current developments in my field
3	S07	Having inadequate facilities
4	S09	Making presentations at professional conferences
5	S23	Advising students

Note: Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Research Question #3

What coping strategies do selected Texas community college business faculty members use to manage their occupational stressors? Respondents chose from the following: 5 = Extensively use, 4 = Use frequently, 3 = Use sometimes, 2= Use occasionally, and 1 = Never use. Coping Strategy 28, *prioritizing work*, was the most

used coping strategy, while Coping Strategy 21, *listening to audio books was the least used of the 48 coping strategies*. A summary of the coping strategies is listed in Table 11 by frequency, mean, and standard deviation.

Table 11. Coping Strategies as Perceived by Respondents

Coping Item and Strategy	Frequencies	Mean	SD
CS01 – Acknowledging self-limitations	48	3.38	1.064
CS02 – Attending plays	48	1.94	1.156
CS03 – Avoiding problems	48	2.40	1.125
CS04 – Buying time to stall an issue	48	2.13	1.142
CS05 – Cleaning	47	2.17	1.167
CS06 – Cooking	47	2.02	1.132
CS07 – Coping Strategies	46	2.78	1.114
CS08 – Dancing	47	1.68	1.002
CS09 – Dealing with problems immediately	48	3.63	1.044
CS10 – Dealing with problems in an unemotional way	47	3.00	1.043
CS11 – Developing stable relationships	47	3.70	1.121
CS12 – Dining out	47	2.98	1.327
CS13 – Doing nothing	47	2.15	1.215
CS14 – Exercising	46	3.52	1.329
CS15 – Formulating a new goal	47	2.77	1.165
CS16 – Gardening	47	2.60	1.409
CS17 – Implementing time management	47	3.00	1.142
CS18 – Inventing ways to make work more interesting	48	2.94	1.080
CS19 – Learning to say "no" gracefully	47	2.83	1.028
CS20 – Learning new skills	47	3.27	1.216
CS21 – Listening to audio books	47	1.64	1.072
CS22 – Listening to music	47	3.23	1.220
CS23 – Meditating	47	2.19	1.329
CS24 – Planning ahead	47	3.70	1.102
CS25 – Playing games	47	2.28	1.174
CS26 – Playing sports	47	2.00	1.198
CS28 – Prioritizing work	48	3.75	1.139

Table 11. (continued)

Coping Item and Strategy	Frequencies	Mean	SD
CS29 – Reading for enjoyment	47	3.26	1.510
CS30 – Relaxing for short periods	47	3.40	1.035
CS31 – Seeking advice from supervisor	47	2.66	.984
CS32 – Seeking support from supervisor	47	2.66	1.185
CS33 – Separating home from work	48	3.63	1.104
CS34 – Separating work from home	47	3.62	1.074
CS35 – Sewing	47	1.72	1.246
CS36 – Shopping	47	2.45	1.348
CS37 – Suppressing emotions so stress will not show	47	2.74	1.242
CS38 – Taking bubble baths	47	1.81	1.313
CS39 – Taking time for yourself	47	3.02	1.225
CS40 – Talking to peer(s) about events	48	3.19	1.123
CS41 – Traveling	47	3.06	1.150
CS42 – Using home as a refuge	47	3.36	1.436
CS43 – Walking	47	3.47	1.365
CS44 – Watching the sun set	47	2.45	1.486
CS45 – Watching television	47	3.06	1.275
CS46 – Watching movies	47	2.83	1.340
CS47 – Watching sporting events	47	2.45	1.248
CS48 – Working on hobbies	47	2.74	1.210

Note: N=49. Some frequencies do not add up to 49 due to missing responses.

Coping Values: 5 = Extensively Use
4 = Use Frequently
3 = Use Sometimes
2 = Use Occasionally
1 = Never Use

By using the table sorting function of Microsoft Word and performing a Column 4 sort in descending order, the ten highest used coping strategies emerged. The data were analyzed, summarized, and placed into Table 12. On a five-point scale, the mean of the ten highest identified coping strategy means occurred between 3.75

(*SD=1.*139) and 3.40 (*SD=1.035*). The item most frequently used coping strategy pertained to CS28, *prioritizing work*, relating to Changing One's Behavior. Coping strategy rankings of 2 and 3, 4 and 5, and 7 and 8 were observed as being tied by means. Identical data rankings were sorted in pair by standard deviations using Microsoft Word and sorting by Column 5 in ascending order to solve these ties. These identical pairs are related to coping strategy groupings of Changing One's Behavior, Social Support, and Active Participation.

Table 12. Rank Means for Top Ten Coping Strategies as Perceived by Respondents

Rank	Coping Item and Description	Frequency	Mean	SD
1	CS28 – Prioritizing work	48	3.75	1.139
2	CS24 – Planning ahead	47	3.70	1.102
3	CS11 – Developing stable relationships	47	3.70	1.121
4	CS09 – Dealing with problems immediately	48	3.63	1.044
5	CS33 – Separating home from work	48	3.63	1.104
6	CS34 – Separating work from home	47	3.62	1.074
7	CS14 – Exercising	46	3.52	1.329
8	CS27 – Praying	48	3.52	1.444
9	CS43 – Walking	47	3.47	1.365
10	CS30 – Relaxing for short periods	47	3.40	1.035

Note: N=49. Some frequencies do not add up to 49 due to missing responses.

Coping Values:
5 = Extensively Use
4 = Use Frequently
3 = Use Sometimes
2 = Use Occasionally
1 = Never Use

In addition to the 48 coping strategies presented to the participants for identification, respondents were provided space for Items 49 through 52 so that they could respond to open-ended questions for additional coping strategies. Respondents wrote 21 additional comments. The most frequently mentioned coping strategies clustered around activities involving social support of families, friends, and students. Some of these responses included *spending time with family members or playing with grandchildren, discussing problems or spending time with a spouse, attending religious and social activities with family and friends, reading the Bible, trying to accept that students control their own destiny, and trying to remove emotions from business situations*. The second popular coping strategies involved nature. These coping strategies included *working outdoors clearing brush and mowing the lawn, watching wildlife, and grooming pets*. Other unique coping strategies *were using downtime productively, always being prepared, organizing desk and office, and making to-do lists*.

Research Question #4

What are the occupational stressors as perceived by selected Texas community college faculty members that relate to selected demographic characteristics? Selected demographic characteristics were chosen by convening a focus group of community college business teachers and through discussions with the dissertation committee members. The resulting coping strategies were listed; then, the strategies were separated into two categories. The first category contained personal demographic

characteristics and the second category the professional demographic characteristics. Those in the personal category selected for further examination related to characteristics like gender, age, marital status, dependents living at home, and health. The professional category of demographics included such characteristics as tenure status, years of teaching experience, and professional rank. Further analyses of these independent factors (demographic characteristics) are expected to result in a greater understanding of situations that contribute to the stress of selected Texas community college faculty members.

Personal Demographic Characteristics

Gender, the first selected demographic characteristic, was separated into male and female respondents. The results for males were summarized in Table 13, while those for females were summarized in Table 14. Only the highest stressors with means of 2.6 or greater were summarized in both Tables 13 and 14.

In analyzing the demographic characteristics of gender, females reported 11 occupational stressors, while males reported only 4. Both males and females listed four similar stressors. The stressors that they listed as being stressful were in respective order: (1) S9, *making presentations at professional conferences*, (2) S22, *teaching inadequately prepared students*, (3) S34, *attending meetings which take up too much time*, and (4) S35, *dealing with program changes that impact my job*. These stressors related to four stressor groups of Professional Identity, Student Interaction, College/Department Influences, and Time Constraints. Females listed seven additional stressors. These are: (1) S14, *in sufficient time to keep abreast of current developments*

in my field; (2*)* S50, *receiving inadequate salary to meet financial needs,*(3) S36, *dealing with program changes that impact my job*; (4) S33, *feeling I have too heavy a workload, one that I cannot possibly finish during the normal workday; (5) S03, participating in work-related activities outside regular working hours*; (6) S27, *having inadequate time for teaching preparation*; and (7) S11, *imposing excessively high self-expectations.* These additional stressors are related to two stressor groupings of Time Constraints and Professional Identity.

Table 13. Ranked Means for the Highest Stressors as Perceived by Male Respondents

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	16	3.25	1.07
2	S34	Attending meetings which take up too much time	16	2.69	.95
3	S09	Making presentations at professional conferences	15	2.69	1.08
4	S35	Dealing with program changes that impact my job	16	2.56	1.03

Note: N=16.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 14. Ranked Means for the Highest Stressors as Perceived by Female Respondents

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	33	3.09	1.18
2	S15	Insufficient time to keep abreast of current developments in my field	33	3.03	1.05
3	S34	Attending meetings which take up too much time	33	2.85	1.42
4	S50	Receiving inadequate salary to meet financial needs	32	2.84	1.51
5	S35	Dealing with program changes that impact my job	33	2.79	1.11
6	S36	Dealing with reduced enrollments that impact my job	33	2.73	1.38
7	S33	Feeling I have too heavy a workload, one that I cannot possibly finish during the normal workday	33	2.64	1.13
8	S03	Participating in work activities outside of regular hours	33	2.64	1.19
9	S09	Making presentations at professional conferences	33	2.58	1.28
10	S27	Having inadequate time for teaching preparation	33	2.58	1.37
11	S11	Imposing excessively high self-expectations	32	2.56	1.13

Note: N=33. Some frequencies do not add up to 33 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Age was the second personal demographic characteristic to be analyzed. This characteristic was divided into four separate categories. These four categories were ages (a) 20 to 45, (b) 46 to 50, (c) 51 to 55, and (d) 56 to 75. Each of the four age

groups was analyzed separately and then compared. Findings for the age group of 25 to 45 are summarized in Table 15; the 46 to 50 age group are in Table 16; the 51 to 55 age group are in Table 17; and the 56 to 75 age group are in Table 18. Only the highest stressors with means of 2.6 or greater are summarized in all four tables.

In analyzing the demographic characteristic of age, the 20 to 45 age group reported 13 stressors; the 46 to 50 and 51 to 55 age groups reported 10 stressors, while the 56 to 75 age group revealed 3 stressors. Age groups 20 to 45 and 51 to 55 reported five similar stressors. These similar stressors are: (1) S09, *making presentations at professional conferences*, (2) S14, *resolving differences with fellow faculty members*, (3) S26, *having insufficient time to keep abreast of current developments in my field*, (4) S34, *attending meetings which take up too much time*, and (5) S35, *dealing with reduced enrollment that impact my job*. These stressors related to three stress groups of Professional Identity, College/Departmental Influences, and Time Constraints.

In addition, age groups 20 to 45 and 46 to 55 shared five similar stressors. These stressors are: (1) S27, *having inadequate time for teaching preparation*, (2) S34, *attending meetings which take up too much time*, (3) S35, *dealing with reduced enrollment that impact my job; (4)* S50, *receiving inadequate salary to meet financial needs*, and (5) S36, *dealing with reduced enrollment that impact my job*. These stressors are linked to age groups of 20 to 45 and 46 to 50 and are related to three stress groups of Time Constraints, Reward and Recognition, and College/Departmental Influences. All four age groups reported that (1) S22, *teaching inadequately prepared students;* and (2) S15, *insufficient time to keep abreast of current developments in my*

field were the most stressful items for them. These four age groups share two stressor groupings related to Student Interaction and Time Constraints.

Table 15. Ranked Means for the Highest Stressors as Perceived by Respondents in 20- to 45-Year Age Group

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S27	Having inadequate time for teaching preparation	6	3.50	.84
2	S22	Teaching inadequately prepared students	6	3.33	1.03
3	S09	Making presentations at professional conferences	6	3.33	1.21
4	S15	Insufficient time to keep abreast of current developments in my field	6	3.17	.98
5	S34	Attending meetings which take up too much time	6	3.17	1.17
6	S11	Imposing excessively high self-expectations	6	3.00	1.10
7	S35	Dealing with program changes that impact my job	6	2.83	.75
8	S36	Dealing with reduced enrollments that impact my job	6	2.83	.75
9	S28	Feeling pressure to compete with my colleagues	4	2.75	1.50
10	S26	Having insufficient reward for institutional service	5	2.60	1.14
11	S53	Having job demands which interfere with family	5	2.60	1.52
12	S50	Receiving inadequate salary to meet financial needs	6	2.67	1.03
13	S54	Being drawn into conflict between colleagues	6	2.67	1.03

Note: N=6. Some frequencies do not add up to 6 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 16. Ranked Means for the Highest Stressors as Perceived by Respondents in 46- to 50-Year Age Group

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	23	3.35	1.07
2	S35	Program changes that impact my job	23	3.00	.95
3	S15	Insufficient time to keep abreast of current developments in my field	23	2.87	1.06
4	S50	Receiving inadequate salary to meet financial needs	21	2.76	1.51
5	S34	Attending meetings which take up too much time	23	2.65	1.07
6	S33	Feeling I have too heavy a workload, one that I cannot possibly finish during the normal workday	23	2.65	1.23
7	S36	Dealing with reduced enrollments that impact my job	23	2.65	1.37
8	S27	Having inadequate time for teaching preparation	22	2.64	1.18
9	S11	Imposing excessively high self-expectations	23	2.61	.99
10	S03	Participating in work-related activities outside regular working hours	23	2.57	.99

Note: N=23. Some frequencies do not add up to 23 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 17. Ranked Means for the Highest Stressors as Perceived by Respondents in 51- to 55-Year Age Group

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S34	Attending meetings which take up too much time	13	2.92	1.50
2	S07	Having inadequate office facilities	13	2.77	1.09
3	S15	Insufficient time to keep abreast of current developments in my field	13	2.77	1.24
4	S14	Resolving differences with fellow faculty members	13	2.69	1.18
5	S02	Participating in the work of college committees	13	2.69	1.38
6	S36	Dealing with reduced enrollments that impact my job	12	2.67	1.37
7	S22	Teaching inadequately prepared students	13	2.46	1.13
8	S24	Preparing a manuscript for publication	11	2.64	1.43
9	S09	Making presentations at professional conferences	13	2.62	1.19
10	S10	Making presentations at faculty meetings	13	2.62	1.19

Note: N=13. Some frequencies do not add up to 13 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 18. Ranked Means for the Highest Stressors as Perceived by Respondents in 56- to 75-Year Age Group

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	6	3.83	.98
2	S10	Making presentations at faculty meetings	6	2.83	1.17
3	S15	Insufficient time to keep abreast of current developments in my field	6	2.67	1.21

Note: N=7. Some frequencies do not add up to 7 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

The third personal demographic characteristic analyzed was that of marital status. This characteristic was divided into three categories, single, married, and divorced and was summarized in three separate tables. Analyses of the single respondents are summarized in Table 19, the married respondents are summarized in Table 20, and the divorced respondents are summarized in Table 21. Only findings by highest stressors with means of 2.6 or greater are summarized in all three tables.

Analyses of marital status revealed that single and divorced groups held five similar stressors. These commonly held stressors were (1) S9, *making presentations at professional conferences*; (2) S22, *teaching inadequately prepared students*; (3) S34, *attending meetings which take up too much time*; (4) S35, *dealing with program changes that impact my job*; and (5) S36, *dealing with reduced enrollments that impact my job*. These stressors fell into four stress groups of Professional Identity, Student Interaction, Time Constraints, and College/Department Influences.

All three groups, single, married, and divorced selected the same four stressors. These reported stressors were: (1) S15, *insufficient time to keep abreast of current developments in my field*, (2) S22, *teaching inadequately prepared students*, (3) S35, *dealing with program changes that impact my job*, and (4) S36, *dealing with reduced enrollments that impact my job*. These four stressors are linked to three stressor groupings of Time Constraints, Student Interaction, and College/Departmental Influences. The married group was the only group to select S33, *feeling that I have too heavy a workload, one that I cannot possibly finish during the normal workday*. This stressor fell into one stress group pertaining to Time Constraints. The divorced respondents were the only group to select S04, *meeting social obligations related to my job*. This stressor related to the stressor grouping of Time Constraints.

Table 19. Ranked Means for the Highest Stressors as Perceived by Single Respondents

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	5	3.40	.89
2	S09	Making presentations at professional conferences	5	3.00	1.00
3	S35	Dealing with program changes that impact my job	5	3.00	1.23
4	S36	Dealing with reduced enrollment that impact my job	5	2.80	1.30
5	S34	Attending meetings which take up too much time	5	2.80	1.48
6	S02	Participating in college committees	5	2.60	.55
7	S10	Making presentations at faculty meetings	5	2.60	.89
8	S08	Evaluating the performance of students	5	2.60	1.14
9	S14	Resolving differences with faculty members	5	2.60	1.14

Note: N=5.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 20. Ranked Means for the Highest Stressors as Perceived by Married Respondents

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	37	3.08	1.19
2	S15	Insufficient time to keep abreast of current developments in my field	37	2.86	1.13
3	S34	Attending meetings which take up too much time	37	2.84	1.24
4	S50	Receiving inadequate salary to meet financial needs	35	2.69	1.49
5	S35	Dealing with program changes that impact my job	37	2.65	1.11
6	S36	Dealing with reduced enrollments that impact my job	36	2.61	1.36

Note: N=37. Some frequencies do not add up to 37 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 21. Ranked Means for the Highest Stressors as Perceived by Divorced Respondents

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S03	Participating in work activities outside of regular hours	7	3.43	1.62
2	S22	Teaching inadequately prepared students	7	3.29	1.11
3	S15	Insufficient time to keep abreast of current developments in my field	7	3.00	.58
4	S35	Dealing with program changes that impact my job	7	2.86	.90
5	S09	Making presentations at professional conferences	7	2.86	1.07
6	S13	Having students evaluate my teaching performance	7	2.86	1.22
7	S24	Preparing a manuscript for publication	6	2.83	1.60

Table 21. (continued)

Rank		Faculty Stressor Item and Description	Frequency	Mean	SD
8	S04	Meeting social obligations related to my job	7	2.71	1.25
9	S36	Dealing with reduced enrollments that impact my job	7	2.71	1.25
10	S27	Having inadequate time for teaching preparation	7	2.71	1.38
11	S26	Having insufficient reward for institutional service	7	2.57	1.27
12	S11	Imposing excessively high self-expectations	7	2.57	1.27
13	S33	Feeling I have too heavy a workload, one that I cannot possibly finish during the normal workday	7	2.57	1.51
14	S34	Attending meetings which take up too much time	7	2.57	1.51

Note: N=7. Some frequencies do not add up to 5 due to missing responses

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

From analyzing the fourth demographic characteristic, those faculty members who did have and those who did not have dependent living children at home, two tables were developed. The results for those who have dependent children living at home are summarized in Table 22. Results for those who do not have dependent children at home are summarized in Table 23. Only findings for the highest stressors with means of 2.6 or greater are summarized in both tables.

Respondents who have children living at home reported 18 stressors that have been summarized and placed into Table 22. However, respondents without children living at home reported only 5 stressors that were summarized and placed into Table 23. Upon further analyses, those respondents with children living at home and those

respondents without children living at home shared four common stressors. These were (1) S22, *teaching inadequately prepared students*, (2) S34, *attending meetings which take up too much time*, (3) S15, *insufficient time to keep abreast of current developments in my field*, and, (4) S35, *dealing with program changes that impact my job*. These four stressors are related to three factor stressor groupings of Student Interaction, Time Constraints, and College/Departmental Influences.

Respondents without children living at home reported one stressor that respondents who had children living at home did not report. This stressor was S9, *making presentations at professional conferences* that relates to a stress group of Professional Identity. Respondents who do not have children living at home reported 6 stressors that have been summarized and placed into Table 23.

