

DESIGNING AND DOCUMENTING A PROGRAM TO SUPPORT TEACHERS' STRESS
MANAGEMENT AND SENSE OF EFFICACY WITHIN THE CLASSROOM

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HELENA EVE SROCZYNSKI

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APPROVED: _____
Cary Cherniss, Ph.D.

Anne Gregory, Ph.D.

DEAN: _____
Stanley Messer, Ph.D.

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ABSTRACT

The purpose of this dissertation was to design and document a program to support teacher stress management and development of efficacy within the classroom for full-time, K-8th grade teachers. The process followed Maher's (1999) model to ensure the relevancy, practicality and defensibility of the program. Relevant research revealed that teacher stress comes from multiple sources and has a proven effect on teachers' health, classroom effectiveness, and student outcomes. The bidirectional relationships between stressful environments, negative feelings, and behavioral responses to stress contribute to the overall cycle of stress and the inability to cope with future events. The current social context does not recognize the importance of teacher stress management, which only contributes to teacher stress. However, effective stress management programs support teacher well-being and effectiveness and positive student outcomes. Twenty-three elementary and middle school teachers from two schools located in a suburban district in New Jersey completed the needs assessment to help clarify the needs of the target population, support the research, and guide the program's purpose and goals. These teachers were more stressed and had lower levels of perceived efficacy than typical teachers, experienced stress from multiple sources, and perceived negative effects of stress on their teaching. A statistically significant negative relationship was found between stress and sense of efficacy among the respondents. Information was then gathered about evidence-based stress management and efficacy-building programs and techniques. This review revealed that techniques to promote mindfulness, positive psychology concepts, self-care activities, and the problem-solving process support stress management and development of efficacy. Successful programming should also include teacher input, administrative support, structured communication, and ongoing monitoring

and support. Following completion of the needs assessment and the review of current programs, a 16-session program was designed using the results. Phone interviews were conducted to assess if the context could support the program as designed. The context assessment revealed that most of the elements of the program were supported, with the main concern being that teachers are already overwhelmed. The final program was documented and an evaluation plan was developed to support future decisions about the program's effectiveness and generalizability.

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CHAPTER I

INTRODUCTION

The purpose of this dissertation was to design and document a program to support stress management and sense of efficacy within the classroom for full-time teachers that are teaching Kindergarten through eighth grade students in a suburban district. The program was designed after a review of relevant research, a needs assessment, a review of alternative programming, and an assessment of the current context. Following a programmatic approach ensured the relevancy, usability, and justifiability of the program, as well as the practicality of the program for the target population and other stakeholders and within the given context (Maher, 1999).

Stress is a multidimensional construct that can have a multitude of negative effects, including physical and psychological symptoms for individuals experiencing stressful events and the decreased ability for those individuals to positively impact their environment. Therefore, stress management and prevention programs are an important part of helping individuals develop their ability to minimize stress and maximize their positive impact on themselves and others. Since people experience different types of stress, varying severity levels of that stress, and different effects of stress on themselves and those around them depending on their setting and role, programs that are geared toward stress management must take into consideration the needs of a specific population, as well as the use of evidence-based strategies if they are to be effective.

Teachers are one particular group facing constant stress, which has a proven effect on their mental and physical health and their ability to be effective within the classroom. Policy and practice has largely ignored this aspect of education, which only contributes to the increased level of teacher stress, dissatisfaction, burnout, attrition, and ineffectiveness. The goal of this dissertation was to highlight the current state of teacher stress and design an effective program to support teachers' stress management and effectiveness that is relevant, tolerable, and evidence-based. The program design has been based on current stress theory and research, existing programming, characteristics of the target population, and consideration for the context of the program. The final product is in the format of a Program Design Document, as outlined in Maher (1999), which will allow for the program to be developed and implemented by an individual within the specified context and for the specified target population. It also includes an Evaluation Plan that can be used to evaluate the effectiveness of the program as implemented for a specific population of teachers.

General Stress Theory

Although stress is a common concept of study, the multidimensional nature of stress creates an ever-present need to highlight its impact on specific populations and tailor programming to fit those populations. In general, Lazarus (1984) defined stress as a relationship between person and environment, which included the interaction of personal characteristics and the nature of an external event. In his well-known appraisal theory, he specifically defined psychological stress as "a relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being." This definition demonstrates the importance of

considering the personal characteristics of specific groups of people as well as the common stressors that that group might be facing within studies of stress. In addition, it supports the idea that even if external stressors cannot be changed directly, individuals from any group may still benefit from interventions designed to affect their perceptions of events and their ability to effectively manage stress.

Stressful events themselves can change in type and/ or severity over time, which may further affect an individual's appraisal of these new stressful events and may further tax his or her ability to cope. Since an individual's appraisal of an event and ability to cope will guide his or her response to a stressor, the stress relationship is always changing (Lhospital & Gregory, 2009). In addition, attempts to strengthen personal resources may not be effective if the individual is lacking the energy to enact change and instead appraises these attempts as further sources of stress. This constantly changing relationship between the individual and their environment can be thought of as an ongoing cycle of stress. Bandura's (1997) model of reciprocal causation highlighted the bidirectional relationships of personal factors, behavior, and environmental events. If an individual is lacking the personal resources to cope with external events, then he or she will not behave in a way that will help them manage the stressful event and will not be able to cope with the stressor. This inaction will cause lower perceptions of self-efficacy, which will in turn negatively impact the individual's appraisal and ability to cope with future stressful events. In addition, that individual will continually exhaust his or her own personal resources.

However, if an individual has awareness of possible stressful events and has had the opportunity to develop their personal resources, his or her appraisal of stressful events

will lead to the ability to analyze the situation and act in such a way to maintain his or her well-being. Every time that individual effectively copes with a stressful event, he or she will build their self-efficacy and thus increase his or her ability to positively impact the environmental factors involved (Bandura, 1997). Within the helping fields, like teaching, individuals need this high degree of self-regard to be able to take genuine and effective helping action (McWilliams, 2004).

Self-Efficacy

A person's sense of efficacy relates to their belief in their own power to produce desired effects (Bandura & Locke, 2003). If individuals have a sense of personal efficacy, it will motivate them to act or to persevere in the face of challenges. When individuals are lacking a sense of personal efficacy, it may affect their emotional well-being and make them more vulnerable to stress and depression. However, a strong sense of personal efficacy can lead to effective problem-solving and decision-making. Pro-activity and reactivity work in conjunction, which can be demonstrated through an individual setting personal goals to be mastered, mobilizing their efforts and resources to prepare for reaching those goals, and then adjusting those goals after receiving reactive feedback. This process supports a future belief in that individual's personal efficacy, as well as the setting of more challenging goals and more self-satisfaction, even in the face of greater challenges.

Stajkovic and Sommer (2000) tested Bandura's rationale for reciprocal relationships between self-efficacy and causal attributions and found that skills and self-efficacy were both related to effective performance. Stajkovic and Sommer based their study on Bandura's (1977) four sources of efficacy: enactive (actual experience),

vicarious (exposure to information), social (observation of others and verbal persuasion), and psychological (personal beliefs, attributions, and emotional arousal). They described the reciprocal relationship of efficacy and attribution as assessment of a situation, persuasion (the gathering of motivation and resources), and regulation of situations and actions (which leads to future beliefs and success). They hypothesized that individuals with high self-efficacy would attribute successful performance to internal causes and performance failure to external causes, and individuals with low levels of self-efficacy would attribute both their success and failure to internal causes. They also went further and tested the reciprocal hypothesis that performance success would increase subsequent perceptions of efficacy when attributed to internal causes and that failure would not decrease subsequent perceptions of efficacy if it was attributed to external causes. For individuals who lacked a strong sense of efficacy, Stajkovic and Sommer hypothesized that if those individuals attributed both success and failure to internal causes, their success would increase self-efficacy while their failure would decrease their already low sense of self-efficacy. Using path analysis, the researchers found that self-efficacy and causal attributions were directly and reciprocally related and that these factors predicted subsequent performance, which confirmed all of their hypotheses. They also found that even individuals who had the skills to succeed at a task, yet had a lower sense of self-efficacy than others with the same abilities, may perform less successfully than those with a higher sense of self-efficacy. This finding implied that a lower belief in efficacy can actually negatively influence success, even when an individual has the skills to successfully complete a task. This finding supported the power of self-efficacy and the effects that attributions and previous performance can have on an individual's perception

of their own efficacy. These findings need to be considered within the orientation of any program designed to develop self-efficacy and demonstrate the added importance of acknowledging current levels of efficacy and whether individuals are attributing success and failure to external or internal causes.

The study described above supported the reciprocal relationship of attribution and self-efficacy, as well as the benefits of helping individuals build self-efficacy, but an important question remains for anyone looking to help individuals develop a sense of self-efficacy. Can self-efficacy actually be increased by external factors? And given that both personal efficacy and attribution are measured through self-reports, can examples of increased self-efficacy be measured in a way that does not depend on using a common method of measurement? Bandura and Locke (2003) found evidence across multiple studies that people who were given the belief from external sources that they can control aversive events demonstrated less autonomic arousal and less performance impairment than those that believed that they lacked personal control over events, even when the events themselves did not change. This evidence linked self-efficacy, well-being, and perseverance, as well as supported the idea that perceptions of self-efficacy can be increased with beneficial results. Bandura and Locke gathered evidence that self-efficacy can change in individuals over time and can be increased through influencing any one of the four sources that Bandura (1977) had outlined. In one study of oral surgery patients, the results showed that enhancing the patients' sense of efficacy by giving them a greater sense of the ability to control their relaxation was more effective than actual relaxation and sedation to reduce their levels of anxiety and agitation. Patients in this study were provided with varying beliefs about their own effectiveness at relaxing. An inverse

relationship was found between the level of relaxation the patients were told that they were in and their reports of anxiety and agitation. In other pain studies, patients were given a pain tolerance test before a procedure and provided with a bogus norm comparison. When patients believed that they had a higher psychological tolerance for pain, they were able to better tolerate the same amount of pain as when they were told they were comparable to a normative group with a lower tolerance for pain. Changes within other studies of self-efficacy were attributed to enactive and vicarious experiences that influenced the individual's future perceptions of self-efficacy and perseverance on tasks. One study of phobics showed that observing others modeling anxiety-provoking tasks helped the phobics have higher perceptions of their own ability to cope with those tasks and be able to successfully perform the tasks. Visualization of a hierarchy of increasingly more threatening events along with relaxation also increased perceived coping efficacy and led to higher coping performance. Belief in the amount of control participants had in some studies was another source of increased self-efficacy and performance. An example of the effects control beliefs can have was seen among phobics who were given the impression that they could control the amount of anxiety attack-provoking chemical they inhaled. Those participants who believed that they could control the amount reported higher levels of self-efficacy and the ability to more effectively cope with the same levels of the chemical as the control group. Additional studies even showed that perceived self-efficacy, influenced by positive feedback, can override past performance as a predictor of subsequent performance and lead to higher goal-setting. All of the studies cited showed that improving perceived self-efficacy through external influences, even if vicarious or false, led to more perseverance, higher productivity, and

higher performance. They also demonstrated that perceived self-efficacy independently influenced performance when controlling for past performance and ability, which meant that actions taken to improve efficacy could be effective no matter what a person's previous experiences have been. To be able to cope with future failure or social criticism and still maintain motivation, individuals need resilience and a high enough sense of self-efficacy to sustain their actions and manage distress, whether that efficacy comes from personal attributions and beliefs about previous success or from other sources, such as feedback from or observations of others. So the development of self-efficacy, whether in the face of stressful situations or not, can be beneficial to the overall pattern of goal-setting, positive action, and the ability to persevere and cope, which will in turn help support continual development and maintenance of high levels of self-efficacy.