Table 22. Ranked Means for the Highest Stressors as Perceived by Respondents Who Have Dependent Children Living at Home

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S27	Having inadequate time for teaching preparation	14	3.36	1.22
2	S50	Receiving inadequate salary to meet financial needs	13	3.31	1.44
3	S15	Insufficient time to keep abreast of current developments in my field	14	3.29	1.14
4	S34	Attending meetings which take up too much time	14	3.14	1.41
5	S22	Teaching inadequately prepared students	14	3.07	1.14
6	S03	Participating in work-related activities outside regular working hours	14	3.00	1.11

Table 22. (continued)

Rank		Faculty Stressor Item and Description	Frequency	Mean	SD
7	S11	Imposing excessively high self-expectations	14	2.93	1.07
8	S36	Dealing with reduced enrollment that impact my job	13	2.92	1.50
9	S02	Participating in the work of college committees	14	2.79	1.31
10	S42	Lacking congruency in institutional goals	13	2.77	1.17
11	S53	Having job demands which interfere with family	12	2.75	1.22
12	S32	Having insufficient time for performing the service function	13	2.62	1.12
13	S17	Believing that progressing my career is not what it should or could be	14	2.57	1.22
14	S14	Resolving differences with fellow faculty members	14	2.57	1.28
15	S37	Receiving insufficient recognition for teaching performance	14	2.57	1.40
16	S07	Having inadequate office facilities	14	2.57	1.56
17	S35	Dealing with program changes that impact my job	14	2.07	.92

Note: N=14. Some frequencies do not add up to 14 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 23. Ranked Means for the Highest Stressors as Perceived by Respondents Who Do Not Have Dependent Children Living at Home

Rank		Faculty Stressor Item and Description	Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	35	3.17.	1.15
2	S15	Insufficient time to keep abreast of current developments in my field	35	2.66	1.03
3	S09	Making presentations at professional conferences	35	2.66	1.19
4	S34	Attending meetings which take up too much time	35	2.66	1.21
5	S35	Dealing with program changes that impact my job	35	2.57	1.12

Note: N=35.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Professional Demographic Characteristics

The first professional characteristic analyzed was tenure. Tenure was divided into two groups. Group one contains those respondents who have tenure. A summary is displayed in Table 24. Group two was comprised of those respondents who do not have tenure. These findings were summarized and placed in Table 25. Only the highest stressors with means of 2.6 or greater are shown in these two tables.

Tenured respondents reported only three stressors. These three stressors are listed in Table 24. Untenured respondents reported eight stressors as shown in Table 25. Both tenured and untenured respondents shared three common stressors. These stressors were (1) S22, *teaching inadequately prepared students*, (2) S34, *attending meetings which take up too much time*, and (3) S15, *insufficient time to keep abreast of current developments in my field*. The three stressors link to two stressor groups that relate to Student Interaction and Time Constraints.

Untenured respondents reported five extra stressors. These stressors were (1) S9, *making presentations at professional conferences*, (2) S36, *dealing with program changes that impact my job*, (3) S36, *dealing with reduced enrollment that impact my job*, (4) S27, *having inadequate time for teaching preparation*, and (5) S50, *receiving inadequate salary to meet financial needs*. These five stressors are connected with four stressors related to four factor stressor groupings of Professional Identity, College/ Departmental Influences, Time Constraints, and Reward and Recognition.

Table 24. Ranked Means for the Highest Stressors as Perceived by Respondents Who Have Tenure

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	19	2.95	.91
2	S15	Insufficient time to keep abreast of current developments in my field	19	2.58	.96
3	S34	Attending meetings which take up too much time	19	2.58	1.07

Note: N=19.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 25. Ranked Means for the Highest Stressors as Perceived by Respondents Who Do Not Have Tenure

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	28	3.14	1.21
2	S15	Insufficient time to keep abreast of current developments in my field	28	3.00	1.05
3	S09	Making presentations at professional conferences	28	2.86	1.11
4	S35	Dealing with program changes that impact my job	28	2.82	.98
5	S34	Attending meetings which take up too much time	28	2.82	1.36

Table 25. (continued)

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
6	S36	Dealing with reduced enrollment that impact my job	27	2.78	1.28
7	S27	Having inadequate time for teaching preparation	27	2.63	1.25
8	S50	Receiving inadequate salary to meet financial needs	28	2.57	1.37

Note: N=28. Some frequencies do not add up to 28 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

The second professional characteristic concerned the number of years faculty had been teaching business subjects in a community college and was divided into four groups. The responses of those faculty members who had teaching experience from one to ten years were listed in group one. These facts were summarized and placed in Table 26. Group two was composed of those respondents who had teaching experience ranging from 11 to 20 years. The respondents' responses were summarized and placed in Table 27. Those respondents who had taught for 21 to 25 years were mirrored in group three and were illustrated in Table 28. Group four included those respondents who had taught from 26 to 30 years and findings were reported in Table 29.

Respondents who reported teaching one to ten years listed 14 stressors; however, five stressors were reported by the 11- to 20-year group, two by the 21- to 25-year group, and nine by the 26- to 30-year group. In analyzing Tables 26, 27, 28, and 29, all

four teaching groups were found to hold two stressors in common. These two stressors are S22, *teaching inadequately prepared students* and S34, *attending meetings which take up too much time*. These stressors are linked to stress groups of Student Interaction and College/Departmental Influences.

Stressor 35, *dealing with program changes that impact my job*, was shared by three groups with teaching experience of 1 to 10 years, 11 to 20 years, and 26 to 30 years. This stressor was linked to a stressor grouping of College/Departmental Influences. Respondents who had teaching experience ranging from 1 to 10 years and 26 to 30 years share two common stressors. These two stressors were S15, *insufficient time to keep abreast of current developments in my field*, and S36, *dealing with reduced enrollments that impact my job*. Stressors 15 and 36 are connected to stressor groupings of Time Constraints and College/Departmental Influences. Stressor 14, *resolving differences with fellow faculty members*, was held in common with teaching experience year groups of 11 to 20 and 26 to 30 years. This stressor is related to a stress group linked to College/ Departmental Influences.

Only respondents with teaching experience of 1 to 10 years reported the following stressors, which are presented in order of highest to lowest stress and with means ranging from 3.07 to 2.64:

- *Making presentations at professional conferences*
- *Participating in work-related activities outside regular working hours*
- *Having inadequate time for teaching preparation*
- *Imposing excessively high self-expectations*

- *Having inadequate facilities*
- *Receiving inadequate salary to meet financial needs*
- *Meeting social obligations*
- *Having students evaluate my teaching performance*

The above stressors are linked to stressor groupings of Professional Identity, Time Constraints, College/Department Influences, Reward and Recognition, and Student Interaction.

Stressor 54, *being drawn into conflicts between colleagues*; and Stressor 10, *making presentations at faculty meetings*; were the only two stressors reported by respondents in the teaching experience group of 26 to 30 years. These two stressors are connected to stressor groupings of Professional Identity and College/Department Influences.

Teaching experience groups of 1 to 10 and 11 to 20 shared one stressor, S33, *feeling I have too heavy a workload, one that I cannot possibly finish during the normal workday*. This stressor is linked to the stressor grouping of Time Constraints. The summarization of the remaining stressors chosen by those faculty member with 1 to 10 years of teaching experience are presented in Tables 26, 27 and 28 and are ranked by means, ranging from highest stressor of 3.17 *(SD=.99)* to lowest stressor of 2.60 *(SD=1.50)*.

Table 26. Ranked Means for the Highest Stressors as Perceived by Respondents Who Have Taught From One to Ten Years

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S15	Insufficient time to keep abreast of current developments in my field	14	3.17	.99
2	S09	Making presentations at professional conferences	14	3.07	1.07
3	S22	Teaching inadequately prepared students	14	3.07	1.39
4	S33	Feeling I have too heavy a workload, one that I cannot possibly finish during the normal workday	14	2.93	1.33
5	S03	Participating in work-related activities outside regular working hours	14	2.93	1.39
6	S27	Having inadequate time for teaching preparation	14	2.93	1.54
7	S35	Dealing with program changes that impact my job	14	2.86	1.17
8	S11	Imposing excessively high self-expectations	14	2.79	.89
9	S34	Attending meetings which take up too much time	14	2.79	1.48
10	S36	Dealing with reduced enrollments that impact my job	14	2.71	1.20
11	S50	Receiving inadequate salary to meet financial needs	14	2.71	1.49
12	S13	Having students evaluate my teaching performance	14	2.64	1.28
13	S04	Meeting social obligations	14	2.64	1.45
14	S07	Having inadequate facilities	14	2.64	1.50

Note: N=14.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 27. Ranked Means for the Highest Stressors as Perceived by Respondents Who Have Taught From Eleven to Twenty Years

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	14	3.17	.99
2	S35	Dealing with program changes that impact my job	13	3.00	1.00
3	S34	Attending meetings which take up too much time	13	2.85	1.14
4	S33	Feeling I have too heavy a workload, one that I cannot possibly finish during the normal workday	13	2.69	1.44
5	S14	Resolving differences with fellow faculty members	13	2.62	.96

Note: N=14. Some frequencies do not add up to 14 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 28. Ranked Means for the Highest Stressors as Perceived by Respondents Who Have Taught From Twenty-One to Twenty-Five Years

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S34	Attending meetings which take up too much time	12	2.92	1.08
2	S22	Teaching inadequately prepared students	12	2.75	.75

Note: N=12.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 29. Ranked Means for the Highest Stressors as Perceived by Respondents Who Have Taught Between Twenty-Six to Thirty Years

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	10	3.40	.84
2	S15	Insufficient time to keep abreast of current developments in my field	10	3.20	.79
3	S36	Dealing with reduced enrollments that impact my job	7	2.90	1.20
4	S50	Receiving inadequate salary to meet financial needs	10	2.90	1.60
5	S54	Being drawn into conflict between colleagues	10	2.90	1.60
6	S14	Resolving differences with fellow faculty members	10	2.80	1.23
7	S35	Dealing with program changes that impact my job	10	2.60	1.17
8	S34	Attending meetings which take up too much time	10	2.60	1.51
9	S10	Making presentations at faculty meetings	10	2.60	1.58

Note: N=10. Some frequencies do not add up to 10 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

The third and last professional characteristic analyzed was that of professional rank. Professional rank includes instructor, assistant professor, associate professor, and professor. Only professional ranks related to instructor and to professor will be reported and discussed because the number of assistant and associate professor respondents totaled only five. With this limited number of responses, this researcher

felt that data reported from more evenly distributed ranks would provide better comparisons.

In analyzing the data further, 29 respondents were instructors and 15 were professors. Instructor respondents reported eight stressors, while professor respondents reported only three. Stressors 22, *teaching inadequately prepared students*, and Stressor 35, *dealing with program changes that impact my job*, are the two stressors these two professional ranks shared in common. These two stressors are linked to two stressor groups pertaining to Student Interaction and College/Departmental Influences.

The results of data analyses by professional rank of instructor are summarized in Table 30. Those for the professional rank of professor are summarized in Table 31. In addition, data for each rank were listed in order by means of 2.6 or greater.

Table 30. Ranked Means for the Highest Stressors as Perceived by Respondents Who Hold the Rank of Instructor

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	29	3.28	1.25
2	S15	Insufficient time to keep abreast of current developments in my field	29	2.93	1.13
3	S09	Making presentations at professional conferences	29	2.86	1.19
4	S34	Attending meetings which take up too much time	29	2.83	1.28
5	S36	Dealing with reduced enrollments that impact my job	28	2.79	1.32

Table 30. (continued)

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
6	S50	Receiving inadequate salary to meet financial needs	28	2.75	1.35
7	S07	Having inadequate time for teaching preparation	28	2.64	1.34
8	S35	Dealing with program changes that impact my job	29	2.59	.98

Note: N=29. Some frequencies do not add up to 29 due to missing responses.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Table 31. Ranked Means for the Highest Stressors as Perceived by Respondents Who Hold the Rank of Professor

Rank	Faculty Stressor Item and Description		Frequency	Mean	SD
1	S22	Teaching inadequately prepared students	15	2.87	.92
2	S35	Dealing with program changes that impact my job	15	2.87	1.13
3	S33	Feeling I have too heavy a workload, one that I cannot possibly finish during the normal workday	15	2.60	1.12

Note: N=15.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Research Question #5

Is there a relationship among stressors, coping strategies, and selected demographic variables, such as gender, age educational level, tenure status, years in teaching, and professional rank, of selected Texas community college business faculty members? To answer this question stressors and coping strategies were grouped according to constructs. The stressor data used in this research were developed and tested in a 1994 study by Gmelch et al. in which validation and reliability were confirmed. In addition, Gmelch used a factor analysis procedure to group the stressors. Respondents scored each item within these five groupings with either 1 = Never use, 2= Use occasionally, 3 = Use sometimes, 4 = Use frequently, and 5 = Extensively used. As a result, a possible item score range of zero to five was produced, with each yielding the following possible total score ranges per grouping: (1) Reward and Recognition, produced 10 items for a total possible range of 0 to 50; (2) Time Constraints, contained 16 items for a total possible range of 0 to 80; (3) College/ Departmental Influences had 18 items for a total possible range of 0 to 90, (4) Professional Identity produced 6 items for a total possible range of 0 to 30; and (5) Student Interaction contained 4 items for a total possible range of 0 to 20.

In the ten-item Reward and Recognition grouping, respondents participating in this study had a mean score of 18.64, producing a mean item score of 1.86. From the sixteen-item Time Constraints grouping, a mean total of 34.79 was generated to produce a mean item score of 2.17. From the eighteen-item College/Departmental Influences, a mean total of 33.48 produced a mean item of 1.86. The six-item

Professional Identity grouping produced a mean total of 13.03 and a mean item of 2.17 The four-item Student Interaction grouping generated a total mean of 9.48 with a mean item total of 2.37.

Given the sample size of the current research, it was not possible to perform a factor analysis to determine upon which group each stressor (i.e. factor) would load. The stressors, therefore, were placed into five separate groupings of shared relationships patterned after those that surfaced from factor analyses procedures as reported by Gmelch et al. in the 1994 study. Then, each stressor under each grouping was statistically analyzed to calculate its frequency, mean, and standard deviation. Next, the total means for each of the stressors in the five groups were summed, resulting in five separate total mean grouping totals. Next, each mean grouping total was divided by the number of stressors under each grouping to determine the total mean item of each factor grouping.

A summary of thee results is shown in Table 32. Group 1 mirrors Reward and Recognition relating to inadequate rewards, insufficient recognition, securing funding for research, and unclear expectations. Group 2 contains stressors that relate to Time Constraints. Time Constraints emanate from balancing work and family goals, confusion regarding understand the scope of professional responsibilities, and insufficient time to prepare for teaching or for staying up to date in the faculty's current field. Group 3 reflects departmental influences, such as attempts to influence department chair's decisions, resolving differences with chair, understanding how chairs evaluate faculty performance, no personal impact on institutional decision

making, and interactions with departmental colleagues. Group 4 relates to Professional Identity and mirrors excessively high self-expectations, making presentations at professional or faculty meetings, and preparing manuscripts for publication. Group 5 holds the stressors linked to Student Interaction with stressors of evaluation, teaching, and advising students to students evaluating teachers. This information is summarized in Table 32.

Table 32. Stressor Groupings as Developed from Gmelch's 1984 Study from Perceptions by Respondents

Group Item and Description	Mean	SD
Group Item 1: Reward and Recognition		
S50 – Receiving inadequate salary to meet financial needs	2.60	1.39
S37 – Receiving insufficient recognition for teaching performance	2.18	1.22
S26 – Having insufficient reward for institutional services	2.02	1.08
S42 – Lacking congruency in institutional goals	2.02	1.12
S12 – Receiving inadequate college recognition for community services	1.86	.96
S40 – Not having clear criteria for evaluating service activities	1.85	.97
S43– Lacking congruency in departmental goals	1.69	.90
S20 – Securing financial support for my research	1.60	1.09
S51 – Not having clear criteria for evaluation of research and publications activities	1.41	.79
S46 – Receiving insufficient institutional recognition for research performance	1.41	.88
(Sum of Group 1 Means) Total Means =	18.64	
(Total Means ÷ 10) Total Item Mean =	1.86	
Group Item 2: Time Constraints		
S15 – Having insufficient time to keep abreast of current developments in my field	2.84	1.09
S34 – Attending meetings which take up too much time	2.80	1.27
S27 – Having inadequate time for teaching preparation	2.48	1.26
S33 – Feeling that I have too heavy a workload, one that I cannot possibly finish during the normal workday	2.45	1.16

Table 32. (continued)

Group Item and Description	Mean	SD
Group Item 2: Time Constraints (continued)		
S03 – Participating in work-related activities outside regular working hours	2.43	1.08
S02 – Participating in the work of college committees	2.33	1.09
S32 – Having insufficient time for performing the service function	2.10	.86
S18 – Assignment of duties that take me away from my office	2.04	1.00
S01 – Participating in the work of departmental committees	2.00	.89
S53 – Having job demands which interfere with family	1.98	1.09
S52 – Job demands that interfere with personal activities	1.89	.94
S31 – Writing letters/memos, other paper work	1.84	.66
S45 – Insufficient preparation to teach subject matter	1.82	1.05
S21 – Frequently requests for community services	1.61	.75
(Sum of Group 2 Means) Total Means =	34.79	
(Total Means ÷ 16) Total Item Mean =	2.17	
Group 3: College/Departmental Influences		
S35 – Dealing with program changes that impact my job	2.71	1.08
S36 – Dealing with reduced enrollment that impact my job	2.65	1.31
S14 – Resolving differences with fellow faculty members	2.42	1.01
S07 – Having inadequate facilities (office, library, laboratories, classrooms)	2.31	1.26
S54 – Being drawn into conflict between colleagues	2.09	1.27
S06 – Complying with college rules and regulations	2.02	1.13
S47 – Lacking personal impact on institutional decision making	1.98	1.09
S16 – Having insufficient authority to perform my responsibilities	1.98	1.16
S05 – Complying with departmental rules and regulations	1.86	1.02
S48 – Lacking personal impact on departmental decision making	1.83	1.00
S25 – Being unclear as to the scope and responsibilities of my job	1.80	1.11
S38 – Trying to influence my chairperson's actions which affect me	1.78	1.04
S39 – Trying to influence my chairperson's decisions which affect me	1.75	1.06
S49 – Unclear how chair evaluates my performance	1.74	1.12
S41 – Resolving differences with my chairperson	1.70	.98
S29 – Having repetitions in teaching assignments	1.45	.82
S30 – Having repetitions in job assignments	1.41	.71
(Sum of Group 3 Means) Total Means =	33.48	
(Total Means ÷ 18) Total Item Mean =	1.86	

Table 32. (continued)

Group Item and Description	Mean	SD
Factor 4: Professional Identity		
S09 – Making presentations at professional conferences	2.66	1.20
S11 – Imposing excessively high self-expectations	2.46	1.05
S10 – Making presentations at faculty meetings	2.33	1.05
S24 – Preparing a manuscript for publication	2.07	1.29
S17 – Believing that progressing in my career is not what it should or could be	1.96	1.10
S44 – Lacking congruency in personal goals	1.55	.88
(Sum of Group 4 Means) Total Means =	13.03	
(Total Means ÷ 6) Total Item Mean =	2.17	
Factor 5: Student Interaction		
S22 – Teaching inadequately prepared students	3.14	1.14
S13 – Having students evaluate my teaching performance	2.16	1.11
S08 – Evaluating the performance of students	2.12	.90
S23 – Advising students	2.06	.99
(Sum of Group 5 Means) Total Means =	9.48	
(Total Means ÷ 4) Total Item Mean =	2.37	

Note: Each group was linked to shared relationships. Individual means were listed from highest to lowest within each individual grouping.

Stressor Values:
1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

The 10-item Reward and Recognition grouping had a means score of 18.64, producing an total mean score of 1.86. In the 16-item Time Constraints grouping, a means score of 34.79 was generated to produce a means item score of 2.17. From the 18-item College/Departmental Influences grouping, a means total of 33.48, generating and producing a total item means of 1.86. With the 6-item Professional Identity, a

means score of 13.03 was generated and produced a total item means of 2.17. A means total of 9.48 and a total item means score of 2.37 was generated from the 6-item Student Interaction stressor grouping.

One stressor grouping, Student Interaction (9.48) was below the midpoints of the other four groupings. Groupings of Reward and Recognition (18.64) and Professional Identity (13.03) are at the midpoints of Time Constraints (34.79) and College/Department Influences (33.48). Moreover, the total means scores for Time Constraints (34.79) and College/Department Influences (33.48) were almost twice the total means scores of each of the other four groupings. The summary of these groupings is displayed in Table 33.

Table 33. Summary of Total Frequencies, Means, and Standard Deviations for Five Stressor Groupings

Five Stressor Groupings	Frequency	Scoring Range	Mean Score	Mean Item Score	SD
Reward/Recognition	45.6	0-50	18.64	1.86	1.04
Time Constraints	48.3	0-80	34.79	2.17	1.03
College/Dept. Influences	47.5	0-90	33.48	1.86	1.01
Professional Identity	46.8	0-30	13.03	2.17	1.10
Student Interaction	49.0	0-20	9.48	2.37	1.04

Note: Each group was linked to shared relationships. Individual means are listed from highest to lowest within each group.

Stressor Values: 1 = Not Stressful
2 = Somewhat Stressful
3 = Considerably Stressful
4 = Decidedly Stressful
5 = Extremely Stressful

Next, 48 coping strategies evolved from meetings with 10 community college faculty members and dissertation committee members. These coping strategies were arranged by constructs into nine groups with nine coping strategy composites through a content analysis and discussions with three psychology professors. Then, each of these coping strategies was statistically analyzed to determine the frequency, mean, and standard deviation. Every coping strategy mean in each composite was summed, resulting in a separate mean total for each. A summary of the coping strategies were listed earlier in Table 12. The higher the means, the more often the coping strategy was used by the respondents. On a five-point scale, these coping strategy items ranged between 3.75 (*SD=1.14*) to 1.64 (*SD=1.07*). Coping Strategy 28, *prioritizing work*, was the most used coping strategy, while Coping Strategy 21, *listening to audio books*, was the least use of the 48 coping strategies.

Groups I, III, V and IX contain three composites; Group II contains two composites; Groups VIII contains four composites; Groups IV contains fifteen composites. Group I mirrors avoidance issues, such as avoiding problems, buying time to stall an issue, and using home as a refuge. Group II relates to housework chores of cleaning and cooking.

Group III parallels traditionally female coping strategies like dancing, sewing, and taking bubble baths. Group IV relates to changing behavior linked to activities of playing sports to formulating a new goal to implementing time management to planning ahead to prioritizing work. Group V reflects social support of getting advice and support from supervisor and talking to and seeking advice from peers. Group VI

contains active participation involving gardening, walking, and exercising. Group VII echoes passive participation of watching. Group VIII includes leisure pursuits from reading for enjoyment to shopping and traveling to dining out. Group IX relates to introspection activities of listening to music, meditating, and praying. A summary of these results are shown in Table 34.

Table 34. Coping Strategy Groupings and Score Ranges as Developed from the Composite Coping Strategy Factors for Respondents

Coping Strategy Groupings	Mean	SD
Group I – Avoidance		
Composite No. 1 – Evasive Behavior		
CS42 – Using home as a refuge	3.36	1.44
CS03 – Avoiding problems	2.40	1.13
CS04 – Buying time to stall an issue	2.13	1.14
(Sum of Composite No. 1 Means) Mean Total Score =	7.89	
(Means Total Score ÷ 3) Mean Item Score =	2.63	
Group II – Housework Behavior		
Composite No. 2– Housework Behaviors		
CS05 – Cleaning	2.17	1.17
CS06 – Cooking	2.02	1.13
(Sum of Composite No. 2 Means) Mean Total Score =	4.19	
(Means Total Score ÷ 2) Mean Item Score =	2.10	
Group III – Traditionally Female		
Composite No. 3 – Traditional Female Coping		
CS02 – Attending plays	1.94	1.16
CS38 – Taking bubble baths	1.81	1.31
CS35 – Sewing	1.72	1.25
(Sum of Composite 3 Means) Mean Total Score =	5.47	
(Means Total Score ÷ 3) Mean Total Score =	1.82	

Table 34. (continued)

Coping Strategy Groupings	Mean	SD
Group IV – Changing One's Behavior		
Composite No. 4 – Changing Behavior		
CS28 – Prioritizing work	3.75	1.14
CS24 – Planning ahead	3.70	1.10
CS11 – Developing stable relationships	3.70	1.12
CS09 – Dealing with problems immediately	3.63	1.04
CS34 – Separating work from home	3.62	1.07
CS01 – Acknowledging self-limitations	3.38	1.06
CS34 – Separating work from home	3.62	1.07
CS10 – Dealing with problems in an unemotional way	3.00	1.04
CS17 – Implementing time management	3.00	1.14
CS18 – Inventing ways to make work more interesting	2.94	1.08
CS19 – Learning to say "no" gracefully	2.83	1.03
CS15 – Formulating a new goal	2.77	1.17
CS25 – Playing games	2.28	1.17
CS13 – Doing nothing	2.15	1.22
(Sum of Composite No. 4 Means) Mean Total Score =	44.37	
(Means Total Score ÷ 14) Mean Total Score =	3.16	
Group V – Social Support		
Composite No. Five – Using social support		
CS40 – Talking to peer(s) about events	3.19	1.12
CS31 – Seeking advice from supervisor	2.66	.98
CS32 – Seeking support from supervisor	2.66	1.19
(Sum of Composite 3 Means) Mean Total Score =		
(Means Total Score ÷ 3) Mean Item Score =		
Group VI – Active Participation		
Composite No. Six – Active activities		
CS43 – Walking	4.46	1.37
CS48 – Working on hobbies	2.74	1.31
CS16 – Gardening	2.60	1.41
CS26 – Playing sports	2.00	1.20
Sum of Composite 4 Means) Mean Total Score =	11.80	
Mean Total Score ÷ 4) Total Item Score =	2.95	

Table 34. (continued)

Coping Strategy Groupings	Mean	SD
Group VII – Passive Participation		
Composite No. 7 – Passive activities		
CS46 – Watching movies	2.83	1.34
CS47 – Watching sporting events	2.45	1.25
CS44 – Watching the sun set	2.45	1.49
(Sum of Composite No. 7 Means) Mean Total Score =	7.73	
(Means Total Score ÷ 3) Total Item Score =	2.58	
Group VIII – Leisure Pursuits		
Composite No. 8 – Traditional relaxation		
CS30 – Relaxing for short periods	3.40	1.04
CS29 – Reading for enjoyment	3.26	1.51
CS41 – Traveling	3.06	1.15
CS12 – Dining out	2.98	1.33
CS36 – Shopping	2.45	1.35
CS21 – Listening to audio books	1.64	1.07
(Sum of Composite No. 8 Means) Mean Total Score =	16.79	
(Means Total Score ÷ 6) Total Item Score =	2.80	
Group IX – Introspection		
Composite No. 9 – Introspecting Activities		
CS27 – Praying	3.52	1.44
CS22 – Listening to music	3.23	1.22
CS23 – Meditating	2.19	1.33
(Sum of Composite No. 9 Means) Mean Total Score =	8.94	
(Means Total Score ÷ 3) Total Item Score =	2.98	

Note: Each grouping was linked by shared relationships. Individual means were listed from highest to lowest within each group.

Coping Values:
5 = Extensively Use
4 = Use Frequently
3 = Use Sometimes
2 = Use Occasionally
1 = Never Use

In the three-item Avoidance grouping, a mean score of 7.89 generated a mean item score of 2.63. With a two-item Housework Behavior grouping, a mean score of 4.19 produced a 2.10 mean item score. For a three-item Traditionally Female coping strategy grouping, a mean score of 5.47 generated a mean item score of 1.82. A fifteen-item Changing One's Behavior coping strategy grouping produced a mean score of 44.37 and a mean item score of 3.16. In the three-item Social Support coping strategy grouping, a mean score of 8.51 generated a mean item score of 2.84. The four-item Active Participation grouping generated a mean score of 11.80 and a mean item score of 2.95. A mean score of 7.73 and a mean item score of 2.58 were produced from the three-item Passive Participation grouping. With the six-item Leisure Pursuits grouping, a mean score of 16.79 generated a mean item score of 2.80. The three-item Introspective grouping produced a mean score of 8.94 and a mean item score of 2.98. Six of the groupings, Avoidance (7.89), Housework Behavior (4.19), Traditionally Female (5.47), Social Support (8.51), Passive Participation (7.73), and Introspective (8.94) are below the midpoint of the coping strategy grouping, Changing One's Behavior (47.37). Active Participation (11.80) and Leisure Pursuits (16.79) are slightly above the midpoint.

A summary of frequencies, means, and standard deviations for the nine coping strategy groupings are displayed in Table 35.

Table 35. Summary of Frequencies, Means, and Standard Deviations for Nine Coping Strategy Groupings

Nine Coping Strategy Groupings	Frequency	Scoring	Mean Score	Mean Item Score	SD
Avoidance	47.7	0-15	7.89	2.63	1.24
Housework Behavior	47.0	0-10	4.19	2.10	1.15
Traditionally Female	47.3	0-15	5.47	1.82	1.24
Changing One's Behavior	47.3	0-75	44.37	3.16	1.10
Social Support	47.3	0-15	8.51	2.84	1.10
Active Participation	46.8	0-20	11.80	2.95	1.33
Passive Participation	47.0	0-15	7.73	2.58	1.36
Leisure Pursuits	47.0	0-30	16.79	2.80	1.24
Introspective	47.3	0-15	8.94	2.98	1.33

Note: Coping Values: 5 = Extensively Use
4 = Use Frequently
3 = Use Sometimes
2 = Use Occasionally
1 = Never Use

Using the information from the 1984 study by Gmelch et al. (1984), each stressor was grouped; and the mean of each stressor was summed by its respective grouping. The summed grouping information from Tables 33 and 35 was used to compare with independent variables of selected demographic characteristics using t-tests and ANOVAs. The following factors were used in the next 14 tables to check for differences in terms of the factors (stressor and coping strategy groupings) for the independent factors (selected demographic characteristics).

Factor stressor groupings

- Reward and Recognition
- Time Constraints
- College/Departmental Influences
- Professional Identity
- Student Interaction

Coping Strategy Factors

- Avoidance
- Housework Behavior
- Traditionally Female
- Changing One's Behavior
- Social Support
- Active Participation
- Passive Participation
- Leisure Pursuits

Comparisons of the five-stressor groupings and the nine-coping strategy groupings for differences among personal and professional demographic characteristics were made through t-tests for independent samples. Levene's Test for Equality of Variances was used to test for homogeneity of variances. When the probability level for Levene's Test for Equality of Variances was greater than .05, the t-test for assumed equal variance was used. With a probability of less than or equal to .05, Levene's Test

for Equality of Variances was considered to be significant, and equal variances were not assumed. When equal variances were not assumed, an adjusted t-test was used.

An ANOVA was used when there were more than two levels of the independent variable in the groupings. Each comparison of the factor for the independent variable was determined through ANOVA testing. In the event the assumption of equal variances was violated, there was no alternative testing mechanism used as ANOVA was considered to be relatively robust to violations of assumption of equal variances. Statistically significance ANOVAs only point to a significant difference between multiple factor categories, not to specific pairings within the categories. In addition, the association of the levels of each of the independent variable to the factor was judged utilizing Partial Eta Squared. According to Winer, Brown, & Michels, 1991, a small effect size would be between .01 and .05; a medium effect would be between .05 and .08; and a high effect would be between .08 and .10 plus.

Qualitative data was reported for each respondent. To alleviate a concern that all stressors and coping strategies were not identified, a blank area was provided on the survey form for respondents to write in additional open-ended responses for stressors and for coping strategies. Using traditional content analysis techniques, common ideas were placed in groups regarding constructs. ANOVAs and t-tests were used to analyze the data in this section. In addition, the results of these statistical analyses are presented in this section.

Personal Demographic Characteristics

In observing Table 36 pertaining to respondents' personal demographic of gender, it may be seen that the homogeneity of variance was satisfied by observing Levene's Test of Equality of Variances. The t-tests for all 14 factors demonstrated equal variances and were presented as t-values. There are no differences in stress-level scores on any of these groupings among respondents' personal demographic characteristic of gender.

Table 36. t-Test Comparison of Respondents' Stressors and Coping Strategies by Independent Variable—Respondents' Personal Demographic Characteristic of Gender

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Gender	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Stressor Groupings									
Reward and Recognition	Male	16	20.63	7.719	.100	.754	.339	.736	.928
	Female	33	10.70	9.515					
Time Constraints	Male	16	33.00	12.350	.100	.754	.339	.736	1.485
	Female	33	31.52	15.224					
College/Dept. Influences	Male	16	37.13	13.894	.100	.754	.339	.736	1.670
	Female	33	35.45	17.127					
Professional Identity	Male	16	12.38	4.631	.100	.754	.339	.736	.557
	Female	33	11.82	5.709					
Student Interaction	Male	16	8.25	3.088	.100	.754	.339	.736	.371
	Female	33	7.88	3.806					

Table 36. (continued)

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Gender	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Coping Strategy Groupings									
Avoidance	Male	16	9.75	3.000	1.269	.266	-.234	.816	-.250
	Female	33	10.00	3.725					
Housework Behavior	Male	16	6.50	2.000	1.269	.266	-.234	.816	-.167
	Female	33	6.67	2.483					
Traditionally Female	Male	16	13.00	4.000	1.269	.266	-.234	.816	-.333
	Female	33	13.33	4.967					
Changing One's Behavior	Male	16	42.25	13.000	1.269	.266	-.234	.816	-1.083
	Female	33	43.33	16.141					
Social Support	Male	16	12.38	4.631	.100	.754	.339	.736	.557
	Female	33	11.82	5.709					
Active Participation	Male	16	13.00	4.000	1.269	.266	-.234	.816	-.333
	Female	33	13.33	4.967					
Passive Participation	Male	16	13.00	4.000	1.269	.266	-.234	.816	-.333
	Female	33	13.33	4.967					
Leisure Pursuits	Male	16	19.50	6.000	1.269	.266	-.234	.816	-.500
	Female	33	20.00	7.450					
Introspection	Male	16	9.75	3.000	1.269	.266	-.234	.816	-.250
	Female	33	10.00	3.725					

As shown in Table 37, testing the 14 factors in terms of respondents' personal demographic characteristic of marital status are presented. Since the number of single and divorced respondents was small, the two groups were collapsed into one group labeled single. The frequencies, means, and standard deviations for the personal demographic characteristic of marital status are presented in Table 37.

Table 37. Frequencies, Means, and Standard Deviations for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Respondents' Personal Demographic Characteristic of Marital Status

Factor	Marital Status	Frequency	Mean	SD
Stressor Groupings				
Reward and Recognition	Single	5	24.00	5.477
	Married	44	19.55	9.138
Time Constraints	Single	5	38.40	8.764
	Married	44	31.27	14.621
College/Dept. Influences	Single	5	43.20	9.859
	Married Male	44	35.18	16.449
Professional Identity	Single	5	14.40	3.286
	Married Female	44	11.73	5.483
Student Interaction	Single	5	9.60	2.191
	Married Male	44	7.82	3.655
Coping Strategy Groupings				
Avoidance	Single	5	10.20	1.643
	Married	44	9.89	3.636
Housework Behavior	Single	5	6.80	1.095
	Married	44	6.59	2.424
Traditionally Female	Single	5	13.60	2.191
	Married	44	13.18	4.848

Table 37. (continued)

Factor	Marital Status	Frequency	Mean	SD
Coping Strategy Groupings (continued)				
Changing One's Behavior	Single	5	44.20	7.120
	Married	44	42.84	15.755
Social Support	Single	5	14.40	3.286
	Married	44	11.73	5.483
Active Participation	Single	5	13.60	2.191
	Married	44	13.18	4.848
Passive Participation	Single	5	13.60	2.191
	Married	44	13.18	4.848
Leisure Pursuits	Single	5	20.40	3.286
	Married	44	19.77	7.272

In observing Levene's Test of Equality of Error Variances for the personal demographic characteristic of marital status, the homogeneity of variances was satisfied as displayed in Table 38.

Table 38. Levene's Test of Equality of Error Variances for Respondents' Personal Demographic Characteristic of Marital Status

Factor	F	df1	df2	Sig.
Stressor Groupings				
Time Constraints	.356	1	47	.554
College/Dept. Influences	.356	1	47	.554
Professional Identity	.356	1	47	.554
Student Interaction	.356	1	47	.554

Table 38. (continued)

Factor	F	df1	df2	Sig.
Coping Strategy Groupings				
Avoidance	2.749	1	47	.104
Housework Behavior	2.749	1	47	.104
Traditionally Female	2.749	1	47	.104
Changing One's Behavior	2.749	1	47	.104
Social Support	.356	1	47	.554
Active Participation	2.749	1	47	.104
Passive Participation	2.749	1	47	.104
Leisure Pursuits	2.749	1	47	.104
Introspection	2.749	1	47	.104

Through the ANOVA comparison of the 14 dependent variables that are depicted in Table 39, there was no difference in stress-level scores on any of these groupings among married and single respondents. As shown in Table 38, the 14 dependent variables in terms of respondents' personal demographic characteristic of marital status are presented. However, according to Winer et al. (1991), a small effect size would be between .01 and .05; a medium effect would be between .05 and .08; and a large effect would be between .08 and .10.

Even though the F-values were not significant, the Partial Eta Squared's effect indicates a small relationship between marital status and the factor stressor groupings of Reward and Recognition, Time Constraints, College/Department Influences, Professional Identity, and Student Interaction. If respondents are affected negatively

by these stressor groupings, the respondents may use a factor coping grouping of Social Support to relieve this small stress effect.

Table 39. ANOVA Summary for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Respondents' Personal Demographic Characteristic of Marital Status

Factor	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Stressor Groupings						
Reward and Recognition	89.091	1	89.09	1.128	.294	.023*
Time Constraints	228.073	1	228.073	1.128	.294	.023*
College/Dept. Influences	288.655	1	288.655	1.128	.294	.023*
Professional Identity	32.073	1	32.073	1.128	.294	.023*
Student Interaction	14.255	1	14.255	1.128	.294	.023*
Coping Strategy Groupings						
Avoidance	.442	1	.442	.036	.851	.001
Housework Behavior	.196	1	.196	.036	.851	.001
Traditionally Female	.785	1	.785	.036	.851	.001
Changing One's Behavior	8.293	1	8.293	.036	.851	.001
Social Support	32.073	1	32.073	1.128	.294	.023*
Active Participation	.785	1	.785	.036	.851	.001
Passive Participation	.785	1	.785	.036	.851	.001
Leisure Pursuits	1.767	1	1.767	.036	.851	.001
Introspection	.442	1	.442	.036	.851	.001

Note: The asterisks denote the stressor groupings that have a small effect on respondents' stress, while the asterisk in the factor coping strategy grouping of Social Support indicates that the respondents have rated this factor as having a small possibility of being used to relieve these stressors as observed from analyzing the Partial Eta Square Table.

In observing Table 40 pertaining to respondents' personal demographic characteristic of marital status, it may be seen that the homogeneity of variance was satisfied by observing Levene's Test of Equality of Variances. The t-tests for all 14 factors were presented as unadjusted t-values. There are no differences in stress-level scores on any of these groupings among respondents who have children living at home. However, respondents who have children living at home indicated a very small likelihood that they might use Social Support more than any other Coping Strategy Grouping. Even though the small number of community college faculty members responding to the survey was disproportionately small, the homogeneity of variances was satisfied as shown in Table 40.