Stress to Burnout

Unfortunately, if an individual continually suffers from exposure to stressful events and the inability to cope with that stress, then the cycle of stress continues to spin. This prolonged stress and ineffectiveness at coping may lead to burnout, which Fulton (1998) defined as physical or emotional exhaustion resulting from prolonged stress or frustration. At the start of the "burnout cascade," individuals become less caring and committed as a result of unrelieved stress, strain, and disillusionment (Cherniss, 1995). Those individuals then change to accommodate the stress and frustration by scaling down their goals to feel more competent, blaming others, and reducing their psychological investment. Not only do individuals who are burned out feel less effective, but they also become less effective.

Unfortunately, this focus on an individual's problems with character or behavior may cause a loss of focus on the problems within an individual's work environment that may contribute to their burnout. Angerer (2003) highlighted current research that suggests that burnout is also an environmental problem and that job satisfaction and burnout are negatively correlated. His summary of current theory described different phases of burnout that include many of those characteristics described by Cherniss (1995): differing levels of inefficacy, depersonalization, and exhaustion. Angerer attributed the exhaustion to being overextended within the workplace and being unable to manage the stress as an individual. Cynicism occurs along with depersonalization, as the individual adopts an uninvolved attitude to protect themselves from the exhaustion. Since they are overextended, the individual begins to feel inadequate, thus inefficient. The most common domains of the work environment that have been related to burnout are work overload, lack of control, insufficient rewards, the breakdown of the community, the absence of fairness, and a conflict of values.

Teacher Stress, Burnout, and Self-Efficacy

Stress is commonly found among individuals within human service occupations, most likely related to constant interaction with people in need and increased levels of dependence on and criticism of those in helping professions (Cherniss, 1995; Fulton, 1998). Fulton's research found specifically that the populations most at risk for burnout are those that work with the general public, people who have disabilities or severe illnesses, or children. People who have a tendency to focus on relationships rather than on their own needs or desires have been found to be more sensitive to the effects of interpersonal stressors (Nagurney, 2007). Many in human service fields feel poorly

prepared for the reality of their occupation and suffer a loss of their idealistic view of helping once they are working in the field. This strain can cause a depletion of personal resources and the inability to appraise events as tolerable, as described above. Once the burnout cascade has begun, the effects can lead to a decline in caring and giving and the increase of self-support instead of self-sacrifice. Coffey's (1999) study of occupational stress among community mental health nurses revealed that a substantial portion of the nurses studied were experiencing high levels of burnout related to emotional exhaustion. The most pressing concerns included a lack of community resources and interruptions in the workplace, confirming the influence of organizational conditions on individual stress and burnout levels of those in helping professions. These helping professions need to be more closely investigated when considering specific populations for studies of stress and development of stress prevention programming, especially since stress and burnout can lead to both personal decline and less effectiveness in such necessary fields.

Barford and Whelton (2010) confirmed Fulton's findings that those in the helping professions that work with children and youth, especially those that work with children considered to be high-need children, are highly susceptible to burnout. In their study of 94 child and youth care workers, they found indicators of high levels of mental and physical exhaustion. Those with the least amount of experience in the field were the most susceptible to burnout. The workers' levels of burnout were influenced by organizational characteristics, individual characteristics, and existing social support. The characteristics related to work environment, namely high degree of work pressure, poor understanding of roles, and lower commitment to the job were most predictive of burnout, and depersonalization was predicted by both work environments and personality.

Teaching is considered one of the most stressful occupations (Klassen, 2010; Klassen & Chiu, 2011; Lhospital & Gregory, 2009). In addition, evidence suggests that regardless of differences in stress levels across different sociodemographic variables, stress has a major impact on most teachers (Boyle, Borg, Falzon, & Baglioni, 1995). Boyle et al. specifically defined teacher stress as a negative emotional response that is accompanied by physiological and biochemical changes resulting from aspects of the job and certain perceptions of demands as being threatening to self-esteem or well-being. The stressful event then triggers coping mechanisms that are designed to reduce the perceived threat. They connected this stressful response to Lazarus' (1984) appraisal theory by further describing how personal characteristics may interact with perceptions of the stressor and how stress reactions are affected by external sources, individual perceptions and interpretations, and available coping mechanisms. More simply yet just as accurate, Lhospital and Gregory (2009) described teacher stress as the measure of a teacher's psychological distress in response to a stressor.

If teachers are stressed then they lack the resources to effectively manage their context, which may create a continuous cycle of reactive and punitive responses (Jennings & Greenberg, 2009). Lhospital and Gregory (2009) provided an example of a teacher faced with a challenging student to further demonstrate the cycle of reactive and punitive responses. If a teacher cannot manage the student based on their own appraisal of the situation, then the teacher's distress will increase and their sense of self-efficacy will diminish. As the teacher's distress and sense of incompetence increases, it will continue to contribute to their stress and their inability to cope or appraise situations as ones they can cope with. This cycle contributes to a constant cycle of disruption and the

triggering of the burnout cascade. Specifically for teachers, burnout has been significantly associated with cumulative daily experiences of negative affect provoked by stressful work-related experiences. The further stress of emotional regulation exacerbates the effect and lack of self-efficacy continues both the internal cycle and the external effects on students and other stakeholders.

Research on teacher self-efficacy confirmed the link between self-efficacy and behavior and affect. Deemer & Minke (1999) reviewed measures of teacher self-efficacy and found that self-efficacy related to goal-setting, effort expended, and persistence. Specifically, self-efficacy in teachers was associated with instructional practices and attitudes toward students. Tschannen-Moran and Woolfolk Hoy (2001) found that teacher efficacy was strongly related to positive educational outcomes such as teachers' persistence, motivation, commitment, and instruction and student achievement, motivation, and self-efficacy. Previous measures of teacher efficacy related perceptions of efficacy to locus of control and the sense of responsibility that teachers feel for student success but lacked the specificity needed to assess teacher behaviors within actual teaching context and situations. More recent measures based on Bandura's (1997) social cognitive theory that a belief in one's capabilities to produce desired results comes from beliefs about competence and previous events tie thoughts and emotions into effective or ineffective actions (Tschannen-Moran & Woolfolk Hoy, 2001). These measures contain more specific teaching context and situations that teachers may encounter and also bring in the relationship between self-efficacy and stress. Tschannen-Moran and Woolfolk Hoy proposed that teacher self-efficacy can be described as a single factor that reveals itself across three subscales: instruction, management, and engagement and can be linked to

teacher stress and appraisal of situations. Fives and Buehl (2010) confirmed this construct and the link between efficacy and environmental factors through their study of practicing teachers.

Sources of Teacher Stress

So where does all this stress come from? Identifying the sources of stress can help researchers, interventionists, teachers, and other stake-holders alike better understand why this profession is so vulnerable as well as how to best relieve stress and increase the positive effects associated with increased efficacy. If teacher stress is related to one or two sources, then action can begin at those sources to benefit all of those involved in the stress cycle. However, if the stress is related to a multitude of sources and if those sources continue to change over time, then it may be beneficial for stress prevention and intervention to reflect a more generalized approach to build teachers' overall resiliency in a variety of settings and situations.

It is likely that teacher stress comes from many sources and that these sources change over time. The study by Boyle et al. (1995) supported the multidimensionality of these sources of teacher stress. Generally, sources of stress across the helping professions included feeling inadequate from a lack of autonomy, difficulties with clients, a lack of client gratitude, a lack of intellectual stimulation, and a lack of collegiality and the existing social context of the time, which may include tension between bureaucratic procedure and compassionate helping, the ambivalence of others toward helping, and the impact of any recent historical changes (Cherniss, 1995).

To pin down specific sources of current teacher stress, a thorough review of literature, research, and popular media must be considered. Previous research conducted

by Turk, Meeks, and Turk (1982) revealed seven categories of stressors: poor school environment, pupil misbehavior, poor working conditions, personal concerns, relationships with parents, time pressures, and inadequate training. Poor school environment included poor relationships among teachers, administrators, colleagues, and parents; lack of public support; lack of student motivation and affect; job insecurity; and role conflict. While many of these stressors were related to organizational factors, there was also evidence that individual characteristics influence teacher stress levels. Forman (1990) found that cognitive-mediational factors influence teachers' experience of stress and reactions to stress. Irrational beliefs about the need for constant approval, complete control, fairness and punishment, lack of frustration, constant help, accurate placement of blame for problems, and avoidance of problems contribute to work-related stress.

Although the review conducted by Turks et al. (1982) was published approximately thirty years ago, current research confirms the influence and strength of these stressors, both within the context of the organization and within the individual. Most commonly right now, teachers' stress and negative emotions seem to be related to student misbehavior and disobeying of rules, uncooperative colleagues and parents, length of teaching experience, greater levels of guilt, lower levels of commitment to care, the open-endedness of teaching, increased accountability, and increased work load (Boyle et al., 1995; Klassen, 2010; Klassen & Chiu, 2011; Perry & Ball, 2007). Other researchers have found that low salaries, poor working conditions, negative classroom discipline, extensive paperwork, poor teacher health, and lack of administrative support, respect, parental support and involvement, advancement opportunities, support from and interactions with other professionals also contribute to teachers leaving the profession

(Cherniss, 1995; Justice & Espinoza, 2007; Lhospital & Gregory, 2009). Popular media has found and reported similar sources of teacher stress and there are multiple articles describing examples of the sources that have been researched (Mooney, 2007c).

The most powerful evidence of teacher stress is best described by teachers themselves. The Bill and Melinda Gates Foundation (2012) recently reported the results of a survey of more than 10,000 teachers. Teacher reports revealed the belief that many factors affect student learning, with the strongest impact coming from family involvement and support, high expectations for students, effective and engaged administration, smaller class size, learning experiences based on competitive skills, curriculum that goes beyond the information on standardized tests, available resources for differentiation of instruction, and up-to-date technology. However, teachers reported feeling challenged by lower parent participation, high levels of time needed to support students (with an average reported work day of 10 hours and 40 minutes), lack of preparation and resources needed to teach consistent standards, and large class size (with an average of 23 students). A number of challenges were related specifically to students, including student misbehavior, students with special needs, students who live in poverty, and students who are considered gifted and talented, as well as struggles with curriculum and accountability, including dependence on standardized tests to demonstrate achievement and determine lessons taught, dependence on a single measure to indicate teacher performance, lack of frequent evaluations with the goal to develop effective teaching practices, lack of time for performance and data analysis, lack of an effective tenure program, lack of student preparation for the workforce and lower student achievement. They also reported challenges relating to an increase in socio-economic and

behavioral challenges and lack of resources, training, and support staff to differentiate instruction. Richards' (2012) study of approximately 1200 Kindergarten through Grade 12 teachers confirmed the results of the Bill and Melinda Gates Foundation survey and summarized that possible sources of teacher stress related to challenges with accountability, lack of administrative or parental support, lack of time for preparation, severe cutbacks, large class sizes, and pay cuts. The top five sources of stress from this nationwide survey were feeling overloaded by work, teaching needy students without adequate support, not enough relaxation time, unmotivated students, and constant pressure of accountability. Other common sources of stress were lack of time for preparation, pressure from testing and pace of demands, large class size, lack of control of school decisions that affected teachers personally, the perception that their personal opinion is not valued, lack of respect from the public, feeling isolated from or unsafe around colleagues or administration, student misbehavior, and a lack of administrative support. A closer look at all of these sources of stress reveals sources that are located with the organizational and social context, as well as the school and classroom context.