Table 40. t-Test Comparison of Respondents' Stressors and Coping Strategies by Independent Variable—Personal Demographic Characteristic of Respondents Who Have Dependent Children Living at Home

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Child	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Stressor Groupings									
Reward and Recognition	Yes	43	22.86	9.95	.078	.781	1.339	.187	3.739
	No	14	19.12	8.30					
Time Constraints	Yes	14	36.57	15.91	.078	.781	1.339	.187	5.983
	No	34	30.59	13.28					
College/Dept. Influences	Yes	14	41.14	17.90	.078	.781	1.339	.187	6.731
	No	34	34.41	14.94					
Professional Identity	Yes	14	13.71	5.97	.078	.781	1.339	.187	2.244
	No	34	11.47	4.98					
Student Interaction	Yes	14	9.14	3.98	.078	.781	1.339	.187	1.496
	No	34	7.65	3.32					

Table 40. (continued)

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Child	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Coping Strategy Groupings									
Avoidance	Yes	14	9.00	4.40	2.55	.117	-1.054	.297	-1.147
	No	34	10.50	2.96					
Housework Behavior	Yes	14	6.00	2.94	2.55	.117	-1.054	.297	-.765
	No	34	6.76	1.97					
Traditionally Female	Yes	14	12.00	5.87	2.55	.117	-1.054	.297	-1.529
	No	34	13.53	3.94					
Changing One's Behavior	Yes	14	39.00	19.08	2.55	.117	-1.054	.297	-4.971
	No	34	43.97	12.81					
Social Support	Yes	14	13.71	5.97	.078	.781	1.339	.187	2.244
	No	34	11.47	4.98					
Active Participation	Yes	14	12.00	5.87	2.55	.117	-1.054	.297	-1.529
	No	34	13.53	3.94					
Passive Participation	Yes	14	12.00	5.87	2.55	.117	-1.054	.297	-1.529
	No	34	13.53	3.94					
Leisure Pursuits	Yes	14	18.00	8.81	2.55	.117	-1.054	.297	-2.294
	No	34	20.29	5.91					
Introspection	Yes	14	9.00	4.40	2.55	.117	-1.054	.297	-1.147
	No	34	10.15	2.96					

As shown in Table 41 the testing of the 14 factors by the respondents' personal demographic characteristic of age was presented. Through a comparison of the 14 factors that are depicted in Table 41, there was no difference in stress-level scores on any of these groupings among the respondents' age categories of 20 to 35, 36 to 55, and 56 to 75.

Table 41. Frequencies, Means, and Standard Deviations for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Respondents' Personal Demographic Characteristic of Age

Factor	Age Group	Frequency	Mean	SD
Stressor Groupings				
Reward and Recognition	20-35	6	21.67	7.528
	36-55	23	20.00	9.045
	56-75	20	19.50	9.445
Time Constraints	20-35	6	34.67	12.044
	36-55	23	32.00	14.473
	56-75	20	31.20	15.112
College/Dept. Influences	20-35	6	39.00	13.550
	36-55	23	36.00	16.282
	56-75	20	35.10	17.001
Professional Identity	20-35	6	13.00	4.517
	36-55	23	12.00	5.427
	56-75	20	11.70	5.667
Professional Identity	20-35	6	13.00	4.517
	36-55	23	12.00	5.427
	56-75	20	11.70	5.667

Table 41. (continued)

Factor	Age Group	Frequency	Mean	SD
Coping Strategy Groupings				
Avoidance	20-35	6	9.50	5.167
	36-55	23	10.04	3.337
	56-75	20	9.90	3.243
	56-75	20	6.60	2.162
Traditionally Female	20-35	6	12.67	6.890
	36-55	23	13.39	4.449
	56-75	20	13.20	4.324
Changing One's Behavior	20-35	6	41.17	22.391
	36-55	23	43.52	14.460
	56-75	20	42.90	14.052
Social Support	20-35	6	13.00	4.517
	36-55	23	12.00	5.427
	56-75	20	11.70	5.667
Active Participation	20-35	6	12.67	6.890
	36-55	23	13.39	4.449
	56-75	20	13.20	4.324
Passive Participation	20-35	6	12.67	6.890
	36-55	23	13.39	4.449
	56-75	20	13.20	4.324
Leisure Pursuits	20-35	6	19.00	10.334
	36-55	23	20.09	6.674
	56-75	20	19.80	6.486
Introspection	20-35	6	9.50	5.167
	36-55	23	10.04	3.337
	56-75	20	9.90	3.243

In observing Levene's Test of Equality of Error Variances for personal demographic characteristic of age, the homogeneity of variances was satisfied as seen in Table 42.

Table 42. Levene's Test of Equality of Error Variances for Respondents' Personal Demographic Characteristic of Age

Factor	F	df1	df2	Sig.
Stressor Groupings				
Reward and Recognition	.811	2	46	.451
Time Constraints	.811	2	46	.451
College/Dept. Influences	.811	2	46	.451
Professional Identity	.811	2	46	.451
Student Interaction	.811	2	46	.451
Coping Strategy Groupings				
Avoidance	.421	2	46	.659
Housework Behavior	.421	2	46	.659
Traditionally Female	.421	2	46	.659
Changing One's Behavior	.421	2	46	.659
Social Support	.811	2	46	.451
Active Participation	.421	2	46	.659
Passive Participation	.421	2	46	.659
Leisure Pursuits	.421	2	46	.659
Introspection	.421	2	46	.659

In Table 43, the relationship between age and the stressor groupings of Reward and Recognition, Time Constraints, College/Department Influences, Professional Identity, and Student Interaction was very small. Even though the F-value does not indicate significance, according to Winer et al. (1991), a small effect size would be between .01 and .05 in a Partial Eta Squared Table. The factor stressor groupings appear to have a very small effect on respondents' stress, while the factor coping strategy groupings indicate that the respondents have rated this coping strategy as having a small possibility of being used to relieve their stressors, as determined by an analysis of the Partial Eta Square Table. These stressor groupings are linked to factor stressor groupings of Reward and Recognition, Time Constraints, College/Department Influences, Professional Identity, Student Interaction, and Social Support. It may be possible that if respondents with the person characteristic of age are affected in a negative manner by these factor stressor groupings, these respondents indicated that they might relieve these stressors through the use of a factor coping strategy grouping based on Social Support more than any of the other coping strategy groupings.

Table 43. ANOVA Summary for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Personal Demographic Characteristic of Age

Factor	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Stressor Groupings						
Reward and Recognition	21.667	2	10.833	.132	.877	.006
Time Constraints	55.467	2	27.733	.132	.877	.006
College/Dept. Influences	70.200	2	35.100	.132	.877	.006
Professional Identity	7.800	2	3.900	.132	.877	.006
Student Interaction	3.467	2	1.733	.132	.877	.006
Coping Strategy Groupings						
Avoidance	1.417	2	.708	.056	.945	.002
Housework Behavior	.630	2	.315	.056	.945	.002
Traditionally Female	2.519	2	1.260	.056	.945	.002
Changing One's Behavior	26.607	2	13.304	.056	.945	.002
Social Support	7.800	2	3.900	.132	.877	.006
Active Participation	2.519	2	1.260	.056	.945	.002
Passive Participation	2.519	2	1.260	.056	.945	.002
Leisure Pursuits	5.668	2	2.834	.056	.945	.002
Introspection	1.417	2	.708	.056	.945	.002

As shown in Table 44, the testing of the 14 factors by the respondents' personal demographic characteristic of health for the last six months was presented. Through a comparison of the 14 factors that are shown in Table 44, there was no difference in stress-level scores on any of these groupings among the six health categories reported for respondents' health for the last six months prior to this survey.

Table 44. Frequencies, Means, and Standard Deviations for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Personal Demographic Characteristic of Health for Last Six Months

Factor	Health for Last 6 Months	Frequency	Mean	SD
Stressor Groupings				
Reward and Recognition	Very Bad	1	10.00	
	Bad	1	30.00	
	Neither Good or Bad	4	20.00	14.142
	Fair	7	21.43	14.639
	Good	22	19.55	7.222
	Very Good	14	20.00	6.794
Time Constraints	Very Bad	1	16.00	
	Bad	1	48.00	
	Neither Good or Bad	4	32.00	22.627
	Fair	7	34.29	23.422
	Good	22	31.27	11.556
	Very Good	14	32.00	10.870
College/Dept. Influences	Very Bad	1	18.00	
	Bad	1	54.00	
	Neither Good or Bad	4	36.00	25.456
	Fair	7	38.57	26.349
	Good	22	35.18	13.000
	Very Good	14	36.00	12.229
Professional Identity	Very Bad	1	6.00	
	Bad	1	18.00	
	Neither Good or Bad	4	12.00	8.485
	Fair	7	12.86	8.783
	Good	22	11.73	4.333
	Very Good	14	12.00	4.076
Student Interaction	Very Bad	1	4.00	
	Bad	1	12.00	
	Neither Good or Bad	4	8.00	5.657
	Fair	7	8.57	5.855
	Good	22	7.82	2.889
	Very Good	14	8.00	2.717

Table 44. (continued)

Factor	Health for Last 6 Months	Frequency	Mean	SD
Coping Strategy Groupings				
Avoidance	Very Bad	1	9.00	
	Bad	1	12.00	
	Neither Good or Bad	4	12.00	4.243
	Fair	7	10.29	1.604
	Good	22	9.82	3.724
	Very Good	14	9.21	3.806
Housework Behavior	Very Bad	1	6.00	
	Bad	1	8.00	
	Neither Good or Bad	4	8.00	2.828
	Fair	7	6.86	1.069
	Good	22	6.55	2.483
	Very Good	14	6.14	2.538
Traditionally Female	Very Bad	1	12.00	
	Bad	1	16.00	
	Neither Good or Bad	4	16.00	5.657
	Fair	7	13.71	2.138
	Good	22	13.09	4.966
	Very Good	14	12.29	5.075
Changing One's Behavior	Very Bad	1	39.00	
	Bad	1	52.00	
	Neither Good or Bad	4	52.00	18.385
	Fair	7	44.57	6.949
	Good	22	42.55	16.138
	Very Good	14	39.93	16.495
Social Support	Very Bad	1	6.00	
	Bad	1	18.00	
	Neither Good or Bad	4	12.00	8.485
	Fair	7	12.86	8.783
	Good	22	11.73	4.333
	Very Good	14	12.00	4.076
Active Participation	Very Bad	1	12.00	
	Bad	1	16.00	
	Neither Good or Bad	4	16.00	5.657
	Fair	7	13.71	2.138
	Good	22	13.09	4.966
	Very Good	14	12.29	5.075

Table 44. (continued)

Factor	Health for Last 6 Months	n	Mean	SD
Coping Strategy Grouping (continued)				
Passive Participation	Very Bad	1	12.00	
	Bad	1	16.00	
	Neither Good or Bad	4	16.00	5.657
	Fair	7	13.71	2.138
	Good	22	13.09	4.966
	Very Good	14	12.29	5.075
Leisure Pursuits	Very Bad	1	18.00	
	Bad	1	24.00	
	Neither Good or Bad	4	24.00	8.485
	Fair	7	20.57	3.207
	Good	22	19.64	7.449
	Very Good	14	18.43	7.613
Introspection	Very Bad	1	9.00	
	Bad	1	12.00	
	Neither Good or Bad	4	12.00	4.243
	Fair	7	10.29	1.604
	Good	22	9.82	3.724
	Very Good	14	9.21	3.806

In observing Levene's Test of Equality of Error Variances of the respondents' personal demographic characteristic of health for 6 months prior to this study, the homogeneity of variances is satisfied as seen in Table 45.

Table 45. Levene's Test of Equality of Error Variances for Respondents' Personal Demographic Characteristic of Health for Last Six Months

Factor	F	df1	df2	Sig.
Stressor Groupings				
Reward and Recognition	1.896	5	43	.115
Time Constraints	1.896	5	43	.115
College/Dept. Influences	1.896	5	43	.115
Professional Identity	1.896	5	43	.115
Student Interaction	1.896	5	43	.115
Coping Strategy Groupings				
Avoidance	1.378	5	43	.252
Housework Behavior	1.378	5	43	.252
Traditionally Female	1.378	5	43	.252
Changing One's Behavior	1.378	5	43	.252
Social Support	1.896	5	43	.115
Active Participation	1.378	5	43	.252
Passive Participation	1.378	5	43	.252
Leisure Pursuits	1.378	5	43	.252
Introspection	1.378	5	43	.252

In Table 46, the F-values do not indicate significance; however, the Partial Eta Squared does indicate a small relationship between health for the last six month and the Stressor Groupings of Reward and Recognition, Time Constraints, College/ Department Influences, Professional Identity, and Student Interaction. If respondents who have been experiencing health problems for the last six months are affected by these stressor groups, the respondents indicated a small likelihood of using Social Support to relieve this small effect of stress.

Table 46. ANOVA Summary for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Respondents' Personal Demographic Characteristic of Health for Last Six Months

Factor	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Stressor Groupings						
Reward and Recognition	21.667	2	10.833	.132	.877	.006*
Time Constraints	55.467	2	27.733	.132	.877	.006*
College/Dept. Influences	70.200	2	35.100	.132	.877	.006*
Professional Identity	7.800	2	3.900	.132	.877	.006*
Student Interaction	3.467	2	1.733	.132	.877	.006*
Coping Strategy Groupings						
Avoidance	1.417	2	.708	.056	.945	.002
Housework Behavior	.630	2	.315	.056	.945	.002
Traditionally Female	2.519	2	1.260	.056	.945	.002
Changing One's Behavior	26.607	2	13.304	.056	.945	.002
Social Support	7.800	2	3.900	.132	.877	.006*
Active Participation	2.519	2	1.260	.056	.945	.002
Passive Participation	2.519	2	1.260	.056	.945	.002
Leisure Pursuits	5.668	2	2.834	.056	.945	.002
Introspection	1.417	2	.708	.056	.945	.002

Note: The asterisks denote those factor stressor groupings that have a small effect on respondents' stress, while the asterisks in the factor coping strategy groupings indicate that the respondents have rated these as having a small possibility of being used to relieve their stressors according to the Partial Eta Squared Table.

As shown in Table 47, the analysis of the 14 factors by the respondents' personal demographic characteristic of health at the beginning of their teaching career in the community college is presented. Through a comparison of the 14 factors that are depicted in Table 47, there was no difference in stress-level scores on any of these

groupings among the four categories for respondents' report on their health at the beginning of their career. A summary of those results is presented in Tables 47.

Table 47. Frequencies, Means, and Standard Deviations for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Personal Demographic Characteristic of Respondents' Health at the Beginning of Their Teaching Career

Factor	Health at Beginning of Teaching Experience	Frequency	Mean	SD
Stressor Groupings				
Reward and Recognition	Very Much Worse	2	35.00	7.071
	Worse	12	22.50	12.154
	The Same	32	17.81	6.591
	Better	3	23.33	5.774
Time Constraints	Very Much Worse	2	56.00	11.314
	Worse	12	36.00	19.447
	The Same	32	28.50	10.546
	Better	3	37.33	9.238
College/Dept. Influences	Very Much Worse	2	63.00	12.728
	Worse	12	40.50	21.878
	The Same	32	32.06	11.865
	Better	3	42.00	10.392
Professional Identity	Very Much Worse	2	21.00	4.243
	Worse	12	13.50	7.293
	The Same	32	10.69	3.955
	Better	3	14.00	3.464
Student Interaction	Very Much Worse	2	14.00	2.828
	Worse	12	9.00	4.862
	The Same	32	7.13	2.637
	Better	3	9.33	2.309

Table 47. (continued)

Factor	Health at Beginning of Teaching Experience	Frequency	Mean	SD
Coping Strategy Groupings				
Avoidance	Very Much Worse	2	12.00	4.243
	Worse	12	11.00	2.954
	The Same	32	9.47	3.663
	Better	3	9.00	3.000
Housework Behavior	Very Much Worse	2	8.00	2.828
	Worse	12	7.33	1.969
	The Same	32	6.31	2.442
	Better	3	6.00	2.000
Changing One's Behavior	Very Much Worse	2	52.00	18.385
	Worse	12	47.67	12.802
	The Same	32	41.03	15.873
	Better	3	39.00	13.000
Traditionally Female	Very Much Worse	2	16.00	5.657
	Worse	12	14.67	3.939
	The Same	32	12.62	4.884
	Better	3	12.00	4.000
Social Support	Very Much Worse	2	21.00	4.243
	Worse	12	13.50	7.293
	The Same	32	10.69	3.955
	Better	3	14.00	3.464
Active Participation	Very Much Worse	2	16.00	5.657
	Worse	12	14.67	3.939
	The Same	32	12.62	4.884
	Better	3	12.00	4.000
Leisure Pursuits	Very Much Worse	2	24.00	8.485
	Worse	12	22.00	5.908
	The Same	32	18.94	7.326
	Better	3	18.00	6.000
Introspection	Very Much Worse	2	12.00	4.243
	Worse	12	11.00	2.954
	The Same	32	9.47	3.663
	Better	3	9.00	3.000

In observing Levene's Test of Equality of Error Variances of respondents' personal demographic characteristic of health at the beginning of their teaching career, the homogeneity of variances was satisfied as seen in Table 48.

Table 48. Levene's Test of Equality of Error Variances for Personal Demographic Characteristic of Health for Last Six Months

Factor	F	df1	df2	Sig.
Stressor Groupings				
Reward and Recognition	2.683	3	45	.058
Time Constraints	2.683	3	45	.058
College/Dept. Influences	2.683	3	45	.058
Professional Identity	2.683	3	45	.058
Student Interaction	2.683	3	45	.058
Coping Strategy Groupings				
Avoidance	.262	3	45	.853
Housework Behavior	.262	3	45	.853
Traditionally Female	.262	3	45	.853
Changing One's Behavior	.262	3	45	.853
Social Support	2.683	3	45	.058
Active Participation	.262	3	45	.853
Passive Participation	.262	3	45	.853
Leisure Pursuits	.262	3	45	.853
Introspection	.262	3	45	.853

The results associated with the different factors of stressors and coping strategies indicated that there was a significant difference in the means for individuals possessing different levels of health when they began their teaching career. However, as observed in Table 49, there was a large effect size for respondents' health at the beginning of their

teaching careers as observed in the AVOVA summary table under Partial Eta Squared effects.

According to Winer et al. (1991), a small effect size would be between .01 and .05; a medium effect would be between .05 and .08; and a large effect would be between .08 and .10. The factor stressor groupings, therefore, would be judged to be large. If respondents are affected negatively by these stressor groupings, the respondents may use a factor coping grouping of Social Support to relieve this small stress effect. A summary of those results is presented in Table 49.

Table 49. ANOVA Summary for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Respondents' Personal Demographic Characteristic of Health at the Beginning of Their Teaching Career

Factor	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Stressor Groupings						
Reward and Recognition	711.458	3	237.153	3.455	.024*	.187*
Time Constraints	1821.333	3	607.111	3.455	.024*	.187*
College/Dept. Influences	2305.125	3	768.375	3.455	.024*	.187*
Professional Identity	256.125	3	85.375	3.455	.024*	.187*
Student Interaction	113.833	3	37.944	3.455	.024*	.187*

Table 49. (continued)

Factor	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Coping Strategy Groupings						
Avoidance	31.705	3	10.568	.868	.465	.055
Housework Behavior	14.091	3	4.697	.868	.465	.055
Traditionally Female	56.364	3	18.788	.868	.465	.055
Changing One's Behavior	595.344	3	198.448	.868	.465	.055
Social Support	256.125	3	85.375	3.455	.024*	.187*
Active Participation	56.364	3	18.788	.868	.465	.055
Passive Participation	56.364	3	18.788	.868	.465	.055
Leisure Pursuits	126.819	3	42.273	.868	.465	.055
Introspection	31.705	3	10.568	.868	.465	.055

Note: The asterisks denote those factor stressor groupings that have a large effect on respondents' stressors, while the asterisk in the factor coping strategy grouping of Social Support indicate that the respondents have rated this coping strategy as having a high possibility of being used to relieve their stressors as determined by an analysis of the Partial Eta Square Table.

In observing Table 50 and analyzing the data of the respondents' professional demographic of holding a second job, it may be seen that the homogeneity of variance was satisfied by observing Levene's Test of Equality of Variances. The t-tests for all 14 factors are presented as unadjusted t-values.

Table 50. t-Test Comparison of Respondents' Stressors and Coping Strategies by Independent Variable—Respondents' Personal Demographic Characteristic of Choosing Teaching as a Career Again

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Teach Again	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Stressor Groupings									
Reward and Recognition	Yes	43	20.23	9.126	.094	.760	.486	.629	1.899
	No	6	18.33	7.528					
Time Constraints	Yes	43	32.37	14.601	.094	.760	.486	.629	3.039
	No	6	29.33	12.044					
College/Dept. Influences	Yes	43	36.42	16.426	.094	.760	.486	.629	3.419
	No	6	33.00	13.550					
Professional Identity	Yes	43	12.14	5.475	.094	.760	.486	.629	1.140
	No	6	11.00	4.517					
Student Interaction	Yes	43	8.09	3.650	.094	.760	.486	.629	.760
	No	6	7.33	3.011					
Coping Strategy Groupings									
Avoidance	Yes	43	9.84	3.545	.158	.693	-.434	.666	-.663
	No	6	10.50	3.146					
Housework Behavior	Yes	43	6.56	2.363	.158	.693	-.434	.666	-.422
	No	6	7.00	2.098					
Traditionally Female	Yes	43	13.12	4.727	.158	.693	-.434	.666	-.884
	No	6	14.00	4.195					
Social Support	Yes	43	12.14	5.475	.094	.760	.486	.629	1.140
	No	6	11.00	4.517					
Active Participation	Yes	43	13.12	4.727	.158	.693	-.434	.666	-.884
	No	6	14.00	4.195					

Table 50. (continued)

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Teach Again	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif
Coping Strategy Groupings (continued)									
Passive Participation	Yes	43	13.12	4.727	.158	.693	-.434	.666	-.884
	No	6	14.00	4.195					
Leisure Pursuits	Yes	43	19.67	7.090	.158	.693	-.434	.666	-1.326
	No	6	21.00	6.293					
Introspection	Yes	43	9.84	3.545	.158	.693	-.434	.666	-.663
	No	6	10.50	3.146					

Professional Demographic Characteristics

The second part of demographic characteristics, the professional demographic characteristics of the respondents, addressed such comparisons as years of teaching at a community college, working on additional degrees or additional certifications, professional rank, and employment status. The independent variable that pertained to professional demographic characters was compared to 14 factors of stressors and coping strategy groupings as identified earlier. As shown in Table 51, the testing of the 14 factors by the respondents' professional demographic characteristic pertaining to years of experience in teaching business subjects in a community college was presented. This was subjected to analysis of variance, and a summary of those results were presented in

Table 51. Through a comparison of the 14 factors that are depicted in Table 51, there was no difference in stress-level scores on any of these groupings among the respondents' professional demographic characteristic pertaining to years of experience in teaching business subjects.

Table 51. Frequencies, Means, and Standard Deviations for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Professional Demographic Characteristic of Years of Experience in Teaching Business Subjects in a Community College

Factor	Years of Teaching	Frequency	Mean	SD
Stressor Groupings				
Reward and Recognition	1 – 10	14	22.14	10.509
	11 – 20	13	16.15	6.504
	21 – 25	12	21.67	8.348
	26 – 30	10	20.00	9.428
Time Constraints	1 – 10	14	35.43	16.814
	11 – 20	13	25.85	10.407
	21 – 25	12	34.67	13.358
	26 – 30	10	32.00	15.085
College/Dept. Influences	1 – 10	14	39.86	18.916
	11 – 20	13	29.08	11.708
	21 – 25	12	39.00	15.027
	26 – 30	10	36.00	16.971
Professional Identity	1 – 10	14	13.29	6.305
	11 – 20	13	9.69	3.903
	21 – 25	12	13.00	5.009
	26 – 30	10	12.00	5.657
Student Interaction	1 – 10	14	8.86	4.204
	11 – 20	13	6.46	2.602
	21 – 25	12	8.67	3.339
	26 – 30	10	8.00	3.771

Table 51. (continued)

Factor	Years of Teaching	Frequency	Mean	SD
Coping Strategy Groupings				
Avoidance	1 – 10	14	9.00	3.328
	11 – 20	13	10.38	3.380
	21 – 25	12	10.25	4.137
	26 – 30	10	10.20	3.225
Housework Behavior	1 – 10	14	6.00	2.219
	11 – 20	13	6.92	2.253
	21 – 25	12	6.83	2.758
	26 – 30	10	6.80	2.150
Traditionally Female	1 – 10	14	12.00	4.438
	11 – 20	13	13.85	4.506
	21 – 25	12	13.67	5.516
	26 – 30	10	13.60	4.300
Changing One's Behavior	1 – 10	14	39.00	14.422
	11 – 20	13	45.00	14.646
	21 – 25	12	44.42	17.926
	26 – 30	10	44.20	13.975
Social Support	1 – 10	14	13.29	6.305
	11 – 20	13	9.69	3.903
	21 – 25	12	13.00	5.009
	26 – 30	10	12.00	5.657
Active Participation	1 – 10	14	12.00	4.438
	11 – 20	13	13.85	4.506
	21 – 25	12	13.67	5.516
	26 – 30	10	13.60	4.300
Passive Participation	1 – 10	14	12.00	4.438
	11 – 20	13	13.85	4.506
	21 – 25	12	13.67	5.516
	26 – 30	10	13.60	4.300
Leisure Pursuits	1 – 10	14	18.00	6.656
	11 – 20	13	20.77	6.760
	21 – 25	12	20.50	8.274
	26 – 30	10	20.40	6.450
Introspection	1 – 10	14	9.00	3.328
	11 – 20	13	10.38	3.380
	21 – 25	12	10.25	4.137
	26 – 30	10	10.20	3.225

In observing Levene's Test of Equality of Error Variances, the homogeneity of variances for the respondents' professional characteristic of years of experience in teaching business subject in a community college was satisfied as seen in Table 52.

Table 52. Levene's Test of Equality of Error Variances for Professional Demographic Characteristic of Years of Experience in Teaching Business Subjects in a Community College

Factor	F	df1	df2	Sig.
Stressor Groupings				
Reward and Recognition	.253	3	45	.858
Time Constraints	.253	3	45	.858
College/Dept. Influences	.253	3	45	.858
Professional Identity	.253	3	45	.858
Student Interaction	.253	3	45	.858
Avoidance	.126	3	45	.944
Coping Strategy Groupings				
Housework Behavior	.126	3	45	.944
Traditionally Female	.126	3	45	.944
Changing One's Behavior	.126	3	45	.944
Social Support	.253	3	45	.858
Active Participation	.126	3	45	.944
Passive Participation	.126	3	45	.944
Leisure Pursuits	.126	3	45	.944

In Table 53, the relationship between age and the Stressor Groupings of Reward and Recognition, Time Constraints, College/Department Influences, Professional Identity, and Student Interaction revealed a medium effect. Even though the F-values were not significant, the Partial Eta Squares indicate a medium to large effect. According to Winer et al. (1991), a medium effect size would be between .05 and .08. The factors that have a medium effect size, as determined by an analysis of the Partial Eta Squared Table, are the factor stressor groupings of Reward and Recognition, Time Constraints, College/ Department Influences, Professional Identity, and Student Interaction. It could be that if these factor stressor groupings affect respondents with professional characteristic of years of experience in teaching business subjects in a negative manner these experienced faculty members may relieve their stresses through the use of a coping strategy grouping based on Social Support, rated as a medium possibility, more one of the other coping strategy, which were rated as a low possibility. A summary of these results is shown in Table 53.

Table 53. ANOVA Summary for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Respondents' Professional Demographic Characteristic of Years of Experience in Teaching Business Subjects in a Community College

Factor	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Stressor Groupings						
Reward and Recognition	289.927	3	96.642	1.239	.307	.076*
Time Constraints	742.212	3	247.404	1.239	.307	.076*
College/Dept. Influences	939.363	3	313.121	1.239	.307	.076*
Professional Identity	104.374	3	34.791	1.239	.307	.076*
Student Interaction	46.388	3	15.463	1.239	.307	.076*
Coping Strategy Groupings						
Avoidance	16.747	3	5.582	.446	.721	.029*
Housework Behavior	7.443	3	2.481	.446	.721	.029*
Traditionally Female	29.772	3	9.924	.446	.721	.029*
Changing One's Behavior	314.463	3	104.821	.446	.721	.029*
Social Support	104.374	3	34.791	1.239	.307	.076*
Active Participation	29.772	3	9.924	.446	.721	.029*
Passive Participation	29.772	3	9.924	.446	.721	.029*
Leisure Pursuits	66.986	3	22.329	.446	.721	.029*
Introspection	16.747	3	5.582	.446	.721	.029*

Note: The asterisks denote those factor stressor groupings that have a low to medium effect on respondents' stress, while the asterisk in the factor coping strategy grouping indicated that the respondents have rated these factor coping strategy groupings as having a low to medium possibility of being used to relieve their stressor according to the Partial Eta Squared Table.

For each of the factors, the mean difference between individuals working on an additional degree and those who were not was tested on significances utilizing a two-group independent t-test. A summary of the results of those analyses is presented in

Table 54. In observing Table 54, it may be ascertained that differences were obtained for factor stressor groupings, Reward and Recognition, Time Constraints, College/ Departmental Influences, Professional Identity, Student Interaction, Avoidance, and Social Support, with an asterisk. The results of the findings from the Levene's Test for Equality of Variance are summarized as F-values, along with t-tests for Equality of Means, in Table 54. It appears that respondents who are working on an additional degree experience factor stressor groupings of Reward and Recognition, Time Constraints, College/Departmental Influences, Professional Identity, and Student Interaction use factor coping strategy grouping of Social Support to relieve their stressors.

In observing Table 54 and analyzing the date of the respondents' professional demographic characteristic of working on an additional degree, it may be seen that the homogeneity of variance was not satisfied as shown in Levene's Test of Equality of Variances. The t-tests for all 14 factors are presented as adjusted t-values. A summary of these results are presented in Table 54.

Table 54. t-Test Comparison of Respondents' Stressors and Coping Strategies for Respondents Who Are Working on an Additional Degree

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Work on Add. Degree	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Stressor Groupings									
Reward and Recognition	Yes	4	27.50	17.08	5.476	.024*	1.80	.078	8.17
	No	45	19.93	7.80					
Time Constraints	Yes	4	44.00	27.33	5.476	.024*	1.80	.078	13.07
	No	45	30.93	12.49			.		
College/Dept. Influences	Yes	4	49.50	30.74	5.476	.024*	1.80	.078	14.70
	No	45	34.80	14.05					
Coping Strategy Groupings									
Avoidance	Yes	4	9.75	2.87	.339	.563	-.100	.921	-.18
	No	45	9.93	3.55					
Housework Behavior	Yes	4	6.50	1.92	.339	.563	-.100	.921	-.12
	No	45	6.62	2.37					
Traditionally Female	Yes	4	13.00	3.83	.339	.563	-.100	.921	-.24
	No	45	13.24	4.74					
Changing One's Behavior	Yes	4	42.25	12.45	.339	.563	-.100	.921	-.79
	No	45	43.04	15.39					
Social Support	Yes	4	16.50	10.25	5.476	.024*	1.800	.078	4.90
	No	45	11.60	4.68					
Active Participation	Yes		13.00	3.83	.339	.563	-.100	.921	-.24
	No	45	13.24	4.74					
Passive Participation	Yes	4	13.00	3.83	.339	.563	-.100	.921	-.24
	No	45	13.24	4.74					
Leisure Pursuits	Yes	4	19.50	5.75	.339	.563	-.100	.921	-.37
	No	45	19.87	7.10					
Introspection	Yes	4	9.75	2.87	.339	.563	-.100	.921	-.18
	No	45	9.93	3.55					

Note: The asterisks denote the factor stressor groupings that have a small effect on respondents' stress, while the asterisk in the factor coping strategy grouping indicates that the respondents have rated this coping strategy as having a small possibility of being used to relieve their stressors as determined by an analysis of the Partial Eta Squared Table.

Observing Table 55, the analysis of the personal demographic characteristic of respondents who have children at home, it may be seen that the homogeneity of variance was satisfied by observing Levene's Test of Equality of Variances. The t-tests for all 14 factors are presented as unadjusted t-values. There was no difference in stress-level scores on any of these groupings among respondents who have children living at home.

Table 55. t-Test Comparison of Respondents' Stressors and Coping Strategies by Independent Variable—Professional Demographic Characteristic of Tenure

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Tenure	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Stressor Groupings									
Reward and Recognition	Yes	19	20.00	6.667	3.475	.069	.452	.654	1.071
	No	28	18.93	8.751					
Time Constraints	Yes	19	32.00	10.667	3.475	.069	.452	.654	1.714
	No	28	30.29	14.002					
College/Dept. Influences	Yes	19	36.00	12.000	3.475	.069	.452	.654	1.929
	No	28	34.07	15.753					
Professional Identity	Yes	19	12.00	4.000	3.475	.069	.452	.654	.643
	No	28	11.36	5.251					
Student Interaction	Yes	19	8.00	2.667	3.475	.069	.452	.654	.429
	No	28	7.57	3.501					

Table 55. (continued)

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Tenure	Frequency	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Coping Strategy Groupings									
Avoidance	Yes	19	9.47	4.155	1.827	.183	-.667	.508	-.705
	No	28	10.18	3.092					
Housework Behavior	Yes	19	6.32	2.770	1.827	.183	-.667	.508	-.407
	No	28	6.79	2.061					
Traditionally Female	Yes	19	12.63	5.540	1.827	.183	-.667	.508	-.940
	No	28	13.57	4.122					
Changing One's Behavior	Yes	19	41.05	18.005	1.827	.183	-.667	.508	-3.055
	No	28	44.11	13.398					
Coping Strategy Groupings									
Social Support	Yes	19	12.00	4.000	3.475	.069	.452	.654	.643
	No	28	11.36	5.251					
Active Participation	Yes	19	12.63	5.540	1.827	.183	-.667	.508	-.940
	No	28	13.57	4.122					
Passive Participation	Yes	19	12.63	5.540	1.827	.183	-.667	.508	-.940
	No	28	13.57	4.122					
Leisure Pursuits	Yes	19	18.95	8.310	1.827	.183	-.667	.508	-1.410
	No	28	20.36	6.184					
Introspection	Yes	19	9.47	4.155	1.827	.183	-.667	.508	-.705
	No	28	10.18	3.092					

In observing Table 56 and analyzing the data of the respondents' professional demographic of holding a second job, it may be seen that the homogeneity of variance was satisfied by observing Levene's Test of Equality of Variances. The t-tests for all 14 factors are presented as unadjusted t-values.

Table 56. t-Test Comparison of Respondents' Stressors and Coping Strategies by Independent Variable—Respondents' Professional Demographic Characteristic of Holding a Second Job

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Work a Second Job	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Stressor Groupings									
Reward and Recognition	Yes	6	20.63	7.719	.040	.843	.228	.821	.625
	No	16	20.00	9.504					
Time Constraints	Yes	16	33.00	12.350	.040	.843	.228	.821	1.000
	No	33	31.52	15.206					
College/Dept. Influences	Yes	16	37.13	13.894	.040	.843	.228	.821	1.125
	No	33	36.00	17.107					
Professional Identity	Yes	16	12.38	4.631	.040	.843	.228	.821	.3.75
	No	33	12.00	5.702					
Student Interaction	Yes	16	8.25	3.088	.040	.843	.228	.821	.250
	No	33	8.00	3.802					

Table 56. (continued)

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Work a Second Job	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Coping Strategy Groupings									
Avoidance	Yes	16	9.19	3.371	.116	.735	-1.153	.2	-1.219
	No	33	10.41	3.491					
Housework Behavior	Yes	16	6.13	2.247	.116	.735	-1.153	.2	-.813
	No	33	6.94	2.327					
Traditionally Female	Yes	16	12.25	4.494	.116	.735	-1.153	.2	-1.625
	No	33	13.88	4.654					
Changing One's Behavior	Yes	16	39.81	14.607	.116	.735	-1.153	.2	-5.281
	No	33	45.09	15.126					
Social Support	Yes	16	12.38	4.631	.040	.843	.228	.8	.375
	No	33	12.00	5.702					
Active Participation	Yes	16	12.25	4.494	.116	.735	-1.153	.2	-1.625
	No	33	13.88	4.654					
Passive Participation	Yes	16	12.25	4.494	.116	.735	-1.153	.2	-1.625
	No	33	13.88	4.654					
Leisure Pursuits	Yes	16	18.38	6.742	.116	.735	-1.153	.2	-2.438
	No	33	20.81	6.981					
Introspection	Yes	16	9.19	3.371	.116	.735	-1.153	.2	-1.219
	No	33	10.41	3.491					

For each of the factors, the mean differences between individuals working on additional certifications were tested on significances utilizing a two-group independent t-test. A summary of the results of those analyses are presented in the Table 57. In observing Table 57, it may be ascertained that significant differences were obtained for factor stressor groupings of Reward and Recognition, Time Constraints, College/ Departmental Influences, Professional Identity, Student Interaction, and Social Support, and were represented with an asterisk. It may possible that if these stressor grouping factors affect those respondents who are working on additional certifications in a negative manner these respondents may likely relieve their stressors through the use of a coping strategy grouping based on Social Support than on any of the other coping strategies. The results of the findings from the Levene's Test for Equality of Variance are summarized as F-values. The t-tests for all 14 factors are presented as adjusted t-values.

Table 57. t-Test Comparison of Respondents' Stressors and Coping Strategies by Respondents Who Are Working on Additional Certifications

					Levene's Test for Equality of Variances		t-Test for Equality of Means		
Factor	Work on Add. Cert.	n	Mean	SD	F	Sig.	t	Sig. (2-tail)	Mean Dif.
Stressor Groupings									
Reward and Recognition*	Yes	6	28.33	14.720	7.659	.008	2.567	.014	9.52
	No	42	18.81	7.392					
Time Constraints*	Yes	6	45.33	23.551	7.659	.008	2.567	.014	15.24
	No	42	30.10	11.828					
College/Dept. Influences*	Yes	6	51.00	26.495	7.659	.008	2.567	.014	17.14
	No	42	33.86	13.306					
Professional Identity*	Yes	6	17.00	8.832	7.659	.008	2.567	.014	5.71
	No	42	11.29	4.435					
Student Interaction*	Yes	6	11.33	5.888	7.659	.008	2.567	.014	3.81
	No	42	7.52	2.957					
Coping Strategy Groupings									
Avoidance	Yes	6	11.50	2.258	2.056	.158	1.171	.248	1.79
	No	42	9.71	3.618					
Housework Behavior	Yes	6	7.67	1.506	2.056	.158	1.171	.248	1.19
	No	42	6.48	2.412					
Traditionally Female	Yes	6	15.33	3.011	2.056	.158	1.171	.248	2.38
	No	42	12.95	4.823					
Changing One's Behavior	Yes	6	49.83	9.786	2.056	.158	1.171	.248	7.74
	No	42	42.10	15.676					
Social Support*	Yes	6	17.00	8.832	7.659	.008	2.567	.014	5.71
	No	42	11.29	4.435					
Active Participation	Yes	6	15.33	3.011	2.056	.158	1.171	.248	2.38
	No	42	12.95	4.823					
Passive Participation	Yes	6	15.33	3.011	2.056	.158	1.171	.248	2.38
	No	42	12.95	4.823					
Leisure Pursuits	Yes	6	23.00	4.517	2.056	.158	1.171	.248	3.57
	No	42	19.43	7.235					
Introspection	Yes	6	11.50	2.258	2.056	.158	1.171	.248	1.79
	No	42	9.71	3.618					

Note: An asterisk was placed after each factor stressor grouping and factor coping strategy grouping that caused stress for teachers who were working on additional certification.

Through a comparison of the 14 factors that are depicted in Table 58, there were no differences in stress-level scores on any of these groupings among the respondents' professional demographic characteristic pertaining to professional rank.

Table 58. Frequencies, Means, and Standard Deviations for Respondents' Stressors and Coping Strategy Groupings by Independent Variable—Respondents' Professional Demographic Characteristic of Professional Rank

Factor	Professional Rank	Frequency	Mean	SD
Stressor Groupings				
Reward and Recognition	Rank 1	29	19.66	8.653
	Rank 2	20	20.50	9.445
Time Constraints	Rank 1	29	31.45	13.845
	Rank 2	20	32.80	15.112
College/Dept. Influences	Rank 1	29	35.38	15.576
	Rank 2	20	36.90	17.001
Professional Identity	Rank 1	29	11.79	5.192
	Rank 2	20	12.30	5.667
Student Interaction	Rank 1	29	7.86	3.461
	Rank 2	20	8.20	3.778
Coping Strategy Groupings				
Avoidance	Rank 1	29	10.34	3.362
	Rank 2	20	9.30	3.629
Housework Behavior	Rank 1	29	6.90	2.242
	Rank 2	20	6.20	2.419
Traditionally Female	Rank 1	29	13.79	4.483
	Rank 2	20	12.40	4.838
Changing One's Behavior	Rank 1	29	44.83	14.570
	Rank 2	20	40.30	15.725

Table 58. (continued)

Factor	Professional Rank	Frequency	Mean	SD
Coping Strategy Groupings (continued				
Social Support	Rank 1	29	11.79	5.192
	Rank 2	20	12.30	5.667
Active Participation	Rank 1	29	13.79	4.483
	Rank 2	20	12.40	4.838
Leisure Pursuits	Rank 1	29	20.69	6.725
	Rank 2	20	18.60	7.258
Introspection	Rank 1	29	10.34	3.362
	Rank 2	20	9.30	3.629

In observing Levene's Test of Equality of Error Variances, the homogeneity of variances was satisfied as seen in Table 59.