Administrative, Legislative, and Societal Factors

Administrative and organizational factors have clearly been linked to stress and burnout. Fulton (1998) found that workers experienced significant levels of burnout when their benefits were cut, there were administration and ownership changes, employees were required to commit to frequent overtime, and there was a reduction in workforce. Acker's (2010) study of relationships between organizational conditions for mental health workers and job satisfaction revealed that the workers were most negatively affected by role conflict, role ambiguity, lack of social support, lack of opportunities for professional

development, and undesirable types of work activities. Unsupportive work environment, as reflected by the above factors, had the strongest statistical relationship to lower job satisfaction when compared to demographic variables. Acker concluded that without a supportive work environment, individuals do not have a way to mediate stress from other organizational factors. Social context is another significant source of stress. Lack of respect from society for child and youth care workers creates a stigma, which in turn makes it difficult to attract and retain qualified employees and provide adequate wages and benefits (Barford & Whelton, 2010).

Media coverage and researchers alike have highlighted specific sources of teacher stress that reflect the above administrative, organizational, and societal factors. Changes within the Newark, New Jersey school system included a large-scale transfer of teachers and administrators, intensified programming, and longer school days and school year (Mooney, 2007c). Mooney's article also highlighted additional stress from inadequate professional development training for the changes being implemented. Margolis and Nagel (2006) found that administrators can mediate change-related stress or become one of the most prevalent stress factors. Within their development and study of an action research group within an urban school setting, they found that lack of resources, lack of support in the face of conflict with students or parents, and lack of opportunities to grow consistently contributed to teacher stress. Also, when administrators did not provide time for rest and recovery among constant demands for change and there was no well-defined structure for the changes, teachers expressed even more anxiety. Klassen (2010) confirmed that time pressure and workload are major contributors to teacher stress.

Social pressure and public opinion lead to legislation such as the No Child Left Behind Act (NCLB), which forced the restructuring of thousands of schools without guidance, money, and recognition of the flaws in the act; and new anti-bullying laws put strain on school districts, administration, teachers, and students (Hu, 2011; Justice & Espinoza, 2007; Mooney, 2007a; Tyre, 2006). NCLB calls for highly qualified teachers but qualities necessary for teaching may not be indicated by certifications alone (Justice & Espinoza, 2007). Regardless of external factors, described in more detail later in this section, and difficult organizational conditions, most teachers are being measured on a single score, not on how much students improve. Even more recent evaluation procedures that take into account student growth have only been put into place by a few states, and each state differs on how that improvement is calculated and how much weight that holds in the overall evaluation. These states are still in the beginning stages of a major policy shift and are facing constant debates about fair evaluation processes and troubleshooting issues with realistic and effective implementation of the process. New anti-bullying laws have been put in place recently to answer to numerous cases of student misconduct and harassment, an increase in suicides related to bullying, and current research on the effects of bullying. The Department of Education (DOE) has urged educators to comply with their responsibility to prevent harassment and reminded educators that student misconduct may fall under new anti-bullying policies and federal anti-discrimination laws (Dillon, 2010). These new mandates put additional responsibilities on teachers, increasing their workload, and threaten additional negative consequences if teachers do not comply with the additional demands.

A new state law in New Jersey requires that additional class time be used for bullying prevention and intervention programs (Hu, 2011). Although many educators and schools welcome the efforts, there is a lot of concern that the laws reach too far, since it includes settings other than the schools, traditional and electronic bullying, and increased sources of reports, and involves no additional resources. The law also requires that schools adopt comprehensive policies that are outlined in over 18 pages of requirements. Some of these requirements include increased staff training and strict reporting time lines. Additional responsibilities for educators include the investigation of complaints and the formation of a School Safety team. Meanwhile the New Jersey DOE will be evaluating school efforts and will be following up on consequences, such as the possibility of losing licenses. Hu reported that schools are concerned about having the people, resources, energy, and liability that are required by this mandate. School staff reported feeling overwhelmed by the law and concerned about being able to implement the law fully. New bills in Texas provide additional examples on an increased burden on school staff, since bullies must be moved to separate classrooms and all incidents must be reported to the state (Smith, 2011).

Unfortunately, the definition of bullying and harassment differ across research, legislation, and school policies. Although most schools and school staff support anti-bullying laws, they are concerned about the effectiveness of government involvement and the lack of a clear definition of bullying (Smith, 2011) Most definitions that teachers are provided with are broad and subjective, which leads to further ambiguity and stress. In addition, teachers are concerned that long-term effects may include the mislabeling of developmentally typical situations and the inability of peers to work out differences

without adult intervention (Hu, 2011). The new law in Texas required an expansion of the definition of bullying that teachers feel may make it difficult for them to protect all groups while not categorizing every situation as bullying (Smith, 2011). Subjective terminology such as “interfering with education opportunities” may include many more incidents than are actually bullying but will require reporting because they fit the definition outlined in the law.

Public opinion and the current social context of education has also led to the call for changes within the pension and benefit systems for educators. In New Jersey, the state legislature recently voted to impose thousands of dollars of costs on approximately 500,000 public workers and retirees (Braun, 2011). These workers lost the expected cost of living increases in their pension and at the same time are facing stereotypes of being “enemies of taxpayers” and “greedy.” Public workers, including teachers, are being portrayed as the reason for current tax increases, yet this reform movement will fall hardest on those public workers that already have the lowest salaries.

Constant change within schools and the policies related to school reform may seem dictatorial to teachers since the source of those changes is detached from those schools (Margolis & Nagel, 2006). According to Margolis and Nagel, the mandates may be in conflict with the student-centered ideals of the teachers and may also reflect an actual disconnect with the time and resources needed to adjust to the changes. The disconnect between policy and available resources may lead to tension and stress among teachers, causing resistance to the changes. This resistance further incites the public and the policy makers and leads to their reactions being ignored or maligned. Teachers’

negative perceptions of the changes manifest as teacher stress and lead to a loss in resiliency.

Support for alternative programming, such as voucher programs and charter schools, poor data analysis procedures to guide future instruction, the push for student achievement and high-stakes testing, and the call for reform of the public pension and benefits systems all contribute to the social context that influences teacher stress (Braun, 2011; Mooney, 2007c). Schools are constantly monitored by state teams and state benchmarks constantly rise without regard for the organizational or social context of the schools (Mooney, 2007a). Pressure to succeed at younger and younger ages, most likely a byproduct of an increasingly competitive global market, may lead to earlier burnout for students, less curiosity and motivation, and more frustration and acting out (Tyre, 2006). Tyre described one school in an upper-middle-class neighborhood in North Carolina where the societal push to create academic standout students led to holding students for an extra year, which increased competition and pressure among students and teachers. Teachers struggled to balance the requirements of their state, expectations from administration and parents, and a high variety of needs among their students. In another school in Colorado, students are being assessed even before Kindergarten, and teachers reported having a difficult time being able recognize student characteristics that were not being tested and being able to nurture students who were developing more slowly. Teachers also reported that their students seemed to be burned out and resisting instruction sooner.

Other environmental factors that are part of the social context, such as economic issues, language barriers, and parent involvement, contribute to teacher stress as well.

Economic downturns lead to poverty, job loss, student transfers, the inability for families to meet their basic needs, and a higher incidence of violence and crime (Mooney, 2007b). In Orange, one in five students transferred or left school during the course of the year preceding Mooney's article, which added to classroom challenges. Teachers also fear for students' safety and futures in these environments. Because of NCLB, schools must raise test scores regardless of language barriers, behavior problems, previous academic achievement and performance, changing leadership and/ or staff, current debt and levels of school aid, and poverty (Mooney, 2007a). Teachers must deal with these social issues that are beyond their control on a daily basis. Teachers in lower socio-economic status (SES) schools rated significantly higher on stress measures than those in middle and high SES schools (Richards, 2012). Not only are teachers affected in the classroom because of students struggling amid these issues, but the focus on test scores also contributes to the organizational factors that have already been shown to affect teacher stress levels. In an elementary school in California, where 75% of students fall below poverty line and 30% of students do not speak English at home, teachers were threatened with losing their funding and their jobs and were required to provide one-on-one tutoring and more hours of instruction, including three and a half hours of after school help (Tyre, 2006).

Parent involvement is another external source of teacher stress. Uninvolved parents were a source of significant stress, especially within areas with lower SES (Mooney, 2007c). But teachers who have students with involved parents may not automatically have less stress than those of students with uninvolved parents. According to Cherniss (1995), parents may view teachers as mostly caring about paychecks and vacation time and lack sympathy for teacher grievances. It may be difficult to understand

that teachers need to consider their own well-being as a priority in order to be able to better meet the needs of their students. These views parallel the lack of social support from the public that was reflected above within the call for education reform.

Traumatic Events/ School Violence

Sudden unexpected events that cause death, injury, community disruption, or individual trauma can cause stress through fear, victimization, and role ambiguity (Sloan, Rozensky, Kaplan, & Saunders, 1994). In fact, student victimization is a major concern of educators and the School Survey on Crime and Safety estimated that 73.8% of all schools reported violent incidents, including those committed against teachers (DeVoe & Bauer, 2011; Neiman, 2011). The “School Crime Supplement” of the *National Crime Victimization Survey* published by the United States DOE revealed statistics that may explain why (DeVoe & Bauer, 2011). During the 2008-2009 school year, about 3.9% of students, ages 12 through 18, were victims of school crimes. Within the school settings, 20.4% of students surveyed reported the presence of gangs at school, and 30.7% reported that drugs were available at their schools. Students also reported being the targets of traditional bullying (28%) and electronic bullying (6%). Out of all of the students, previous victims and nonvictims alike, 26.6% reported being afraid of attacks or other forms of harm at school. During the 2010-2011 school year, 48% of 7th to 12th graders reported being sexually harassed in a nationwide survey, as reported in an article in *The New York Times* (Anderson, 2011). A study published by the *Journal of School Violence* reported that dealing with put-downs from classmates made it difficult for students to learn, which led to a disruptive learning environment in both public and private schools (Cherry, 2009).