Table 59. Levene's Test of Equality of Error Variances for Respondents' Professional Demographic Characteristic of Professional Rank

Factor	F	df1	df2	Sig.
Stressor Groupings				
Reward and Recognition	.224	1	47	.638
Time Constraints	.224	1	47	.638
College/Dept. Influences	.224	1	47	.638
Professional Identity	.224	1	47	.638
Student Interaction	.224	1	47	.638

Table 59. (continued)

Factor	F	df1	df2	Sig.
Coping Strategy Groupings				
Avoidance	.036	1	47	.850
Housework Behavior	.036	1	47	.850
Traditionally Female	.036	1	47	.850
Changing One's Behavior	.036	1	47	.850
Social Support	.224	1	47	.638
Active Participation	.036	1	47	.850
Passive Participation	.036	1	47	.850
Leisure Pursuits	.036	1	47	.850
Introspection	.036	1	47	.850

The results associated with the different factors of stressor groupings and coping strategy groupings indicated that there were no significant differences in the means for respondents who held professional ranks. No significant F-values nor significant data was generated by this test. The result could have been affected due only two ranks, instructors and professors, were analyzed. These two ranks were chosen because they contained the largest percentage of the respondents (90 percent). The rank of assistant professor contained only four respondents, and the rank of associate professor contained only one respondent, which is 10 percent of the total respondents. A summary of results from professional ranks of instructor and professor is presented in Table 60.

Table 60. ANOVA Summary for Respondents' Stressors and Coping Strategy Groupings by Independent Variable for Respondents' Professional Demographic Characteristic of Professional Rank

Factor	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Stressor Groupings						
Reward and Recognition	8.448	1	8.448	.105	.748	.002
Time Constraints	21.628	1	21.628	.105	.748	.002
College/Dept. Influences	27.372	1	27.372	.105	.748	.002
Professional Identity	3.041	1	3.041	.105	.748	.002
Student Interaction	1.352	1	1.352	.105	.748	.002
Coping Strategy Groupings						
Avoidance	12.922	1	12.922	1.072	.306	.022
Housework Behavior	5.743	1	5.743	1.072	.306	.022
Traditionally Female	22.972	1	22.972	1.072	.306	.022
Changing One's Behavior	242.642	1	242.642	1.072	.306	.022
Social Support	3.041	1	3.041	.105	.748	.002
Active Participation	22.972	1	22.972	1.072	.306	.022
Passive Participation	22.972	1	22.972	1.072	.306	.022
Leisure Pursuits	51.687	1	51.687	1.072	.306	.022
Introspection	12.922	1	12.922	1.072	.306	.022

In analyzing the data of the respondents' professional demographic characteristic of employment status, all respondents were full-time faculty members; therefore, no statistical tests were necessary. In addition, extra effort was expended to ensure that only full-time faculty members were asked to participate. This extra effort was expended during the initial period when the request was made by telephone to obtain membership lists from TBTEA and to TCCTA.

Summary

Five research questions were presented and answered in this chapter concerning identifying and exploring stressors as perceived by selected Texas community college business faculty as well as to identify the coping strategies they use to relieve these stressors. Also, discussed were personal and professional demographic characteristics of these faculty members and the relationships of their demographic characteristics to their stressors and coping strategies. The overall purpose of this research was to generate information about selected Texas business teachers that would be useful in helping them to identify and to manage their stressors in the interest of those who supervise and work with these teachers. The summary is presented in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter was divided into three major sections. The first section contains a summary of the literature review, the purpose of the study, and a description of the population who responded to the survey questionnaires. The second section includes the conclusions derived from the data as well as a review of the literature. The recommendations for future studies and improved practices based on the study of community college business faculty members are located in section three.

Summary of Literature Review

For over one hundred years, community colleges have provided more and more services to both students and members of the community, along with a wide variety of academic and vocational course offerings in an array of settings to a growing, diverse population. With these changes and growth, faculty members who are the backbone of these community colleges have experienced and will continue to experience increasing stress. The work environment for community college faculty is one where a provider and a recipient relationship exist. Additionally, this work environment is one where change in instructional innovations and technological advances in American education is continual. In addition, demands on faculty time for tutoring and advisement, along with conflicts in instructional changes and heavy class loads, have created a climate of increased stress and anxiety for many faculty members. An occupation as a teacher is

one in which a high degree of work-related stress exits (Blix, Cruise, Mitchell, & Blix, 1994; Borg 1990; Carlson & Thompson, 1995; Chan, 1998; Coates & Thoresen 1976; Gmelch, 1993; Kyriacou & Sutcliffe, 1978b; Pithers, 1995; and Mearns & Cain, 2003).

Continual changes in the academic life of faculty can cause potential conflicts between what is and what should be. These conflicts may cause a decline in a teacher's performance, which in turn, may affect student learning and an institution's effectiveness in achieving its mission. Stress often causes teachers to experience time deadlines and lower levels of energy in performing their teaching responsibilities. Prolonged teacher stress may result in job dissatisfaction, reduced teacher-student rapport, and decreased teacher effectiveness in meeting educational goals (Kyriacou & Sutcliffe, 1978b).

The researcher who seemed most interested in college faculty stress was Gmelch. He has performed, lectured, and researched faculty stress for the past 20 years. Some of the stressors Gmelch (1993) found that stress college faculty the most are: (1) *imposing excessively high self-expectations on themselves*, (2) *having insufficient time to keep abreast of developments in their fields*, (3) *receiving insufficient salary*, (4) *having too heavy a workload*, (5) *job demands that interfere with personal activities*, (6) *experiencing interruptions from telephone and drop-in visitors*, and (7) *attending too many meetings* (p. 24). Additionally, he offered a seven-step plan to cope with stress based on a problem-solving strategy. A few of these steps include identifying the stressors, developing a plan to deal with these stressors, and performing a follow-up analysis to see if the plan worked or caused additional

problems. A few researchers have addressed stressors and coping strategies but few have studied a specific discipline such as community college business faculty.

The primary purpose of this study was to explore and to identify the sources of occupational stressors perceived by selected Texas community college faculty members and to generate current demographics about these faculty members that would be useful in understanding such stress. A second purpose was to explore and to identify the coping strategies these faculty members use to alleviate their stressors. A third purpose of this study was to determine if relationships exist among stressors, coping strategies, and selected demographic characteristics, such as gender, age, educational level, tenure status, years in teaching, and professional rank, of selected Texas community college business faculty members.

Research data were collected through questionnaires mailed to 90 Texas community college business faculty members who were members of Texas Business Teachers Educators Association and the Accounting Section of Texas Community College Teachers Association. These faculty members were sent questionnaires relating to their stressors and coping strategies. Demographic information was also requested. Fifty-six percent of these community college business faculty members responded to the questionnaire; however, one survey form was declared unusable because only one section had been completed. The respondent was contacted but politely declined to complete the other two sections. The return rate was then recalculated and confirmed to be 54.4 percent.

Conclusions Derived from Data and the Literature

Within the framework and limitations of this study the following conclusions seem warranted. The collection of data from the questionnaires provided the basis for analyses to the following research questions. The responses of these community college teachers were discussed in Chapter IV and also in this chapter. The respondents in this study were 49 selected business faculty members who worked in Texas community colleges.

Research Question #1

What is the demographic profile of the survey respondents? Question #1 was analyzed by separating the demographic characteristics into two sections, one for personal and one for professional. The first section was placed in Table 5 and was analyzed for seven distinct personal characteristics. Based on the findings from analyses of Table 5, 67.3 percent of the respondents were female, whereas 32.7 percent were male. Over 75 percent of the respondents in this study were married, and over 28 percent had dependent children living at home.

Even though these faculty members did not reveal their exact ages on the survey form, their ages ranged from 20 to 75 years of age. The average age of the study's respondents fell between 46 and 55. Forty percent of the respondents were found to be middle-aged.

Almost 45 percent of the study's respondents reported very good health, with eight percent reporting their health as not being very good to two percent reporting

very \bad health. The respondents' answers to the question concerning health at the beginning of their teaching career reflected 65.3 percent reporting their health to be the same and only 4.1 percent reporting very much worse health. Only 6.1 percent reported their health to be better now than when they first began teaching at the community college.

Professional characteristics were placed in Table 6. These characteristics were analyzed for eight separate professional characteristics. This study's respondents reported their experience in teaching business subjects averaged about 28 years. The majority of the community college faculty in this study had earned a master's degree. Approximately, 6 percent of this study's respondents were working on a doctorate, and 12 percent were working on additional certifications, with over 34 percent held a second job.

One hundred percent of this study's respondents held some kind of professional rank. The two largest groups holding professional rank were instructors with over 59 percent and professors with over 30 percent. One hundred of this study's respondents were full-time faculty. Thirty-eight of the respondents in this study had earned tenure status; however, 57.1 percent reported no tenure. When faculty were asked if they would choose teaching as a career, 87.8 percent of the respondents answered that they would again choose teaching as a career.

Implications: Even though more than 60 percent of the respondents were females and over 30 percent were males, community colleges typically have a lower proportion of males to females on their faculty, but equity toward gender has been

progressing forward since 1992 according to Huber (1998, p. 16). An earlier study by the National Center for Postsecondary Improvement (1997) reflected the ratio of male faculty to female faculty as 53 percent males to 47 percent females (Huber, 1998, p. 16). These percentages reflected more females than males. It could be that females are more likely to respond to surveys, while males are less likely to respond.

The respondent's years of teaching experience ranged in this study from 1 to 30 years, with an average of about 21 years of experience. Huber's (1998) study found the average teaching experience of her respondents to be 14.5 years (p. 49). One hundred percent of this study's respondents reported the highest degree earned was a master's degree, while Huber's group reported 64 percent holding a master's degree.

This study found a little over 8 percent working on an additional degree, while the 1998 Huber study found 4 percent were working on another degree. In addition, this study found over 34 percent working at a second job, and Huber (1998) found 75 percent reporting earnings above their regular faculty salary.

Over 40 percent of the respondents in this study were middle-aged, which society considers to be an aging workforce similar to the ages reported by both Huber (1998) and Outcalt (2002). According to Santiago (2001), an aging workforce causes three immediate problems. First, costs rise due to incremental salary scales because higher than average ages for teachers leads to greater overall expenditures for salaries, leaving little monies for higher salaries to assist in hiring or training new teachers. Secondly, training current teachers to meet new challenges will possibly require more

resources. The third problem is that the future supply of teachers will be become a problem as more teachers retire each year (Santiago, 2001, p. 1).

Bennett (2002) reported that many recently graduated doctoral students who seek an academic career might find one in a community college. Community colleges in the southwest are experiencing the greatest population growth; therefore, their community college enrollments are rising. Because of this growth, some states are continuing to fund community colleges.

One hundred percent of the faculty in this study were employed full-time. The 1998 study by Huber found that 79 percent of the respondents were full-time faculty and 21 percent were part-time (p. 7). One hundred percent of the full-time faculty respondents in this study held some kind of professional rank; whereas, Huber's faculty held only 85 percent of some kind of a professional rank (p. 52).

On February 27, 2004, an update to the *Occupational Outlook Handbook* by the U.S. Department of Labor gave a report that employment opportunities in community colleges were expected to improve; but the majority of these job opportunities were anticipated to be for part-time or non-tenure-track job openings in health specialties, business, and computer science. The Texas Education Agency indicated a statewide need for over 6,000 bilingual teachers and over 1,000 teachers of English as a Second Language. This need was based on waivers requested by some Texas school districts (Fuller, 2002, p. 1; Strayhorn, 2003). Strayhorn (2003) reported that losing even one teacher means additional expenses of hiring and training costs for a school district.

A mandate by the National Commission on Teaching and America's Future (2003) calls for three strategies:

Strategy 1: We must organize every school for teaching and learning success.

Strategy 2: We must insist on quality teacher preparation, program accreditation, and licensure.

Strategy 3: We must develop and sustain professional rewarding career paths for teachers from mentored induction through accomplished teaching.

Because of these mandates, community college teachers will face further competition for funding the programs they teach and carrying heavier burdens of program and course development and implementation as their peers retire. A recent study by the American Association of Community Colleges reported that approximately 30 percent of almost 100,000 community college faculty could retire in the next three years (Bennett, 2002). With the community college taking an active role in teacher training, it will not only face training future teachers but also face a need to replace their retiring faculty. Their administrators will be aggressively identify and hire highly qualified, diverse faculty to add to or to replace retiring faculty from a pool of recent college graduates or from industry, so they will have little time to deal with the pressures of their faculty members. However, training future teachers could assist in community colleges in having access to trained teachers to fill positions that are open or will be opening in the future. Community colleges may get extra funding for training teachers because some of the funding they will need to operate their

institutions is tied to training new teachers and to an increasing student population. A community college's biggest challenge, however, will be the availability of funds necessary to support continual up dates and salary increases for its current faculty and for new faculty, along with building new campus buildings and renovating its current facilities to accommodate technological changes, new and innovative teaching practices, and a growing student body, especially in the southwest part of the United States.

Research Question #2

What are the occupational stressors perceived by Texas community college business faculty members? Research Question #2 involved analyzing 54 stressors. The ten most stressful sources of stress ranked by means for Texas community college faculty members are listed in Table 8 of Chapter IV. These stressors were: (1) *teaching inadequately prepared students*; (2) *having insufficient time to keep abreast of current developments in my field*; (3) *attending meetings which take up too much time*; (4) *dealing with program changes that impact my job*; (5) *making presentations at professional conferences*; (6) *dealing with reduced enrollments that impact my job*; (7) *receiving inadequate salary to meet financial needs*; (8) *having inadequate time for teaching preparation*; (9) *imposing excessively high self-expectations*; and (10) *feeling that I have too heavy a workload, one that I cannot possibly finish during the normal workday*.

In reviewing the top ten stressors selected by community college faculty members, these stressors related to five factor stressor groupings that include (1)

Student Interaction, (2) Time Constraints, (3) College/Departmental Influences, (4) Reward and Recognition, and (5) Professional Identity.

Implications. In comparing the highest stressors of this study to those of Gmelch (1993), this researcher found similar stressors. This study, along with that of Huber (1998) and of Gmelch (1984), found stressor S22, *teaching inadequately prepared students*, was one of the highest stressors for community college faculty.

When teachers' perceptions of their investments in their students' depersonalization outweigh what they receive in return, teachers may experience emotional, psychological, and professional consequences (Taris, Peeters, LeBlanc, Schreurs, & Schaufeli, 2001). Moreover, the work environment for community college faculty is also one in which a provider and a recipient relationship exist. This work environment is also one in which change, relating to instructional innovations and technological advances in American education, is continual. Additional demands on faculty time for tutoring and advisement, along with conflicts of instructional changes have created a climate of increased stress and anxiety for many faculty members (Alfred, 1986; Gmelch, 1984; Huber, 1998; Outcalt, 2002). Further, many authors report that an occupation as a teacher is one in which a high degree of work-related stress exists (Outcalt, 2002; Hollingsworth, 1990; Wadlington & Partridge, 1998).

To address these stressors, community college teachers need to develop a repertoire of coping strategies they can use to reduce or to eliminate their stressors. In addition, teachers who encounter underprepared students could pair these students with interested and caring adults who could help these students to improve. Students who

have interested and caring adults to tutor them usually begin to achieve. The interaction between student and adult perpetuates wisdom and citizenship, along with bridging the intergenerational gap between younger and older adults.

Another way to reduce faculty stressors is for faculty members to request that administrators offer stress reduction seminars and implement wellness programs. In addition, new faculty members could be mentored by more seasoned faculty so that the new faculty members could learn the college's culture and other important information that these new teachers need to perform their jobs.

Research Question #3

What coping strategies do Texas community college business faculty members use to manage their occupational stressors? Research Question #3 involved analyzing 48 coping strategies. Respondents rate their responses by using one of the following choices: 5 = Extensively use, 4 = Use frequently, 3 = Use sometimes, 2= Use occasionally, and 1 = Never use. Information concerning the means and standard deviations of the ten highest rated coping strategies is listed in Table 12 of Chapter IV. Findings are reported not only in means but also in descending order in this table. On a five-point scale, these ten items fell between 3.75 (*SD=1.14)* and 3.40 (*SD=1.04)*. The ten most used coping strategies are: (1) *prioritizing work*, (2) *developing stable relationships*, (3) *planning ahead*, (4) *separating home from work*, (5) *dealing with problems immediately*, (6) *separating work from home*, (7) *praying*, (8) *exercising*, (9) *walking*, and (10) *relaxing for short periods*. Community

college faculty are using organizational activities, social support, and engaging in short periods of mental and physical rest to reduce some of their stressful situations.

Implications. Researchers like Bourne (1995) and Gmelch and Chan (1994) found that individuals in the teaching field who are able to identify their stress sources and apply appropriate coping stressors are less likely to experience burnout. Methods of reducing stress concur with the results of this research. Many authors suggest using holistic approaches to coping, such as exercising, analyzing the actual stressor, using social support, practicing sound dietary practices, employing self-management skills, engaging in personal hobbies, and using supportive attitudes (Chan, 1998; Gmelch, 1984; Lazarus & Folkman, 1984; and Matheny, Gfroerer, & Harris, 2000).

Other research findings recommend developing and utilizing effective coping techniques to reduce negative effects of stress. Some of these techniques included designing clearer administrative guidelines and responsibilities, mentoring new teachers, providing different kinds of social support, having teachers participate in the decision-making process in hiring and goal setting, and matching newly hired teachers and their job assignments with seasoned teachers in the same discipline and of the same philosophy (Wiley, 2000). An important point in the literature review is the one that suggests faculty members who develop a repertoire of coping strategies to counteract their stressors can be more effective in helping students to become better students.

Community college faculty identified coping strategies of planning ahead and addressing problems immediately as methods to reduce stressors. In addition, this

researcher recommends that community college teachers develop methods of organizing their work through the use of short- and long-range planning strategies. To assist with this task, these teachers could use daily planners and semester calendars to plot their strategies and to assist them with this planning and organizing the planning process. Using strategic and long-range planning may help to ensure that college and departmental goals are being met by both the faculty member and the students. Preparing on-going methods of recording and evaluating student progress and incidents could prevent future problems that faculty members may face when crisis-type situations emerge. To further foster effective coping strategies, this researcher suggests that community college faculty enroll in college courses or seminars that are designed to teach effective communication skills, reflective thinking and listening, dealing with difficult students, and teaching diverse student populations. Other suggestions for community college faculty include selecting a mentor, participating in a support group, attending stress and coping management seminars, and participating in local, state, and national conferences to establish networking links to other community college faculty.

Research Question #4

What are the occupational stressors as perceived by selected Texas community college faculty members that relate to selected demographic characteristics? Selected demographic characteristics were divided into two categories. The first category pertained to personal demographic characteristics and the second to professional demographic characteristics. Those in the personal category selected for further

examination relate to gender, age, marital status, and dependents living at home, while the professional category was composed of tenure status, years of teaching experience, and professional rank.

Personal Demographic Characteristics. Gender was the first selected demographic characteristic and was separated in Chapter IV into two separate tables, Table 11 for male respondents and Table 12 for female respondents. Only information that pertained to male and female respondents who had the highest stressors with means of 2.6 or greater are reported in these two tables. In analyzing the demographic characteristics of gender, females had 11 occupational stressors, while males reported only 4. Both males and females held in common five stressors that related to four factor stressor groupings related to Professional Identity, Student Interactions, and College/ Departmental Influences. Females listed five additional linked to factor stressor groupings of Time Constraints and Professional Identity.

Age was the second personal demographic characteristic to be analyzed. This characteristic was divided into four separate categories. These four categories of ages were: (a) 20 to 45, (b) 46 to 50, (c) 51 to 55, and (d) 56 to 70, resulting in Tables 15 through 18 in Chapter IV. In analyzing the demographic characteristic of age, the 20 to 45 age group reported 14 stressors that were linked to four factor stressor groupings of Time Constraints, Professional Identity, Student Interaction, and College/Departmental Influences. The 46 to 50 and 51 to 55 age groups reported ten stressors that were connected to four factor stressor groupings of Student Interaction, Professional Identity, Reward and Recognition, and College/Departmental Influences. The 56 to 70

age group reported three stressors that linked to three factor stressor groupings of Student Interaction, Professional Identity, and Time Constraints. Age groups 20 to 45 and 51 to 55 reported five similar stressors connected to three factor stressor groupings of Professional Identity, College/Departmental Influences, and Time Constraints. In addition, age groups 20 to 45 and 46 to 50 shared similar stressors. These four stressors were applicable to three factor stressor groupings linked to Time Constraints, Reward and Recognition, and College/Departmental Influences.

All four age groups reported their most stressful stressors to be S22, *teaching inadequately prepared students*; S34, *attending meetings which take up too much time*; and S36, *dealing with reduced enrollments that affect my job*. These three age groups shared two factor stressor groupings related to Student Interaction and College/ Departmental Influences. All age groups reported Stressor 15, *having insufficient time to keep abreast of current developments in my field* that linked to one factor stressor grouping of Time Constraints.

The third personal demographic characteristic analyzed was that of marital status. This characteristic was divided into three categories, single, married, and divorced that resulted in three separate tables. Only the highest stressors with means of 2.6 or greater are listed in Tables 19, 20, and 21 of Chapter IV.

Analyses of marital status revealed that single and divorced groups held five similar stressors. These five commonly held stressors fell into three factor stressor groupings of Professional Identity, Student Interaction, and College/Departmental Influences. All three groups, single, married, and divorced selected the same five

stressors. These reported stressors were (1) S15, *insufficient time to keep abreast of current developments in my field*; (2) S22, *teaching inadequately prepared students*; (3) S35, *dealing with program changes that impact my job*; (4) S34, *attending meetings which take up too much time;* and (5) S36, *dealing with reduced enrollments that impact my job*. These stressors related to three factor stressor groupings linked to Time Constraints, Student Interaction, and College/Departmental Influences.

The single group was the only group to select S8, *evaluating the performance of students,* that linked to one stress factor grouping of Student Interaction. The married group was the only one to select S33, *feeling that I have too heavy a workload, one that I cannot possibly finish during the normal work day*, which connected to Time Constraints.

In analyzing the fourth demographic characteristic relating to faculty members, who had dependent children living at home and those who did not, these two categories were divided into Tables 22 and 23 of Chapter IV. Only the highest stressors with means of 2.6 or greater are presented in these tables.

An analysis of respondents who had dependent children living at home, 18 stressors were found; however, respondents without dependent children living at home reported only 5. Upon further analyses, respondents with children and without children shared four stressors. These were S22, *teaching inadequately prepared students*; S34, *attending meetings which take up too much time*; S15, *insufficient time to keep abreast of current developments in my field*; and S36, *dealing with program changes that impact my job*. These four stressors were linked to three factor stressor

groupings of Student Interaction, Time Constraints, and College/Departmental Influences.

Respondents who had dependent children living at home experienced 14 additional stressors. These 14 were linked to four factor stressor groupings of Time Constraints, Reward and Recognition, Professional Identity, College/Departmental Influences. Respondents without children reported one stressor that respondents did not report. This stressor was S9, *making presentations at professional conferences*, that was linked to one factor stressor grouping of Professional Identity.

Professional Demographic Characteristics. The first professional characteristic analyzed was tenure. Tenure was separated into two groups. Group one contained those respondents who had attained tenure. Group two contained those who had not attained tenure. In both groups, only the highest stressors with means of 2.6 or greater resulted in Tables 24 and 25 of Chapter IV.

In analyzing these two tables, tenured respondents reported only three stressors; whereas, untenured respondents reported eight. Tenured respondents and untenured respondents shared three common stressors. These three stressors are: (1) S22, *teaching inadequately prepared students*; (2) S34, *attending meetings which take up too much time,* and (3) S15, *insufficient time to keep abreast of current developments in my field*. These three stressors were applicable to two factor stressor groupings of Student Interaction and Time Constraints.

Untenured respondents reported five extra stressors. These five stressors were: (1) S9, *making presentations at professional conferences*; (2) S35, *dealing with*

program changes that impact my job; (4) S27, *having inadequate time for teaching preparation*; (4) S36, *dealing with reduced enrollment that impact my job*; and (5) S50, *receiving inadequate salary to meet financial needs*. These additional stressors for untenured respondents were connected to four factor stressor groupings related to Professional Identity, College/Departmental Influences, Time Constraints, and Reward and Recognition.

The second professional characteristic analyzed was number of years teaching business subjects in a community. Years of teaching business subjects in a community college was divided into four groups. Group one contained those respondents who had taught for one to ten years. Group two was composed of those respondents who had taught for 11 to 20 years. Group three held respondents who had taught for 21 to 25 years. Group four included those respondents who had taught from 26 to 30 years. The groups in respective order resulted in Tables 26, 27, 28 and 29 of Chapter IV.

Respondents who reported teaching one to ten years listed 14 stressors; however, only five stressors were reported by the 11- to 20-year group, two by the 21- to 25-year group, and nine by the 26- to 30-year group. In analyzing all four tables, all four teaching groups held two stressors in common. These two stressors were (1) S22, *teaching inadequately prepared students*; and (2) S34, *attending meetings which take up too much time*. These two stressors connected to two factor stressor groupings of Student Interaction and College/Departmental Influences.

Stressor 35, *dealing with program changes that impact my job*, was shared by three groups with teaching experience of 1 to 10 years, 11 to 20 years, and 26 to 30 years. This factor stressor grouping linked to College/Departmental Influences.

Faculty members who had teaching experience in year groups of 1 to 10 and 26 to 30 shared two common stressors. These two stressors were S15, *insufficient time to keep abreast of current developments in my field*; and S36, *dealing with reduced enrollments that impact my job*. These two stressors linked to two factor stressor groupings of Time Constraints and College/Departmental Influences.

Stressor 14, *resolving differences with fellow faculty members*, was held in common with teaching experience year groups of 11 to 20 and 26 to 30 years. This stressor was linked to factor stressor grouping of College/Department Influences.

Only respondents with teaching experience of 1 to 10 years reported the following stressors. These stressors were reported in order of highest to lowest stress and with means ranging from 3.07 to 2.64:

- S27, *having inadequate time for teaching preparation*
- S11, *imposing excessively high self-expectations*
- S7, *having inadequate facilities*
- S50, *receiving inadequate salary to meet financial needs*
- S4, *meeting social obligations*
- S13, *having students evaluate my teaching performance.*

These eight stressors are applicable to four factor stressor groupings of Professional Identity, Time Constraints, Reward and Recognition, and Student Interaction.

Stressor 54, *being drawn into conflicts between colleagues*; and Stressor 10, *making presentations at faculty meetings*, were the only two stressors reported by respondents in the teaching experience group of 26 to 30 years. These two stressors were connected to two factor stressor groupings of Professional Identity and College/ Departmental Influences.

Teaching experience groups of 1 to 10 and 11 to 20 shared stressor, S33, *feeling I have too heavy a workload, one that I cannot possibly finish during the normal workday*. This stressor was linked to the one stress factor grouping of Time Constraints.

The third and last professional characteristic analyzed was professional rank. Professional rank included instructor, assistant professor, associate professor, and professor. Only professional ranks related to instructor and to professor were reported and discussed because the total number of assistant professor and associate professor respondents numbered only five. With this limited number of responses, this researcher felt reported data from more evenly distributed ranks would provide better comparisons.

In analyzing the data further, instructor respondents selected 29 stressors; whereas, professors selected only 15. Instructor respondents reported eight stressors, while professor respondents reported only three. Stressors 22, *teaching inadequately prepared students*, and Stressor 35, *dealing with program changes that impact my job* are the two stressors these two ranks shared in common. These two stressors linked to factor stressor groupings of Student Interaction, and College/Departmental Influence.

Only data for the rank of instructor and professor were reported in Tables 30 and 31 of Chapter IV.

Implications. Several researchers have found some stress patterns related to time constraints and inadequate resources (Coates & Thorsen, 1976; Gmelch et al., 1984; Huber, 1998). In addition, some research related to inadequate organizational resources and limited personal capacity of and severe time constraints for faculty (Bourne, 1995; Gmelch, 1984; Hunter, Crow, Beach, and Ventigiglia, 1983; Rosch 1997).

This researcher found similar stressor groupings to those of Gmelch et al. (1984) and to those of McCracken (2001). The factor stressor groupings in this study that were found to be the most stressful linked to Student Interaction, College/ Departmental Influences, Professional Identity, Time Constraints, and Reward and Recognition.

With this information, administrators, particularly chairpersons, could relieve some of their faculty members' stress by giving the faculty more freedom to participate in decision-making process of the college. Research has found that occupational stress decreases when faculty members are involved in administrative policies and procedures so that faculty feel a sense of autonomy in their job. Additionally, when faculty members are trusted to make choices and decision in their classrooms without supervisory approval and are able to choose their own teaching style, disciplinary procedures, and teaching materials, their stress levels are decreased.

Research Question #5

Is there a relationship among stressors, coping strategies, and selected demographic characteristics, such as gender, age, educational level, tenure status, years of teaching, and professional rank, of selected Texas community college business faculty members? To answer this question, stressors were grouped according to constructs into five groupings pertaining to Reward and Recognition, Time Constraints, College/ Departmental Influence, Professional Identity, and Student Interaction. This grouping process for stressors was patterned after the stress research by Gmelch et al. (1984). Coping strategies were grouped according to constructs into nine groupings as result of several conferences with four psychology professors. These nine coping strategy groupings related to Avoidance, Housework Behavior, Traditionally Female, Changing One's Behavior, Social Support, Passive Participation, and Leisure Pursuits.

Respondents scored each item within the five-factor stressor groupings as follows: 1 = Never use, 2= Use occasionally, 3 = Use sometimes, 4 = Use frequently, and 5 = Extensively used. As a result, a possible item score range of zero to five was produced, with each yielding the following possible total score ranges per grouping: (1) Reward and Recognition, produced 10 items for a total possible range of 0 to 50; (2) Time Constraints, contained 16 items for a total possible range of 0 to 80; (3) College/ Departmental Influence had 18 items for a total possible range of 0 to 90; (4) Professional Identity generated 6 items for a total possible range of 0 to 30; and (5) Student Interaction contained 4 items for a total possible range of 0 to 20. Respondents

scored each item within the nine-factor coping strategy groupings as follows: 5 = Extensively use, 4= Use frequently; 3= Use sometimes; 2 = use occasionally, and 1 = Never use. As a result, a possible item score range of zero to five was produced with each yielding the following possible total score ranges per grouping: (1) Avoidance, produced 3 items for a total possible range of 0 to 15; (2) Housework Behavior contained 2 items for a possible range of 0 to 10; (3) Traditionally Female had 3 items for a possible range of 0 to 15; (4) Changing One's Behavior generated 14 items for a possible range of 0 to 75; (5) Social Support produced 3 items for a possible range of 0 to 15; (6) Active Participation generated 4 items for a possible range of 0 to 20; (7) Passive Participation produced 3 items for a possible range of 0 to 15; (8) Leisure Pursuits contained 6 items for a possible range of 0 to 30; and (9) Introspection contained 3 items for a possible range of 0 to 15.

Given the sample size in the current research, it was not possible to perform a factor analysis to reveal clusters of correlated items. The factor stressor and coping strategy groupings were used to compare with independent variables of selected demographic characteristics using t-tests when comparing two levels of variable or using ANOVAs when variable levels were greater than two. Additionally, Levene's Test for Equality of Variances was used to test for homogeneity of variances. When Levene's Test for Equality of Variances produced a probability greater than .05, the differences in variances was not considered to be significant, and the t-test for equal variances was not considered to be significant for equal variances assumed was used. With a probability of less than .05, Levene's Test for Equality of variances was considered significant, so

variances were not assumed. When equal variances were not assumed, the appropriate t-test was used.

When an ANOVA was used on comparison levels of more than two, comparison of independent variables and the dependent factor groupings were made through ANOVA testing. If assumptions of equal variances were violated, there were no alternative testing mechanisms used, as ANOVA was considered relatively robust to violations of assumption of equal variances. Statistically significance ANOVA only points to a significant difference between multiple variable factors, not to specific pairings within a factor. In addition, the association of the levels of each of the independent to the factor stressor groupings was judged utilizing Partial Eta Squared as suggested by Winer, Brown, & Michels (1991). According to Winer et al. (1991), a small effect size would be between 0.01 and 0.5; a medium effect would be 0.5; to 0.8 and a large effect would be between 0.8 and 0.1.

In analyzing the ANOVA summary for the selected demographic characteristic of health of the respondents at the beginning of their career, the five factor stressor groupings of Reward and Recognition, Time Constraints, College/Departmental Influences, Professional Identity, and Student Interaction indicated a significance difference in the means for individuals possessing different levels of health when they began their teaching career. In addition, a large effect size of .187 was observed in the Partial Eta Squared table as well for these same five-factor stressor groupings. Further, an analyses of nine factor coping strategy groupings indicated that if respondents are negatively affected by these five factor stressor groupings, the respondents will most

likely use the factor coping strategy grouping of Social Support to relieve these stressors; however, these respondents have a medium likelihood of using one of the other eight coping stressor groupings of Avoidance, Housework, Traditionally Female, Changing One's Behavior, Active Participation, Leisure Pursuits, or Introspection to relieve these stressors.

In observing the ANOVA summary for the selected demographic characteristic of years of experience in teaching business subjects in a community college, the data revealed that the Partial Eta Squared table indicated a medium to large effect. The factors that have a medium to large effect are five-factor stressor groupings of Reward and Recognition, Time Constraints, College/Departmental Influences, Professional Identity, and Student Interaction. It appears that if these five stressor groupings cause a negative affect for respondents who have years of experience in teaching business subjects in a community college that these respondents use the factor coping strategy grouping of Social Support; however, these respondents might possibly use one of the other eight-factor coping strategy groupings of Avoidance, Housework Behavior, Traditionally Female, Changing One's Behavior, Active Participation, Passive Participation, Leisure Pursuits, or Introspection.

In observing other ANOVA summaries, it was found that other Partial Eta Squared tables reflected a small relationship among selected demographic characteristics pertaining to marital status, age, and health for the last six months and the factor stressor groupings of Reward and Recognition, Time Constraints, College/Department Influences, Professional Identity, and Student Interaction. In

analyzing the nine-factor coping stressor groupings, it was observed that if respondents are negatively affected by these five-factor stressor groupings, the respondents are might use a factor coping strategy grouping of Social Support to relieve these small stressor effects.

In observing t-tests for respondents who were working on an additional degree, data indicates that these respondents experience a significant amount of stress the five-factor stressor groupings of Reward and Recognition, Time Constraints, College/ Departmental Influence, Professional Identity, and Student Interaction and that these respondents use a factor coping strategy grouping of Social Support to relieve their stressors.

In observing the group independent t-test for respondents who were working on an additional degree, it may be ascertained that significant differences were obtained for five-factor stressor groupings of Reward and Recognition, Time Constraints, College/ Departmental Influence, Professional Identity, and Student Interaction. It appears that respondents who are working on an additional degree experience a significant amount of stress from these five stressors. To alleviate these stresssors, respondents use may use the factor coping strategy grouping of Social Support to relieve these stressors; however, they might possibly use one of the other eight-factor coping strategy groupings as well.

From t-test comparisons of selected demographic characteristics pertaining to choosing teaching as a career choice again, tenure status, having dependent children at

home, and holding a second job yield no significant sources of stress from the five-factor stressor groupings or to any of the nine-factor coping strategy groupings.

An ANOVA summary of the selected demographic characteristic of professional rank indicated no differences that were significant pertaining to factor stressor groupings or in factor coping strategy groupings. The selected characteristic of employment status was not statistically analyzed and compared with factor stressor groupings or factor coping groupings because all respondents were full-time respondents.

Implications. It appears that respondents who experience stress from Reward and Recognition, Time Constraints, College/Departmental Influence, Professional Identity, and Student Interaction use the factor coping strategy grouping of Social Support to relieve these stressors. Using Social Support has been verified by the literature search as being one of the most used coping strategies. Burke, et al, (1996) reported that teachers who sought social support by talking to others also found this type of social support to be beneficial in relieving teachers' stresses. In addition, responses from Items 49 through 52, which were open responses from the survey instrument in Appendix A, clustered around activities involving social support of families, friends, and students. Some of these social support responses included *spending time with family members or playing with grandchildren, discussing problems or spending time with a spouse,* and *attending religious and social activities with family and friends.*

Future Predictions for Community Colleges

College enrollments are predicted to grow slowly; therefore, the hiring of new faculty members will also show similar increases. The ratio of full-time faculty to part-time faculty has stabilized at a ratio of 60 to 40 (Cohen & Brawer, 2003, p. 409). This ratio is likely to remain the same because administrators want to save money by employing more part-time faculty members.

The manner in which instruction is delivered by community colleges will continue be through the tradition method of sole teacher and student, along with radio, television, interactive telecasts, and the computer using the internet. However, instruction has not changed the way that many educators had previously thought. Educators had envisioned their students learning on their own, thus freeing educators to interact with their students in more creative ways. This vision has not completely materialized as people who walk the halls can readily view sole teachers and students interacting as they had before the era of computers (Cohn & Brawer, 2003, p. 418).

Increases in pay for community college faculty will be small. If production for community college teachers does not increase and everyone get paid and advanced at the same rate, pay increases for those faculty members who elevate themselves above their peers will be small. Faculty members who work harder or who are more intelligent than their peers cannot expect to receive more pay (Cohn & Brawer, 2003, p. 410).

Cohn & Brawer (2003) report that the movement toward professional has been led by instructors who have taken over the supervision of learning resource centers and

other curricular projects and predict that "the next professional enhancements will be led by instructors who build reproducible learning sequences and interactive media" (p. 411). Along with being managers of paraprofessionals, they will interact with "media technologists, script writers, editors, and production coordinators" (p. 411). If these professionals can demonstrate that these learning enhancements have greatly increased learning opportunities more economically, "they will be recognized as instructional leaders" (p. 411). Cohen and Brawer predict that this progression toward professionalism will be slow and will depend upon how much funding a community college can make available for such expensive endeavors.

The development of new programs will be limited by enrollment and funding. For example, "in 1991, the Texas Higher Education Coordinating Board adopted a policy of linking approval of new associate degrees to the college's training record" (Cohen & Brawer, 2003, p. 420). This Board's policy reads: "An institution must show that 85 percent of the students completing existing technical programs over a three-year period are employed or pursuing additional education" (Cohen & Brawer, 2003, p. 420).

"Monies for basic skill development will be one-third of many community colleges' budgets," predict Cohen & Brawer (2003), in areas where "lower schools pass through numbers of marginally literate students, college going and immigration rates are high, and matriculation testing and placement are mandated" (p. 422).

Coping Actions of Educational Institutions

To reduce teacher stress, educational institutions need to ensure that their educational environment is one where a positive atmosphere of social support exists (Punch & Tuetteman, 1996; Sheffield, Dobbie, & Carroll, 1994). Social support enables teachers to share concerns with one another so that a suggestion or action from a fellow teacher can help stressed teachers resolve their stress sources. Frequently, stressed teachers who can share their problems or engage in some social activity with their fellow teachers during break periods may become more able to effectively relieve their stress feelings. Too, seasoned teachers and administrative school employees need to consider the manner in which they may be creating unnecessary sources of stress through poor management techniques. For example, they may be setting unrealistic completion dates for certain tasks or failing to communicate clearly with their teachers, thus creating avoidable problems for themselves (Kyriacou, 2001).