These reports of school violence and harassment do not just come from students. *The School Survey on Crime and Safety*, which was gathered from principals at 2,648 public schools, revealed that 73.8% of all schools reported violent incidents (Neiman, 2011). Principals reported that at 23.1% of the schools, student bullying was happening daily or at least once a week. The survey also revealed direct acts of student aggression against teachers. The results indicated that 13.4% of the principals reported either student verbal abuse of teachers or other student acts of disrespect against teachers. And most disturbing, a 2010 report from the National School Safety Center revealed that between the year 1992 and 2010, there were approximately 470 school-associated, violent deaths of students, teachers, and other school staff.

Examples of school violence are widespread in the media, and the fear that they create for teachers and students increases the stressfulness and hostility in the school where teachers feel even less adequate to handle these issues (CNN, 1999; CNN, 2011; Frosch, 2010; McKinley, 2011; Saulny, 2010). In 2011, gunshots left five teenagers wounded after a basketball game at a high school in Brooklyn, and a student opened fire at a high school in Omaha, killing the vice principal and himself and wounding the principal (Baker & Stelloh, 2011; The Associated Press, 2011). But violence is not limited to high schools. Also in 2011, a 6-year-old boy brought a pistol to his kindergarten class, which fell out of his pocket in the lunchroom and wounded him and two other children (McKinley, 2011). Students reported being scared and seemed traumatized, and the elementary school reported considering searching students in the future. At a suburban middle school in Denver, two students were wounded by a gunman

with a high-powered rifle as they were leaving school (Frosch, 2010). School staff members had to tackle the gunman and hold him until police arrived.

Many of these examples of youth violence become a source of negative emotions and reactions, not just within the communities they take place in, but nationwide (CNN, 2011). Students become fearful, apprehensive, and confused, and school staff members are needed to talk with students about their feelings and help them to gain perspective, with little or no time or training. Further anxiety may be caused by the news reports themselves, as more media sources include warnings, new procedures, and vivid details. The reports also lead to additional safety measures while increasing the demand for warm and safe school environments, which may be a challenging contradiction to accomplish. There is also a call for educators to become even more involved in the community and students' lives to strengthen the community and prevent further incidents.

Unfortunately, the strain caused by school victimization and trauma is compounded by the pressure put on teachers and other school staff to remediate the issues. All of these necessary, yet stressful requirements continue to tap into already limited resources, time, and social-emotional capacity. Within *The School Survey on Crime and Safety*, principals reported that their efforts to reduce or prevent acts of school crime and bullying were limited by inadequate teacher training (37.6%), lack of or inadequate alternative placements for disruptive students (59.7%), lack of parental support (44.6%), and inadequate funds (61.9%) (Neiman, 2011). Reports revealed that 15.8% of principals believed that teachers' fear of retaliation also affected efforts to reduce or prevent school crime, while only 3.3% reported being limited in a major way by lack of teacher support. Most school violence takes place outside of the classroom in

settings that are not directly supervised by teachers, and teachers may not break up these incidents, because there is no clear designation of whose responsibility it is to supervise those areas (CNN, 1999). Teachers reported feeling ownership within the classroom but were reluctant to extend that authority, because they felt constrained by organizational policies and high student-teacher ratios. Unfortunately, teachers will need to intervene and train students in effective conflict resolution, in addition to their already high workload, if these situations are to improve.

Pressure from the public related to incidents of violence, bullying, and trauma also comes from the parents. Parents may look to the schools for “justice, protection, even revenge” but educators “feel unprepared or unwilling to be prosecutors and judges” (Hoffman, 2010). Educators may lack authority over student cell phones, home computers, and other settings not connected to the school environment, even though new laws like some of the anti-bullying legislation require schools to be responsible for incidents that occur within these settings. Legal and logistic constraints still may limit educators’ ability to investigate the situations. One incident reported by Hoffman involved a conflict between two girls that grew to a physical confrontation among 20 girls. Educators tried to resolve the situation, but the process became time-consuming and confusing because of contradictory policies, legal rulings, and parental and administrative pressure. Yet somehow educators are expected to know the correct response to every situation. So not only do school crime and concerns about safety affect teacher stress levels, but the examples and requirements presented continue to support the presence of many other stressors previously mentioned, while demonstrating that teachers themselves are mostly in support of creating safe schools.

Even if schools implement a complex remediation effort, it still comes at a high cost. In Chicago, a teacher initiated a program to improve school safety after 258 public school students on their way to or from school were shot in 2009 (Saulny, 2010). Schools took on the responsibility of analyzing students and identifying those that were most at risk for victimization. Educators were assigned to be 24/7 advocates for these students, and a safety plan was developed that mandated every school's responsibility to protect all 409,000 students across 675 public schools. The public schools hired advocates to provide around-the-clock academic, social, and emotional support, because the strain on the original teachers used for this support was so great. The success of the initial year led to the expansion of the advocacy program to include 1500 students in the upcoming year, but the school chief had to earmark \$60 million for the intervention plan, which also included a security center to facilitate communication between police and schools and create a safe environment within the schools. Most schools and educators would not be able to secure that amount of funding, resources, energy, or time, even if they were committed to addressing the issue.

Student Behavior and Characteristics

Student behavior and characteristics have consistently shown to be related to teacher stress. In a meta-analysis conducted by Jennings and Greenberg (2009), problematic student behaviors and low social-emotional competence of students contributed to teachers' social-emotional competence and ability to cope with stress. Teachers were also frequently stressed by maintaining discipline and teaching unmotivated students. Klassen (2010) confirmed that teacher stress can be attributed to student behavior and that student misbehavior was a major contributor to teacher stress.

Baker, Grant, and Morlock (2008) found that students with behavior problems were more likely to have poor teacher-student relationships, which contributed to stress and may lead to a cyclical pattern of poor relationships and increased stress. Teachers who face challenging students have elevated stress levels and expressed negative reactions toward students, which may affect their relationships (Lhospital & Gregory, 2009). Stanley (2010) demonstrated that teachers of students with emotional or behavioral disturbances have greater levels of stress than other teachers and are more likely to quit. Middle school teachers may experience the most stress from difficult student interactions, since developmental changes and peer influences increase the frequency of these interactions (Nauert, 2011). Nauert cited a 2010 study of middle school teachers within the Greater Houston area which indicated that 1/3 of middle school teachers were significantly stressed.

Effects of Teacher Stress on Teachers and Teaching

Clearly, teacher stress contributes to poor well-being, psychological distress, and a low sense of efficacy, as well as the continuous cycle of stress that can trigger the burnout cascade. But the question of what specific effects these contributions may have still remains. General research on the common effects of stress reflects dysphoric symptoms across individuals with no history of psychopathology and reveals that mental and behavioral symptoms are more common than physical symptoms, although all three types occur (Angerer, 2003). Shapiro, Brown, and Biegel (2007) cited a range of the negative consequences of stress on those in the helping professions, including increased depression, emotional exhaustion and anxiety, isolation, decreased job satisfaction, reduced self-esteem, and difficulties with personal relationships. They hypothesized that

these effects would harm professional effectiveness because their findings appear to negatively impact attention and concentration, disrupt decision-making skills, and reduce the professionals' abilities to develop relationships.

High levels of teacher stress have been associated with undesirable physical and mental health outcomes, as well as negative impacts on actual work outcomes (Gold et al., 2010; Klassen, 2010; Klassen & Chiu, 2011; Lhospital & Gregory, 2009; McWilliams, 2004). Research consistently demonstrates that the symptoms of teacher stress take a serious toll on teachers, students, schools, districts, and communities (Greenberg & Jennings, 2009). In Richards' (2012) nationwide survey, teachers reported that the most common manifestations of stress reactions were physical exhaustion, loss of idealism and enthusiasm, self-doubt about their ability to meet expectations and make a difference in students' lives, negative effects on relationships, and physical symptoms such as headaches, stomach aches, and/ or high blood pressure. Teachers also reported additional symptoms, such as feeling vulnerable, unable to cope, anxious, depressed, unable to sleep, irritable, impatient, and the desire to withdraw. Even with all of these symptoms, teachers must continue to deal with social issues that negatively affect their students' academic progress and the overall classroom experience.

Physical and Psychological Symptoms

Physical symptoms may include exhaustion, muscle pain, headache, insomnia, respiratory illness, gastrointestinal disorders, depression, and hypertension (Cherniss, 1995; Fulton, 1998; Klassen & Chiu, 2011; Lhospital & Gregory, 2009). Angerer's (2003) research linked stress to heart attacks, chronic fatigue, insomnia, dizziness, nausea, allergies, breathing difficulties, skin problems, muscle aches and stiffness,

menstrual difficulties, swollen glands, sore throat, recurrent flu, infections, colds, headaches, digestive problems, and back pain. Stress may also lead to self-medicating through substance abuse, which intensifies both the psychological and physical effects.

Psychological symptoms of stress may include loss of meaning and disillusionment, lack of concentration, overwork, lower job satisfaction and commitment, depersonalization, emotional exhaustion, desire to quit, and anger (Cherniss, 1995; Fulton, 1998; Klassen & Chiu, 2011; Lhospital & Gregory, 2009). Thought processes may be compromised by sleep deprivation and working too many hours (McWilliams, 2004). Teachers may also be aware of being less effective than possible, which further complicates the psychological impact of stress. Klassen, Usher, & Bong (2010) found that teacher stress was inversely related to self-efficacy. Jennings and Greenberg (2009) found that teachers will eventually feel ineffective, demonstrate less sympathy, have less tolerance for disruptive behavior, and be less dedicated to work. Klassen (2010) found a direct and inverse link between teacher stress and teacher self-efficacy, and Perry and Ball (2007) supported the link between emotional exhaustion and inability to regulate emotions and feelings of lack of control and threats to effectiveness. Margolis and Nagel (2006), within their research on teachers' experiences of educational change and the impact of administrator support, found that the negative perceptions of change from external forces manifested as teacher stress and loss of resiliency. Teacher stress increased as teachers became more physically and mentally exhausted. That stress in turn led to feelings of loss, anxiety, ambivalence, and resistance.

Impacts on Attrition and Actual Effectiveness

Negative attitudes and behaviors of workers suffering from stress result in a decrease in overall effectiveness and work performance (Angerer, 2003). Angerer (2003) also found that worker burnout was related to absenteeism, job turnover, low productivity, and reduced commitment. Acker (2010) reported that organizational conditions strongly predicted job satisfaction and intent to quit among a study of mental health workers. Teacher stress has been found to negatively impact retention and recruit and lead to lower production and increased absenteeism and health care costs (Fulton, 1998; Gold et al., 2010; Justice & Espinoza, 2007; Mooney, 2007b). Klassen and Chiu (2011) discovered that the attrition rate for beginning teachers has been rising for over a decade and experienced teachers are also continuing to leave the profession; all reported reasons that included job stress, job dissatisfaction, and low self-efficacy. Margolis and Nagel (2006) found that teacher attrition for those in their study was directly related to perceptions of lack of administrative support and the disconnect between teachers' and principals' perceptions of working conditions. There are also negative effects on the economy as a result of this attrition. Teacher attrition as a result of stress affects districts and communities, since districts pay the price of losing staff that they have invested in training (Justice & Espinoza, 2007).

But teacher stress does not just reflect negative educational outcomes related to attrition. Although attrition will certainly affect organizational and community conditions, classroom climate, consistency of instruction, and student achievement, teacher stress also directly affects classroom and student outcomes. Klassen and Chiu (2011) found relationships between teacher stress and poor teacher-pupil rapport, low

self-efficacy, less teacher effectiveness, and higher levels of burnout. Margolis and Nagel (2006) found that an increase in teacher stress negatively impacted job performance and satisfaction. Lhospital and Gregory (2009) found similar relationships between chronic stress and low tolerance of student behaviors, less effective classroom management, and lower quality of student relationships. Klassen, Usher, and Bong (2010) found that teacher stress was positively related to poor teacher-pupil rapport and low levels of actual effectiveness. Cherniss (1995) reported that teachers who are suffering from stress or burnout will be less willing to expend energy on students, parents, and/ or administrators who are difficult and will be less tolerant within those situations. It is important to note that although many of these studies cited significant relationships among teacher stress and a number of outcomes, based on Bandura's (1997) theory of reciprocal causation, most of these relationships may be bidirectional. Thus, these negative outcomes will also most likely contribute to teacher stress.

Within their research on relationships between social-emotional competence (SEC) and burnout, Greenberg and Jennings (2009) hypothesized that if teachers lack the emotional resources to effectively manage social and emotional challenges, then that would lead to lower levels of on-task behavior and negative classroom climate. Their research supported this hypothesis and revealed that a lower perception of accomplishment and efficacy led to an actual negative effect on classroom climate and effectiveness, demonstrated through lower levels of children's on-task behavior and performance and rigid classroom climates with hostile or harsh management techniques. They carried their hypothesis further to describe the possible resulting relationship between a decline in classroom climate and an increased chance for teacher burnout,

since teachers will become even more emotionally exhausted trying to manage the continual problematic behaviors. Greenberg and Jennings (2009) tie that exhaustion and resulting burnout into the more hostile classroom environment using Lazarus' (1984) appraisal theory, since teachers are more likely to resort to punitive and reactive responses and continue to contribute to the negative cycle. Meanwhile, teachers may become cynical and feel they have little to offer, which leads to attrition, or stay and cope through cynicism and detachment. Thus, Greenberg and Jennings (2009) describe teachers' lack of SEC and increase of stress as taking a "serious toll on teachers, students, schools, districts, and communities" and having "harmful effects on students" within a less than optimal classroom climate.

Benefits of Stress Prevention and Treatment

Overall, helping teachers manage stress presents as a sound idea, especially if it helps protect teachers' well-being, increases effective teaching and behavior management, and contributes to the prevention of attrition and burnout. But there is further research that reveals the benefits of specifically focusing on stress prevention and intervention programming. Addressing burnout can lead to a more energetic and dedicated workforce who are more effective (Angerer, 2003). Fulton (1998) found that in companies that had supportive family and work policies, health coverage for mental illness and treatment, and effective communication policies, there was half the level of burnout than in comparable companies with no such programs and policies. If employees have the chance for recovery during off-job time, it would reduce the negative effects of job stress, which are important for both well-being and job performance (Hahn, Binnewies, Sonnentag, & Mojza, 2011). In fact, Acker (2004) states that programs that

support staff will be more cost effective in the long run and have been shown to significantly reduce stress and cut down on absenteeism and tardiness, inadequate service provision, and attrition rates.

For teachers, even the perception of an administrator supporting staff can be enough to reduce stress. In the action research group conducted by Margolis and Nagel (2006), when an administrator implemented school reform based on teachers' existing practices to reduce the strain caused by the changes, the teachers reported feeling more resilient, motivated, and positive. This consideration for teachers also led to higher rates of volunteerism and participation. The administrator's actions and resulting teachers' reactions led to additional time being given for structuring the demands of the change, more teacher-centered monthly meetings, and improved relationships among teachers and teachers and administrators. Job satisfaction and student learning were also increased, showing a possible "ripple effect" of administrator support. Ultimately, the researchers' results showed that relationships were the strongest mediator of teacher stress, and increased resilience resulted when teachers trusted their administrator and felt valued and appreciated.

Other benefits of supporting teachers and their well-being are that teachers are better able to meet the needs of their students (Bennett & Mosen, 2011). Working with groups of school staff can positively affect the school culture and enable teachers to develop proactive and analytical solutions to problems as opposed to reactive and emotional ones. Bennett and Mosen's work confirms the presence of appraisal theory and the need for administration to support and encourage teacher stress management through supportive action and collaboration among colleagues. Improved teacher quality

can positively affect student learning and achievement, so Ruddy and Prusinski (2012) make the case that efforts to improve student achievement should include professional development for teachers that allows them to take an active role in student success. They demonstrate that effective professional development must include teacher input, consideration of organizational conditions, and support from stakeholders and administration; all of which have been designated as important elements to be considered within the design of the stress management program that follows.

Through analyzing research on the relationship between social-emotional competence and burnout and reviewing programs that supported teacher social-emotional competence, Jennings and Greenberg (2009) found that supporting teachers' development of social-emotionally competent behaviors and overall well-being helped those teachers enact a prosocial classroom design associated with optimal social and emotional classroom climate and desired student outcomes. Those teachers were more likely to have supportive teacher-student relationship, more effective classroom management, and more implementation of effective social and emotional curriculum, since they were able to role model process-based activities in everyday situations. In addition, teachers showed more enjoyment, efficacy, and commitment to their profession, which can be attributed to these improvements in climate. Baker, Grant, and Morlock (2008) confirmed that student-teacher relationships characterized by high levels of warmth and trust and low negativity were associated with positive school outcome. More specifically, those relationships were positively associated with school adaptation over time, while relationships characterized by conflict were negatively associated with school adaptation. However, these climate changes and relationships take the availability of

personal resources and the development of well-being and SEC, which are depleted from experiences with chronic stress.

Based on Bandura and Locke's (2003) findings, summarized previously, efficacy beliefs are linked to coping mechanisms, perseverance, and performance in multiple settings. To better plan an effective program, it is important to look at how supporting teachers' stress management through the development of self-efficacy may support teacher and student performance. As mentioned previously, Tschannen-Moran and Woolfolk Hoy (2001) found that teacher efficacy was strongly related to positive educational outcomes such as teachers' persistence, motivation, commitment, and instruction as well as student achievement, motivation, and self-efficacy. Fives and Buehl (2010) confirmed this construct and the link between efficacy and environmental factors, such as amounts of exposure and observation of others, through their study of practicing teachers. Their study revealed that more experienced teachers had significantly higher levels of efficacy than preservice teachers, which further supports the theory of reciprocal determinism. More years of experience contributes to the thoughts and beliefs that contribute to future effective behavior, which then leads to more successful experiences and a greater sense of efficacy. Klassen and Chiu (2011) found that teachers who developed a stronger sense of self-efficacy better handled stress and used more effective teaching strategies, as well as had a stronger occupational commitment. Perry and Ball (2007) supported the link between developing psychological resiliency and increasing teacher self-efficacy and confirmed the link between self-efficacy and teachers' abilities to deal more constructively with negative situations, use emotion to gain professional pleasure and increase self-esteem, and contribute to an increase in skilled performance in

teaching. Ross and Bruce (2007) and Deemer and Minke (1999) related these findings about efficacy to Bandura's previous research to specifically explain the process of teacher efficacy and the benefits of developing that efficacy. Teacher efficacy influences behavior through goal-setting, motivation, affective processes (such as controlling negative feelings), and selection processes of previous experience. Deemer and Minke (1999) confirmed that teacher efficacy can have an important influence on instructional practices and attitudes toward students. Higher teacher efficacy led to setting more challenging goals and persistence, as well as more effective consideration of situational factors and past experiences (Ross & Bruce, 2007). High perceived efficacy also led to stronger student achievement through more effective teaching, classroom management, and addressing of higher need students and the ability for teachers to maintain positive attitudes toward all students.

Creating a sense of collective efficacy through programs that encouraged collegial feedback and support was also found to mediate the influence of job stress from student misbehavior on job satisfaction and was related to student achievement and academic climate, even after controlling for prior student achievement and demographic characteristics (Klassen, 2010). Job resources, such as social support, feedback, and collegiality, have been shown to lead to increased teacher motivation and lower personal stress levels. Klassen's research also linked both self and collective efficacy to job satisfaction, which can influence performance, commitment, absenteeism, physical and mental health, and overall well-being. Klassen defined teacher collective efficacy as the perception that a staff can work together to effectively bring about change. It is influenced by past success, observation of group success, and encouragement from

others. Klassen's results revealed faculty who reported higher levels of TCE demonstrated lower levels of stress and higher levels of commitment and job satisfaction. Along with Usher and Bong, Klassen (2010) confirmed these results across multiple settings and further supported that job satisfaction was related to lower levels of job stress and high levels of teachers' collective efficacy were related to higher levels of motivation and performance and lower levels of stress, anxiety, and burnout. TCE was also linked to professional commitment and teachers' sense of community.

Need for Stress Prevention Programming

As evidenced above, stress is a multidimensional construct that can have negative effects on individuals and organizations, and those effects can influence ongoing performance and coping. To better understand these effects and prevent the further effects of the stress cycle, it is helpful to focus on specific subgroups of the population, especially those most at-risk, when considering stress prevention and intervention programming. Teacher stress comes from a multitude of internal and external sources that are ever-changing and can negatively impact teachers, students, and other stakeholders. Yet according to Nauert (2011) and Carroll (2011), there is very little published research and comprehensive studies on stress specific to teachers across the nation and current educational trends. While this review found articles about the overall effects of stress on teachers and students, it was difficult to find a comprehensive study of how many teachers are currently experiencing negative teacher stress. In addition, studies of teacher stress focused mostly on negative issues such as bullying, dropout rates, and levels of teacher burnout without also highlighting positive issues that may help support teacher resiliency and adaptation (Hoy & Tarter, 2011). To be able to develop positive

interventions and strengthen protective factors, there is a need for educational practice to include a focus on positive outcomes and the possible causes of these outcomes to highlight what leads to successful adaptation and to help repair negative outcomes and build positive ones. By examining resilience, achievement, and commitment, researchers and practitioners can develop a better understanding of what leads to these factors and how they can be developed, even in the face of organizational challenges and negativity. These studies can help support adaptation and resiliency, helpful relationships, positive outcomes, and effective student engagement.