Some important characteristics that create a healthy educational institution in which an educational staff can work with less stress are:

- A strong sense of collegiality
- Additional duties are matched to teachers' skills
- Building environments that are pleasant to work in
- Consensus established on key values and standards
- Good communication between staff
- Good level of resources and facilities to support teachers
- Induction and career development advice is given

- Management decisions based on consultation
- Policies and procedures are easy to follow
- Red tape and paperwork is minimized
- Role and expectations clearly defined
- Senior management makes good use of forward planning
- Support available to help solve problems
- Teachers receive positive feedback and praise
- Whole school policies in writing and distributed to each faculty member (Cooper & Cartwright, 1997; Edworthy, 2000).

Many educational institutions offer counseling services to their teachers and to their educational staff support members who experience high levels of stress. Too, many institutions offer stress management seminars during faculty and staff development days. The most important point concerning effective coping strategies is that teachers should try to discover what strategies work best for them; then, teachers should develop a repertoire of coping strategies to use in different stressful situations to bring balance to not only their personal life but most importantly to their work life.

Recommendations for Further Research

From the results and conclusions of the analyses of data obtained through this study, the following recommendations were formulated:

1. Researchers should investigate the attitudes, beliefs, and policies of administrators in various community colleges where faculty work to gain an insight into their perspectives toward working conditions and related occupational stressors of community college faculty members.
2. Researchers should research and examine the variables relating to community college faculty's beliefs about health consequences and frequency of occupation stress, the coping strategies they could use to relieve this stress, and their thoughts pertaining to the extreme form of stress (burnout), along with their plans to continue in the teaching profession.
3. To provide better insight into specific stressful situations experienced by community college faculty, a longitudinal study of stress should be conducted so that faculty could be surveyed several times during a semester or during the academic year to establish patterns of stress and coping.
4. Comparative studies should be conducted to identify stressful situations and areas of dissatisfaction that cause stress unique to community college faculty. Campus, district, state, nation, and ethnic differences could also be considerations.
5. Revise and up date the survey form used in this study to more effectively reflect the stressors of today's community college teacher's work environment.

Recommendations to Improve Practice

Issues relating to stress and coping strategies of teachers must be considered to attract and to retain the best teachers as community colleges cannot afford to lose the backbone of their institutions, their faculty, to private industry or to other educational institutions. In addition, community colleges must investigate, develop, and implement appropriate changes in their educational practices and policies for relieving the stressors that their faculty members are now experiencing.

The following recommendations are submitted to improve the practices of community colleges by college administrators:

1. Community college administrators should develop faculty development programs to encourage and assist new as well as seasoned faculty in building coping strategies and stress management techniques, as well as building a culture that supports innovation, reflection, and discussion about teaching and learning.
2. As budgetary problems are always a concern at most community colleges, new techniques, besides monetary rewards, should be developed and instituted for rewarding and recognizing faculty efforts by a committee of the teachers' peers and support of the administrators at the community college. Some of faculty efforts that could be rewarded are activities that use research and professional service to enrich students' experience, the development and implementation of successful programs, and the creation

and development of innovative and creative methods of helping students to learn.

3. For community college faculty who seeking current work experience in their field, additional degrees, additional certifications, or higher degrees, administrators should seek implementation of funded sabbaticals leaves of at least one semester for all interested faculty. Sabbatical leaves could add enrichment to the teaching environment and could relieve some of the stressors that community college faculty experience in pursuing additional education to stay current in their teaching fields.
4. Community College administrators should pay closer attention to creating environments that promote greater teacher empowerment. By creating environments that allow faculty members to gain competence and to expand their professional stature and growth in their belief that they have the capacity to influence and to impact student learning. This environment could ultimately result in greater commitment from faculty members and could create more enriched learning environments for their students.
5. Community college administrators should support and sustain professional rewards for career paths of faculty who mentor students and who excel in teaching inadequately prepared students.
6. Community college administrators should encourage faculty to exert extra effort to model themselves as optimistic and constructive teachers and to form support groups. These efforts could help to motivate unmotivated

students and could add a dimension of teacher helping other teachers' students to learn, as well as teachers helping other teachers.

7. Community college administrators should plan, build, and provide better facilities, teaching tools, and materials for their faculty.

According to Nagel and Brown (2003), teachers will always have some stress. Stress does have some positives sides, such as motivating teachers to (1) examine new instructional strategies, (2) adopt innovative approaches to help students become more motivated, and (3) take time to reflect on their teaching practices. Negative stress occurs when teachers are overwhelmed. However, if teachers have greater social support, shared decision-making processes, wellness programs directed to enhance their mental and physical health, and trained mentors to assist both new and seasoned teachers, community college faculty will experience less stress. Good stress management techniques have three benefits. The first benefit will reduce the physiological effects of stress, and secondly, these techniques may improve job performance and reduce absenteeism (Pert, 1986; Seldin, 1991). A third benefit of stress management techniques is that they may reduce teacher burnout and attrition (Tye, 2002).

Knowledge of occupational stressors and coping strategies can help community college faculty to be more prepared to face their responsibilities each day. In adopting and integrating useful coping strategies into their daily routines, community college faculty will be more able to safeguard their personal and professional well-being. a repertoire of personalized coping strategies can assist in preventing stress to spread to

students, other faculty members, and to the community. Turning stressors into positive ones could help faculty to become more effective, empowered, and successful at their workplaces in community colleges.

Ancillary Findings

In addition to the 54 items, community college faculty members were asked to assess the level of the stress regarding two general estimates of stress. Forty-eight faculty members completed these two items, responding that work life was more stressful than was home life. Responses to these two questions were reported in Table 10 of Chapter IV. When respondents were asked to identify their five highest stressors, they surprisingly chose stressor, S07, *having inadequate facilities*, as the third highest stressor and S23, *advising students*, as the fifth highest stressors. However, data obtained from SPSS had ranked these two as somewhat stressful.

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APPENDIX A

#____

COMMUNITY COLLEGE BUSINESS FACULTY STRESS AND COPING SURVEY

SECTION 1. Sources of Stress You Face in Your Teaching Job

Different people have different ways of perceiving their stressors. From the following list, indicate the extent to which each stressor is affecting your business teaching environment by placing an "X" in the appropriate areas to rate the level of stress that best describes how you experience each of these stressors.

1 = Not Stressful 2 = Somewhat Stressful 3 = Considerably Stressful 4 = Decidedly Stressful 5 = Extremely Stressful

STRESSORS	LEVELS OF STRESS				
	1	2	3	4	5
1. Participating in the work of departmental committees					
2. Participating in the work of college committees					
----3. Participating in work-related activities outside regular working hours					
4. Meeting social obligations (clubs, parties, volunteer work) expected of me because of my position					
5. Complying with departmental rules and regulations					
6. Complying with college rules and regulations					
7. Having inadequate facilities (office, library, laboratories, classrooms)					
8. Evaluating the performance of students					
9. Making presentations at professional conferences					
10. Making presentations at faculty meetings					
11. Imposing excessively high self-expectations					
12. Receiving inadequate college recognition for community services					
13. Having students evaluate my teaching performance					
14. Resolving differences with fellow faculty members					
15. Having insufficient time to keep abreast of current developments in my field					
16. Having insufficient authority to perform my responsibilities					
17. Believing that progressing in my career is not what it should or could be					
18. Assignment of duties that take me away from my office					
19. Being interrupted frequently by telephone calls and drop-in visitors					
20. Securing financial support for my research					
21. Frequently being requested to provide community services					
22. Teaching inadequately prepared students					
23. Advising students					
24. Preparing a manuscript for publication					
25. Being unclear as to the scope and responsibilities of my job					
26. Having insufficient reward for institutional services					
27. Having inadequate time for teaching preparation					
28. Feeling pressure to compete with my colleagues					

1 = Not Stressful 2 = Somewhat Stressful 3 = Considerably Stressful 4 = Decidedly Stressful 5 = Extremely Stressful

STRESSORS	LEVELS OF STRESS				
	1	2	3	4	5
29. Having repetitions in teaching assignments					
30. Having repetitions in job assignments					
31. Writing letters and memos, and responding to other paper work					
32. Having insufficient time for performing the service function					
33. Feeling that I have too heavy a workload, one that I cannot possibly finish during the normal work day					
34. Attending meetings which take up too much time					
35. Dealing with program changes that impact my job					
36. Dealing with reduced enrollment that impact my job					
37. Receiving insufficient recognition for teaching performance					
38. Trying to influence my chairperson=s actions which affect me					
39. Trying to influence my chairperson's decisions which affect me					
40. Not having clear criteria for evaluating service activities					
41. Resolving differences with my chairperson					
42. Lacking congruency in institutional goals					
43. Lacking congruency in departmental goals					
44. Lacking congruency in personal goals					
45. Having to teach subject matter for which I am not sufficiently prepared					
46. Receiving insufficient institutional recognition for research performance					
47. Lacking personal impact on institutional decision making					
48. Lacking personal impact on departmental decision making					
49. Not knowing how my chairperson evaluates my performance					
50. Receiving inadequate salary to meet financial needs					
51. Not having clear criteria for evaluation of research and publication activities					
52 Having job demands which interfere with other personal activities (recreation, hobbies, and other interests)					
53. Having job demands which interfere with family					
54. Being drawn into conflict between colleagues					

Please add other sources of teaching-related stressors in the blanks provided below. Then, indicate the extent to which each stressor is affecting your business teaching environment by placing an "X" to rate the level of stress that best describes how you experience each of your stressors in the areas below.

1 = Not Stressful 2 = Somewhat Stressful 3 = Considerably Stressful 4 = Decidedly Stressful 5 = Extremely Stressful

STRESSORS	LEVELS OF STRESS				
	1	2	3	4	5
55.					
56.					
57					
58.					

Please rate your level of stress by placing an "X" in the appropriate areas below:

1 = Not Stressful 2 = Somewhat Stressful 3 = Considerably Stressful 4 = Decidedly Stressful 5 = Extremely Stressful

DESCRIPTION	LEVELS OF STRESS				
	1	2	3	4	5
59. Assess the level of stress you typically experience in your work life					
60. Assess the level of stress you typically experience in your home life					

61. From the stressor items on the previous pages, Items 1-54, list the top five (5) most stressful situations you encounter. (Please use item numbers and prioritize to complete this response.)

(1) _____ (2) _____ (3) _____ (4) _____ (5) _____

Section 2. How You Cope with Stress You Experience

Individuals react to sources of pressure and the effects of stress in a variety of ways. Usually, we all make some attempt at coping with these difficulties, consciously or subconsciously. From the list below, select and rate Items 1 through 50 in terms of the extent to which you use these coping strategies to relieve your teaching stressors by placing an "X" in the appropriate areas below.

5 = Extensively use 4 = Use frequently 3 = Use sometimes 2 = Use occasionally 1 = Never use

COPING STRATEGIES	LEVELS OF USE				
	5	4	3	2	1
1. Acknowledging self limitations					
2. Attending plays					
3. Avoiding problems					
4. Buying time to stall an issue					
5. Cleaning					
6. Cooking					
7. Coping Strategies					
8. Dancing					
9. Dealing with problems immediately					
10. Dealing with problems in an unemotional way					
11. Developing stable relationships					
12. Dining out					
13. Doing nothing					
14. Exercising					
15. Formulating a new goal					
16. Gardening					
17. Implementing time management					
18. Inventing ways to make work more interesting					
19. Learning to say "no" gracefully					
20. Learning new skills					
21. Listening to audio books					
22. Listening to music					
23. Meditating					
24. Planning ahead					
25. Playing games					
26. Playing sports					
27. Praying					
28. Prioritizing work					
29. Reading for enjoyment					
30. Relaxing for short periods					
31. Seeking advice from supervisor					
32. Seeking support from supervisor					
33. Separating home from work					
34. Separating work from home					

5 = Extensively use 4 = Use frequently 3 = Use sometimes 2 = Use occasionally 1 = Never use

COPING STRATEGIES	LEVELS OF USE				
	5	4	3	2	1
35. Sewing					
36. Shopping					
37. Suppressing emotions so that stress will not show					
38. Taking bubble baths					
39. Taking time for yourself					
40. Talking to peer(s) about events					
41. Traveling					
42. Using home as a refuge					
43. Walking					
44. Watching the sun set					
45. Watching television					
46. Watching movies					
47. Watching sporting events					
48. Working on hobbies					

Please add any additional coping strategies you use to reduce your teacher-related stress in the blanks provided below. Then, rate these strategies in terms of the extent to which you use each coping strategy.

5 = Extensively use 4 = Use frequently 3 = Use sometimes 2 = Use occasionally 1 = Never use

ADDITIONAL COPING STRATEGIES	LEVELS OF USE				
	5	4	3	2	1
49.					
50.					
51.					
52.					

Section 3. Demographic Data

For Questions 1 – 15: Please furnish relevant demographic data that will be used in this study. Respond by placing a checkmark to the left of response that most fits your demographics.

---

1. What is your gender?

___ Male ___ Female

2. What is your marital status?

___ Single ___ Married
___ Divorced ___ Widowed

3. Do you have dependent children in your home?

___ Yes ___ No

4. What is your age?

___ 20 – 25 ___ 26 – 30
___ 31 – 35 ___ 36 – 40
___ 41 – 45 ___ 46 – 50
___ 51 – 55 ___ 56 – 60
___ 61 – 65 ___ 66 – 70

5. How long have you taught business subjects in a community college?

___ 1 – 5 years ___ 6 – 10 years
___ 11 – 15 years ___ 16 – 20 years
___ 21 – 25 years ___ 26 – 30 years
___ 31 – 35 years ___ 35 – 40 years

6. What is your highest degree earned?

___ Associate's ___ Bachelor's
___ Master's ___ Doctorate

7. Are you currently working on another degree?

___ Yes ___ No

8. Do you have tenure?

___ Yes ___ No

9. Do you work a second job?

___ Yes ___ No

10. Are you working on an additional certification?

___ Yes ___ No

11. What is your current professional rank?

___ Instructor ___ Assistant Professor
___ Associate Professor ___ Professor

12. Think about your present health in general. During the past six months, would you say your health has been:

___ Very bad ___ Bad
___ Neither good or bad ___ Fair
___ Very good ___ Good

13. How does your present health compare with your health when you became a teacher?

___ Very much worse ___ Worse
___ The same ___ Better
___ Very much better

14. What is your employment status?

___ Full time ___ Part time

15. Knowing what you know now, would you again choose teaching as a career?

___ Yes ___ No

Adapted with permission from *Coping with Faculty Stress* by Walter H. Gmelch (1993)

Section 2. *How You Cope With Stress You Experience*: *Information was* obtained from a meeting with a focus group of business teachers and doctoral committee members.

Section 3. *Demographic Data:* Data derived from meeting with doctoral committee members and literature search.

APPENDIX B

Gmelch, Walter, 08:38 AM 2/5/99 - , RE: Permission to Use Survey I

From: "Gmelch, Walter" wgmelch@iastate.edu
To: " ' Genevieve J. Allison' " gallison@accd.edu
Subject: RE: Permission to Use Survey Instruments
Date: Fri, 5 Feb 1999 08:38:04 -0600
X-Mailer: Internet Mail Service (5.5.2448.0)

Dear Genevieve:
Thank you for your request to use the FSI in your study. You are granted permission to use the modification of the instrument in your research. My only request is that you cite the copyright (c Walter H. Gmelch, Iowa State University) and provide a summary of the result and implications. Thank you and best wishes with your study.
Kindest regards,

Walt
****

Walter H. Gmelch, Dean
College of Education
Iowa State University
E262 Lagomarcino Hall
Ames, IA 50011-3190
Phone: (515) 294-7000
Fax: (515) 294-9725
E-Mail: wgmelch@iastate.edu

-----Original Message-----
From: Genevieve J. Allison (mailto:gallison@accd.edu)
Sent: Thursday, February 04, 1999 9:48 AM
To: wgmelch@iastate.edu
Subject: Permission to Use Survey Instruments

On January 21, 1999, I telephone you to request permission to use your faculty stress surveys to collect information for my dissertation. I have attached the surveys that I want to use. The citation still needs some work, and I have changed the word "university" to "college". I hope this change meets with your approval.

I just need a short e-mail from you stating that I may use the attached instruments.

APPENDIX C

26722 Turkey Run
Boerne, TX 78006
November 12, 2002

Title FirstName LastName
College Name
Address
City, State ZipCode

Dear Title LastName:

As a community college business teacher at San Antonio College for more than fifteen years and having personally faced stress, I am interested in knowing what stresses other community college business teachers. As I am sure you know the environment of a community college can be stressful. As a doctoral student at Texas A&M University, I would like to know your responses to the enclosed survey questionnaire.

You were chosen, along with approximately one hundred other Texas community college business teachers, to participate in a study through Texas A&M's Educational Human Resource Department regarding teacher stress and coping strategies. Your responses will have a great potential for helping other Texas business teachers to identify their stressors and to use coping mechanisms to lessen the impact of these stressors in their lives. Stress has been found to impact not only educators themselves but also students in the classroom and, at times, entire campuses.

The research study has been reviewed and approved by the Institutional Review Board—Human Subjects in Research, Texas A&M University. For research-related problems or questions regarding subjects' rights the Institutional Review Board may be contacted through Dr. Michael W. Buckley, Director of Research, Office of the Vice President for Research Compliance, at (979) 845-8585 (mwbickley@tamu.edu). Also, I have received the approval of my doctoral chairperson, Dr. Kenneth Paprock, whom you may contact at (979) 845-5488 (kpaprock@tamu.edu). In addition, I have the permission of the president of Texas Business and Technology Educators Association (915) 723-6111 (Aldridge@jimned.exc14net). This survey will take you about 20 minutes to complete. All responses will be kept **CONFIDENTIAL** and are coded for follow-up purposes only.

A copy of the results of this survey will be available upon request. I sincerely thank you for your time and cooperation in responding by November 25, 2003. Please return the survey in the enclosed stamped, self-address envelope.

Very truly your,

Genevieve J. Allison
Principal Investigator
(210) 698-0307
(210) 771-3441
E-mail: gallison@accd.edu

Enclosures

APPENDIX D

26722 Turkey Run
Boerne, TX 78006
February 12, 2003

Title FirstName LastName
College Name
Address
City, State ZipCode

Dear Title and LastName:

I need your help. I hope that received my survey form asking you to evaluate the stressors that you as a business teacher experience in your daily work life and home life. The time the survey was mailed on November 12, 2002; however, it may have gotten lost in the mail or have ended up at the wrong address.

Your answers are very important for my study because you as a business educator only have insight into this particular matter. Other phases of this research cannot be completed until I receive and complete an analysis of your responses to the questionnaire. Therefore, to expedite your response, I am mailing you the survey questionnaire as a follow up to the original one. Please find a few moments of your time to complete the stress questionnaire and mail it to me in the stamped, self-addressed envelope by Friday, February 20, 2004.

The results of this study will be shared with the Texas Business and Technology Educators Association and the Accounting Section of Texas Community College Teachers Association. By sharing your experience, you could contribute significantly toward identifying our unique problems and may even solve some of the problems we face as business teachers day in and day out.

Let your opinions be voiced and heard.

Sincerely,

Genevieve J. Allison

Enclosures

VITA

GENEVIEVE J. ALLISON
26722 Turkey Run
San Antonio, Texas 78006

EDUCATION

2004	Doctor of Philosophy, Educational Human Resource Development Texas A & M University, College Station, Texas
1979	Master of Business Education University of North Texas, Denton, Texas
1974	Bachelor of Science, Education Texas State University, San Marcos, Texas
1965	Associate of Arts, General Studies Altus Junior College, Altus, Oklahoma

CERTIFICATION

Post-Secondary Certification
Life Time Teacher's Certification, Business and English

EXPERIENCE

1988 – Present	Professor Administrative Computer Technology San Antonio College, San Antonio, Texas
1984 – 1988	Instructor and Evening Coordinator Business Technology Department San Antonio College, San Antonio, Texas
1976 – 1984	Business and English Teacher Business and English Departments East Central High School, San Antonio, Texas
1975 – 1976	Instructor in Clerical Cluster San Antonio Skills Center San Antonio College, San Antonio, Texas