Researchers do consistently underscore the need for the development of professional self-efficacy, empathy, and adaptability through increased resources, administrative and public support, development of personal coping mechanisms and resiliency, continued learning, and collegiality (Cherniss, 1995; Klassen, 2010; Klassen & Chiu, 2011; Perry & Ball, 2007). These factors are supported by Lazarus' (1984) theory that personal characteristics can affect our appraisal of and relationship with stressful events, and Bandura's (1997) connections between personal characteristics, behaviors, and outside events. But although further research into existing programs, as described in the design process section of this dissertation, outlines some programs that have been developed to address teacher stress, the research lacked information about how to improve these factors in the face of limited resources and organizational constraints. Many programs are developed and implemented within a research setting and use resources from external sources, such as money and outside facilitators, to support their implementation. Unfortunately, as the above information on sources of teacher stress revealed, many school settings have limited resources, lack administrative support for

teachers, and are facing pressing legislative and reform issues that do not focus on teacher stress management. In addition, many of the programs described do not address the most current issues facing teachers and were not developed to be flexible amid the constant changes within the classroom and educational settings. Carroll (2011) called for the development of interventions to mitigate stress and improve effectiveness, student behavior and learning based on current stressors and needed resources. Studies of how stress can be effectively managed even amid the current atmosphere could help districts implement strategies to lower teacher stress and improve teacher effectiveness and student behavior and learning (Nauert, 2011). If helping teachers manage stress can increase self-efficacy and resilience to deal with both external and internal events, even if those events change, then it is worth the effort of implementing effective yet realistic programming for the benefit of all.

Effective programs that are based on generalizable stress management skills and the development of self-efficacy while using limited resources do exist, but many that are described further in this document are not based within an organizational framework, which would be more beneficial for the development of the individual and the social context at the same time. *The Public Health Service Report* highlighted the need for employers to give more attention to reduce employee stress (Fulton, 2000). Acker (2004) pointed out the need for more supervisory support, peer support groups, and in-service training within the workplace. Teachers are at what Richards (2012) referred to as a “tipping point” and in need of programming to encourage them to improve and practice effective coping strategies in light of current sources of stress. Based on his research and the teachers' self-reports, this programming would need to include self-care, exercise,

sleep and healthy diet, the development of a support system, the use of meditation and solitude, the development of a sense of humor and time for fun, the use of positive attitude and identification of what can and cannot be controlled. Jennings and Greenberg's (2009) review of public surveys indicated a need for broad educational agenda to improve academic performance but also enhance social-emotional competence. Since these characteristics are largely shaped by a student's teacher, teachers need to develop supportive and encouraging relationships with their students, design strengths-based lessons, establish and implement behavioral guidelines for intrinsic motivation, coach through conflicts, encourage cooperation, and act as role models. Programming that focuses on developing a positive perspective toward experiences and outcomes can also help teachers build effective student engagement and foster positive relationships, which will enhance students' meaningful connections, sense of competence, and autonomy (Hoy & Tarter, 2011).

But this type of social-emotional programming is rarely used (Jennings & Greenberg, 2009). In addition, since teachers' social-emotional competence is also influenced by personal factors such as friendships, marital relations, and degrees of life stress, there is a further need for programming that supports a teachers' ability to regulate emotion in response to a variety of stressors. Justice and Espinoza (2007) also cited the need for this type of dual-programming to develop both personal characteristics like self-esteem and stress management and skills that relate to classroom management, like assertiveness and self-management. Unfortunately, programs that do exist are mostly focused on the individual alleviation of burnout, but since organizational factors have such a large influence on burnout, it may be more useful to develop group or

organizational programming (Angerer, 2003). It would be even more effective if stress management techniques were supported within the work environment, since that would change both individual coping and the workplace environment. Programs that decrease teacher stress, improve student outcomes, and encourage collegial support would answer the current need for programming but do not exist on any large scale and are currently unsupported by the public agenda.

In addition, any programming would need to be realistic and tailored to its population, unlike many of those developed in a research setting or those that are outdated. Klassen and Chiu (2011) cited the importance of designing interventions to support self-efficacy and lower negative effects of teacher stress but pointed out that programming will depend on the social context and available support. High levels of current stress and high turnover rates may be prohibitive for teacher involvement, low resources and academic support may affect the implementation of programming within a school system, and the goals of any program must be able to address the need for the stress management techniques to generalize across settings and sources of stress. Amid the current air of educational reform, schools will only be able to successfully address teacher resistance to policy change if administration and legislation acknowledge and consider teachers' perceptions, as well as work to understand the local impact of change on teachers' experience to help support the reform movement (Margolis & Nagel, 2006). If administration and policy makers can consider these issues, then administrators will be able to begin to mediate stress, and policy makers can begin to implement changes with less chance of teacher resistance and stress. Currently, stress management programs that meet the existing diverse needs of teachers cannot be found (Justice & Espinoza, 2007).

Teachers are very aware of the lack of programming and support for stress management. Teachers in Margolis and Nagel's (2006) focus group reported that there was no outlet to relieve stress constructively and suffered from feeling like their stressful state was a chronic effect of working within their setting. They expressed a desire for teacher-led programs and meetings and positive reinforcement for their daily work. Teachers surveyed by the Bill and Melinda Gates Foundation (2012) also reported the need for school-wide systems of support to retain effective teachers. They highlighted support from family, school leaders, and the use of high-quality curriculum. They also called for a more collaborative work environment, available support staff, and ongoing, accessible professional development to alleviate challenges. And teachers are ready for these types of programs. Teacher reports showed that although they believe most of the sources of their stress were outside of their control, they believe that they can control their ability to use coping tools to manage stress (Richards, 2012).

Unfortunately, teacher stress has practically been ignored by educational policy and practice (Lhospital & Gregory, 2009). Perry and Ball (2007) refer to teaching as an emotional activity with its own class of mental operations, where emotion and cognition combine into social practice. With the stressful challenges associated with this field and the uniqueness of the activity as described by Perry and Ball, the importance of investigating and addressing teacher stress is clear. Any effective programming must seek to first understand the current levels and sources of teacher stress to highlight the specific need that exists. Then, the program design must include evidence-based stress management techniques geared toward those needs and components that are both useful and practical within the social context. If a program can be designed that balances theory,

research, and practicality, then it will effectively address the need for prevention programming, diffuse the stress cycle and alleviate the negative effects of teacher stress, increase self-efficacy and the other positive effects described above, and gain administrative and public support.

CHAPTER II

METHOD FOR PROGRAM DESIGN

This stress prevention program was designed using a programmatic approach, as outlined by Maher (1999), to ensure that the program was relevant, useful, and timely. The first phase of this approach involved the clarification of the target population and the needs of that population, which are defined as the difference between the current state of affairs and the desired state of affairs. The needs assessment's methods and procedures were designed to answer the following questions: "To what extent do teachers need to improve their ability to effectively manage current stress?" and "In what ways do teachers need to feel more effective in the classroom?" Analysis of the data collected from the needs assessment was used to clarify the current characteristics of the target population and to understand the discrepancy between the target population's current ability to manage stress and their current levels of efficacy and the desired levels of stress management and sense of efficacy. This discrepancy guided the program design process and helped develop the specific goals, objectives, and components of the program based on where exactly the discrepancies existed.

The second phase of the approach was the program design phase, which involved considering relevant research on current techniques and programs developed for stress management and building efficacy and assessing the context of the proposed setting for the program through phone interviews conducted with individuals from the data

collection sites. The needs assessment, the consideration of current programming and techniques, and the context assessment demonstrated the rationale for and the practicality of the program by clarifying the need for it and ensuring that the program design was specific, useful, and justifiable before the documentation of the program was completed. The results of these three procedures were used to guide the program purpose, goals, components, and phases; develop a program evaluation plan; and support the ability to make evidence-based decisions about the use of this program for other populations in the future.

Needs Assessment

Participants

Participants for the needs assessment were teachers involved in full-time instruction of elementary (kindergarten through fifth grade) and middle school (sixth through eighth grade) students in either general education or special education within a suburban, public school district. The district's population that the elementary and middle schools draw from was approximately 56,590, and the median income was approximately \$96,541 (AmericanTowns.com, 2011). The ethnic breakdown was approximately 38.5% White, 20.6% Black, .3% American Indian/ Eskimo/ Aleut, 33.5% Asian or Pacific Islander, 11.8% Hispanic or Latino origin, and 7% Other, with two or more races being reported individually. Teachers at two schools with a total teaching staff of approximately 85 teachers, as estimated through use of the schools' staff directory, were given the opportunity to complete the needs assessment measures (see Design). After approval by the principal and notification by the Rutgers Institutional Review Board, participants were recruited through an introductory letter distributed through each

school's mailbox system. A doctoral-level graduate student (the investigator) administered, collected, and analyzed the measures, under the supervision of two doctoral-level faculty members.

Design

The goal of the needs assessment was to highlight the current needs of teachers related to stress management and sense of efficacy and to inform the program design process. The introductory letter that was distributed to all of the possible participants explained the purpose of the research project, what would be done with the results, and the level of participation that was necessary to complete the assessment (see Appendix A). Participants who voluntarily attended the needs assessment meeting were asked to complete three measures to collect data about the current sources, levels, and symptoms of teacher stress, current attempts at relieving stress, the effects of teacher stress on teachers, and their current sense of efficacy within the classroom.

Teacher Stress Inventory

The Teacher Stress Inventory (TSI) developed by Michael J. Fimian (1988) was designed to include multiple stressors that have been found to be related to teacher stress and signs of teacher stress (see Appendix B). It contains 10 factors based specifically on teacher experience, five of which are sources of stress and five of which are physical manifestations of stress. The overall mean provides a measure of teachers' overall stress levels. The measure was constructed using data collected from a similar target population, teachers who are involved in full-time instruction, that this current program design was addressing and provided information about stress levels, specific stressors, and current manifestations of stress to clarify the needs of the target population. The

norms that were provided included the total norm sample and norms for subgroups, which were useful to analyze subgroup differences within the needs assessment. This analysis was used to support the determination of whether there was a need for a more targeted intervention and specific program components based on any patterns that arose among the levels of teacher stress. The methods outlined by the test developer for data collection were aligned with those that were used within this needs assessment. Although the measure within the Appendix included the scoring instructions, the manual allowed for the choice of who will score the measure to be left to the investigator, so the teachers were not required to score their own inventory within this study. The measure distributed to the teachers was also titled Teacher Concerns Inventory, not the Teacher Stress Inventory, to prevent a negative bias. The manual for the TSI confirmed that content validity had been established through relevancy ratings provided by the sample group, and convergent validity was determined by significant correlation with three measures. The developer found adequate reliability, and test-retest correlations ranged from .49 to .84 ($p = .001$) for the TSI subscales and were .76 ($p = .001$) for the Total Stress Score. The Total Stress Score and the 10 TSI subscales were used within the analysis of the needs assessment and the reporting of the results to support the findings from the review of the previous research. The data gathered from the target population was compared to the norm groups provided by the test developer which demonstrated a need among the target population and described the characteristics of this target population. Results from this measure were also useful to help inform the specific goals of the program.

Teachers' Sense of Efficacy Scale

The Teachers' Sense of Efficacy Scale (TSES) was developed by Tschannen-Moran and Woolfolk Hoy (1990, 2001) to measure teachers' perceptions of personal competence and external influences (see Appendix C). Using their findings about previous measures, Tschannen-Moran & Woolfolk Hoy developed this current measure of teacher self-efficacy to assess both personal competence and ability to analyze teaching tasks based on external resources and constraints. Through studies to refine their measure, Tschannen-Moran and Woolfolk Hoy revealed that teacher self-efficacy can be described as a single factor that reveals itself across three subscales: instruction, management, and engagement and can be linked to teacher stress and appraisal of situations. The measure was supported by research conducted with previous measures and the constructs involved within the specific items on the measure (Deemer & Minke, 1999; Fives & Buehl, 2010). Since one of the goals of the needs assessment was to gather information about the target population's self-efficacy, considering the link found in the research between stress and self-efficacy, this measure was appropriate to gauge both internal and external factors that may be affecting self-efficacy. The results of this measure provided information about three factors: Efficacy in Student Engagement, Efficacy in Instructional Practices, and Efficacy in Classroom Management. Reliability and validity of both the long form and short form were found to be reasonable and acceptable through studies conducted by the developers and other researchers (Fives & Buehl, 2010; Tschannen-Moran & Woolfolk Hoy, 2001). Factor loadings were conducted to exclude items and confirm the most parsimonious model. The short form of the scale was used within this needs assessment. Internal consistency on the short form ranged

from good to excellent as revealed by Cronbach's alpha scores ranging from .81 to .86 ($p < .01$) for the three subscales and .90 ($p < .01$) for the total scale. Convergent validity was confirmed through correlational studies with existing measures and discriminant validity was found through a significant negative correlation with an unrelated measure. Results from the needs assessment were compared to the normative data supplied by the test developers. The comparison between the target population and the norm group helped further describe the characteristics of the target population as related to their current sense of efficacy within the classroom and highlight any differences between the target population and the norm group supporting the need for programming. Results from this measure also helped confirm the relationship between stress and self-efficacy and inform the specific goals for the program in the area of sense of efficacy.

Teacher Well-Being Survey

The Teacher Well-Being Survey (TWBS) was created by the investigator to gather certain demographic information and confirm the relevancy and immediacy of the results of the research conducted during the inception of this program design (see Appendix D). The survey was composed of four main parts. The first part asked for demographic information to allow for the further comparison of data and possible subgroups to better inform the programmatic goals and more effectively target certain populations. This data was also used to investigate possible relationships between stress, efficacy, number of sources of stress, and years of teaching experience. The second part of the survey was designed to confirm the relevancy of the sources of stress found within the research to ensure that any program goals were aligned with the actual needs of the population that it was designed for, as well as to assess whether these sources positively

or negatively affected teachers' personal well-being. The survey listed each source of stress that was found in the review of previous research and asked teachers to use a Likert-type scale to rate if and how each source has affected their personal well-being within the past three months ranging from -2 (strongly disagree) to +2 (strongly agree). The third part of the survey, which was also based on current research, asked the teachers how they perceived stress as affecting their sense of efficacy within the classroom. It used the same Likert-type scale as the second part of the survey. The descriptive data gathered from these two parts of the survey was used to support the relevancy of the research, gather more information about whether the target population perceived stress as affecting their ability to teach effectively and if those effects were positive or negative, and highlight other possible benefits of prevention and intervention. The means of individual items from the second and third parts of the survey were used to reveal negative effects of stress on personal well-being from specific sources and/ or negative effects on teaching effectiveness in specific areas of teaching to better target the components of the program.

The fourth part of the survey was designed to gather information about teachers' attempts to relieve stress. This section highlighted how many and which techniques teachers were using to try to relieve stress. The methods that were used most frequently by all of the teachers surveyed were considered to be more tolerable and thus were considered as part of the possible methods for the program design.

Procedure

The investigator received approval from the district's administration for data collection within their schools and made individual requests through each school's

principal to hold a data collection meeting to gather information from the teaching staff. Exemption was granted by the Institutional Review Board on May 1, 2012, and within a week of notification, the investigator scheduled the needs assessment meeting at the two out of nine schools in the district that responded to her request for entrance. At the district's request, the introductory letter for the project was distributed to the teachers at each of the two schools through the school's mailbox system two weeks prior to the scheduled needs assessment meeting and two days prior to the meeting as a reminder. The needs assessment was administered by the investigator to the participants who attended the meetings, which took place after school hours within each school building. Between the two schools, 23 teachers attended the meetings and completed the measures, which was approximately 27% of the full-time teaching staff at those buildings. Unfortunately, participation was affected by administrative team meetings scheduled on the same days, which affected approximately 12 staff members who were out of the building and 40 staff members who had been held for an hour-long meeting before the start of the data collection meeting. There were also approximately 10 teachers out sick or using a personal day, and approximately six to eight teachers left the building to prepare for a school-wide event at one of the schools. The number of participants was considered adequate in light of these limitations and the inherent challenge of conducting the data collection meeting within the last month of school. The investigator was available to answer any questions that arose and monitor for any signs of distress, which did not arise. Although there were no questions asked about the measures or the study, two teachers expressed finding the measures an interesting activity that increased their self-awareness. Refreshments were provided.

Most participants took approximately 15 minutes to complete the measures, and completion was completely voluntary. Participants were not required to put any identifying information on the assessment, and there was to be no identifying information used in any part of the reporting or publication of this program. They were not required to complete any of the scoring of the measures, and the scoring instructions from the TSI were not included on the measures that were distributed, as mentioned previously. When participants completed the needs assessment, they put the measures into an unmarked envelope. Participants were informed that placing the measures in the envelope was considered as completion of their participation in the needs assessment and completion of their participation in the project, unless they chose to provide information to facilitate later contact regarding the context assessment being conducted to ensure that the proposed program was realistic and tolerable.

Review of Current Stress Prevention Techniques and Programming

As part of the program planning process, the developer must consider the different alternatives that may guide the program design (Maher, 1999). Thus, a review of existing research was conducted to gather information about current stress management techniques and existing programs. This review ensured that the purpose and goals of the program were aligned with current theory and research as well as were designed to fulfill what may be lacking within current programs. In addition, the information gathered from the research ensured that the program phases and components were evidence-based.

Context Assessment

To assess the relevant context for the program and ensure that the proposed program design was realistic and tolerable, phone interviews were conducted by the

investigator to gather information about variables that may affect the goals, components, and timing of the program. Although the investigator originally planned to conduct a focus group session with willing volunteers from the needs assessment participants, limited availability and mobility of the participants led to phone interviews being used instead. Using the AVICTORY framework, the content of the phone interviews assessed the Ability for teachers and other stakeholders to commit resources, the Values of the teachers and stakeholders, the Ideas teachers had about the current state of affairs, the Circumstances within the district or the school, the appropriateness of the program's Timing, the Obligation that the teachers felt toward themselves and their students, the Resistance that might be encountered, and the perceived Yield of the program (Maher, 1999). This information was used to confirm the structure of teachers' needs and the relevancy of goals of the program and to ensure that the program can realistically be implemented within a school setting and was tolerable for teachers. All of the teachers who were offered the opportunity to take part in the needs assessment were offered the opportunity to participate in the context assessment.

Methods and Procedure

When the introductory letter for the needs assessment was distributed, it also contained some brief information that explained the intent to conduct a focus group and the goals of that group (see Appendix A). Participants were provided with an additional letter at the needs assessment meeting to further explain the purpose and details of the focus group and any follow-up interviews and were asked to record their contact information on the attached sheet only if they were interested in being contacted about the focus group (see Appendix E and F). Participants were informed that all identifying

information and emails would be destroyed as soon as the research project was completed. Five participants provided their contact information, however when the researcher contacted these volunteers, only three returned the researcher's contact email/ phone call. One of these participants reported having limited mobility and not being able to travel very far for a group session, and the other two participants reported having limited time to participate based on their vacation schedules. The researcher decided that phone interviews would be used instead of a focus group and would follow the same semi-structured format as the proposed focus group based on the AVICTORY variables described above (see Appendix G and H). The participants were contacted again, and an appointment was set up for the phone interview. Three interviews were conducted, one with an elementary school teacher and two with middle school teachers, and the interviews ranged from 15 minutes to a half of an hour. No incentives were offered for participating, but after the researcher reread the information letter that had been provided at the needs assessment to reiterate the purpose of the dissertation and the phone interview, as well as the information about their involvement, all of the participants agreed to continue (see Appendix E).

To begin the phone interview, the investigator introduced the purpose and goals of the proposed program. Participants were then asked to provide feedback based on each variable to help inform the final program design, ensure relevancy and tolerability, and help to generate alternatives for elements that were not supported by the context. If a participant reported that a part of the program design would not be supported by their current context, they were asked for an alternative suggestion. When alternatives were offered, these alternatives were recorded on the protocol and considered as part of the

final program design. If the majority of phone interviewees reported that a part of the proposed program design was not tolerable or would not be supported by the current context, then it was changed by the researcher, with a consideration of any suggestions made by the participants. The phone interviews were not recorded, as had been stated on the original letter pertaining to the focus groups, but the interviewer did take notes on the semi-structured protocol, which did not include any identifying information. Any reporting or publication of this material was done in a manner that did not identify individual or organizational names directly or indirectly. At the end of the phone interview, participants were informed that they had fulfilled their commitment to the research being conducted as part of this program design.

The notes were reviewed by the investigator to gauge whether the context for the program was able to support the program as it was proposed. Within each variable, participants were asked if they agreed or disagreed with the ideas that the program was based on or on the part of the program that was described to them. If the phone interviewees did not agree with the part of the program that was related to that specific variable, they were asked to suggest an alternative. Additional notes were also taken in regards to any other contextual issues that arose. The program design was considered acceptable across any variable where the majority of the participants' responses were "yes," indicating that they agreed with the corresponding proposed program element or idea. If the majority of responses among all of the participants reflected disagreement, then the suggestions and alternatives were further analyzed and considered as possible additions to or revisions of the program design. If there was no alternative suggestion within a variable, even if the majority of the responses were "disagree," then the

investigator revisited how that variable affected the relevancy and practicality of the overall design to make a determination about any changes to the program. The investigator also considered additional comments and suggestions that were made throughout the interview as possible issues with the proposed program and used those perspectives to consider any other revisions.

CHAPTER III

RESULTS AND IMPLICATIONS FOR PROGRAM DESIGN: NEEDS ASSESSMENT

Participants

Number of participants and demographic information, including years of experience, teaching level, and student population taught, were gathered from the Teacher Well-being Survey (TWBS) and recorded. Table 1 shows the breakdown of participants across each group and the means for the years of experience among each group.

Table 1

Needs Assessment Participant Data

	Teaching Level ^a			Student Population ^b	
	Whole Group (N=23)	Elementary (N=16)	Middle (N=12)	General Ed (N =19)	Special Ed (N = 2)
Average Years of Experience	10.09 (7.07)	10.19 (7.83)	8.33 (4.77)	9.63 (6.18)	3.50 (3.54)

^a Total for Elementary and Middle exceeds 23 because some participants listed both levels.

^b Total for General and Special Ed does not equal 23 because two participants left blank responses.

Although the survey was meant to collect current teaching levels, it was possible that the teachers thought that they were supposed to report any levels that they have taught in the past. Teachers who reported both levels were included in both groups, since the staff directory showed that there was only one possible teacher teaching in both levels at the same time of the survey, which means those teachers were not part of a separate group. There was an average of 10.09 years of experience among the whole group, with a

range from one year to 27 years, and only two reported teaching special education students while 19 reported teaching general education students. Two teachers left the student population item on the survey blank. Most of the groups showed similar mean years of teaching, with the two special education teachers being the exception. No statistical analysis to test whether the difference in years of teaching was statistically significant could be run, however, since the numbers were too small for adequate power.

Teacher Stress Inventory

The Teacher Stress Inventory was scored according to the manual provided by the test developer and scores were reported using means, standard deviations, frequency counts, and decile scores. Correlation coefficients were also calculated to determine if there were any significant relationships among years of experience, number of sources of stress reported on another measure, and the total stress scores to confirm previous research and better inform any possible segmenting of the target population for the program components. The results from this measure were taken into consideration to help guide the goals of the program and support a plan for evaluation. The goals for stress management and prevention were created based on helping teachers move from their current stress level to a decreased level of stress, based on the standard deviations of the normative group.

The Total Stress Score was analyzed through a comparison of the group mean with the normative group, provided by the test developer, to better describe the characteristics of the target population as compared to the normative group of their peers and to assess the degree of need for a program (see Table 2). Subscales were compared to the normative group through the use of decile tables provided by the test developer.

Table 2

Participants' Mean Total and Subscale Scores for the TSI

	Total Stress Score	<u>Sources of Stress Subscales</u>						<u>Manifestations Subscales</u>			
		Time	Work	Distress	Discipline	Invest	Emotion	Fatigue	Cardio	Gastro	Beh
Group Mean (SD)	2.91 (0.62)	3.61 (0.82)	3.77 (0.88)	3.04 (0.86)	3.46 (.99)	2.64 (0.81)	3.10 (1.16)	3.03 (0.97)	2.74 (1.13)	1.88 (1.09)	1.86 (0.70)
Decile	60-69	60-69	70-79	50-59	60-69	40-49	60-69	70-79	80-89	60-69	80-89

Note. For full subscale titles see Appendix B. Decile scores of 90-100 indicate high stress values.

To interpret the data, the test developer supplied cutoff points based on the standard deviations of the normative group. Scores that were greater than one standard deviation from the norm were labeled as Significantly Strong, scores within one standard deviation from the norm were labeled as a Moderate, and scores less than one standard deviation from the norm were labeled Significantly Weak. Based on the test developer's interpretation, the group mean of the participants ($M = 2.91$) demonstrated moderate levels of stress, demonstrating a need for programming. The group decile score for the Total Stress Score did not reach the decile designated by the test developer to be considered a high stress value (90-100), which aligned with the finding that the group demonstrated moderate stress levels. The group decile scores (ranging from 40-49 to 70-79) for different Sources of Stress also were not considered high stress values but all were above the 50th decile except the Professional Investment Subscale. The group decile scores seemed to be slightly higher on the Stress Manifestation Subscales (ranging from 60-69 to 80-89) and although they still did not reflect high stress values, the presence of these manifestations also supported the need for programming to benefit teacher health and outcomes.

Frequency of the interpretations of individual stress scores and subscales scores was analyzed to help further describe the characteristics of the target population and a frequency distribution table of the subscale scores can be seen below (see Table 3).

Table 3

Number of Participants Who Scored in Each Decile for Each Subscale of the TSI

	90-100 ^a	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	0-9
Time	5	7	2	0	2	1	1	3	1	1
Work	6	5	4	0	1	4	1	0	2	0
Distress	0	1	5	6	2	4	0	1	2	2
Discipline	4	6	1	2	1	4	3	1	1	0
Investment	2	2	1	4	1	5	6	1	1	0
Emotional	7	1	3	2	2	2	2	2	2	0
Fatigue	7	2	3	4	0	1	5	0	1	0
Cardio	9	7	0	2	0	1	4	0	0	0
Gastro	3	3	5	0	2	10	0	0	0	0
Behavior	6	8	5	1	0	3	0	0	0	0

Note. For full subscale titles see Appendix A.

^aDecile scores of 90-100 indicate high stress values.

Although the group total stress score was within the moderate range, there were eight individual stress scores within the Significantly Strong Levels of Stress range. In addition, all of the 15 remaining scores were within the Moderate Levels of Stress range, with no individuals scoring within the Significantly Weak Levels of Stress range, which further supports the need of the target population.

Analysis of the frequency distribution of the Subscale Scores provided more information about the target population as compared to the normative group on sources of stress and manifestations of stress. Although the group decile scores among Sources of Stress did not reach the decile designated by the test developer to be considered a high stress value, as mentioned previously, more than half of the individual scores fell within the upper half of the decile scores. Within a normal distribution, the frequency of scores above the 50th decile would be approximately the same as the frequency below, so these results show a tendency toward higher stress levels among the individual participants

when compared to the normative group on almost all of the Sources Subscales. There were a number of participants, ranging from two to six across all of the Sources Subscales, with the exception of the Professional Distress Subscale, who individually scored within the high stress range, as well. In addition to describing the target population, these comparisons confirmed the presence of multiple stressors among the target population. Again, although the group scores on the Stress Manifestation Subscales did not reach high stress values, more than half of the individual scores fell within the upper half of the decile scores, and there were a number of participants, ranging from three to nine across the Manifestation Subscales, who individually scored within the high stress range. These scores reflected the presence of manifestations of stress, which negatively affect health and well-being, as well as teacher effectiveness.

Correlation coefficients were calculated to assess the relationships among overall stress levels assessed through the TSI and demographics reported on the Teacher Well-Being Survey. Table 4 shows the results of these analyses, as well as correlations between these variables and self-efficacy, which will be referenced later in the results section.

Table 4

Correlation Matrix for Needs Assessment Variables

	TSI	TSES	Years of Experience	Number of Stressors
TSI	-	-.383*	-.280	.665**
TSES	-.383*	-	.102	-.375*

Note. Correlations were not run between Years of Experience and Number of Stressors.

* $p < .10$.

** $p < .05$.

When a Pearson Correlation analysis was run to determine if years of teaching experience and the teachers' Total Stress Scores from the TSI had a significant relationship, the relationship was not found to be significant with $r = -0.280$ ($r_{sig} = 0.413$). The relationship that was found was negative, meaning that the teachers with greater years of experience reported lower overall stress scores. Using Cohen's interpretations of the relationship between the correlation coefficient and effect size, the relationship was small. These results are consistent with the previous research about the relationship between years of experience and stress levels; however due to the lack of significance among this specific group, it was considered appropriate to create mixed groups for programming.

The correlation coefficient for the relationship between teachers' Total Stress Scores and the number of stressors reported on the TWBS was significant with $r = 0.665$ ($p < .05$). The positive relationship demonstrated that, as would be expected, the more sources of stress that teachers reported, the higher their levels of overall stress, and again, as expected, this relationship was found to be strong.

Teachers' Sense of Efficacy Scale

The Teachers' Sense of Efficacy Scale (TSES) was scored according to the test developers' directions, and the total scores and subscale scores were compared to the normative group data provided by the test developers. The set of individual TSES scores was also compared to the TSI scores to gather information about a possible relationship between those variables. Like the TSI, the results from the TSES helped describe the characteristics of the target population, confirm the possible need for programming, support the previous research, and guide possible program goals and components. The

TSES may provide a realistic and tolerable pre/ post measure for assessing any changes within the target population if a program is implemented and assessing program effectiveness.

First, the group means for the TSES Total Score and scores on the three factors (Instruction, Management, and Engagement) were calculated and compared to the normative data (see Table 5).

Table 5

Comparison of Participants' Total and Subscale Means to Normative Data for TSES Scores

	Participants' Group Mean (SD)	Norm Group Mean (SD)
TSES Total Score	6.94 (1.02)	7.10 (0.98)
Instruction	7.73 (1.20)	7.30 (1.20)
Management	6.81 (1.55)	6.70 (1.20)
Engagement	6.28 (1.43)	7.20 (1.20)

The overall group mean for the TSES Total Score was lower than the normative group, although it did fall within one standard deviation of the norm, so it was not deemed a significant difference based on the test developers' interpretations. This difference may support the need for possible programming, since it was lower, but a closer look at the individual scores may further demonstrate that need. Four individual TSES scores were more than one standard deviation below the norm group mean, demonstrating low levels of self-efficacy, as compared to only one individual who scored more than one standard deviation above the norm. Group means also were within one standard deviation of the norm for the three separate factors subsumed within this measure, although the group mean for Engagement was slightly lower than the normative group mean. It was possible

that teachers felt more of a need to report higher efficacy levels than actually felt because the district approved the investigator's entrance into the school and the administration received a copy of the results. However, the seemingly comparable data from the target population and the normative group was not considered enough to decide that a program was unwarranted in light of the previous results reported within this document.

A correlational analysis was run to assess any relationships between the TSES Total Scores and the TSI Total Scores, since there were numerous studies within the introductory research that found links between stress levels and self-efficacy, and the possible program components may include strategies to manage stress and to build self-efficacy. Relationships were also assessed between the TSES Total Scores, years of experience, and number of stressors. Teachers' scores on the TSI were found to be related to their TSES Total Scores with $r = -0.383$ ($p < .10$). The relationship was of medium strength, and the negative direction implied that as teacher stress levels increased, teacher sense of efficacy decreased, and vice versa. This suggestive result was consistent with the relationship found in previous research between stress and self-efficacy, and although the finding did not indicate the direction of the relationship, it was most likely bidirectional as theorized by Bandura (1997). It also supported the inclusion of program components to address stress levels and develop self-efficacy, since an improvement in one may affect the other. Teacher self-efficacy, as measured by the TSES, was not found to be significantly related to years of experience, which again supported the use of a mixed population for the program. Teacher self-efficacy was found to be negatively related to the number of sources of stress with $r = -0.375$ ($p < .10$) with a medium effect size, and

this result was aligned with the increase in stressors causing a decrease in self-efficacy that has also been found in previous research.

Teacher Well-Being Survey

Scores for each item on each part from the Teacher Well-Being Survey (TWBS) were recorded and analyzed on spreadsheets. Before being entered, certain items were reverse-coded to ensure that negative scores showed sources of negative stress and the negative effects of stress. These items for Part 2 - Sources of Stress were as follows: anti-bullying legislation, educational reform, lack of collegiality, lack of support staff, and violence. These items for Part 3 - Effects of Stress were teaching effectiveness and energy levels. One survey was invalid for use within the total score analysis for Parts 2 and 3 because a page was left blank. Items on this participant's measure that were filled out were used within the overall item means to strengthen the validity of the group results for individual items. To analyze relevant patterns in the data, group statistics were calculated for the demographic portion and item means and frequency of responses were calculated for the remaining portions of the measure. Data were recorded and reported using means, standard deviations, frequencies, and simple percentages. Demographic information and frequency of response data were also used in later correlation calculations to look for relevant relationships, confirm research findings, and support the program design.

To make the program as relevant and effective as possible, analysis was conducted on the group means for each individual item within Parts 2 and 3 (See Table 6). If an individual item mean was negative, the negative score implied that the item was a source of stress or a negative effect of stress for most of the group. All of the item

means were then investigated to determine if there was evidence of multiple sources of negative stress and multiple negative effects of stress or if there were only a few sources of negative stress or only a few negative effects of stress.

Table 6

Individual Item Means for the TWBS

		Mean	SD	
Sources of Stress	NCLB	-0.74	0.86	
	Anti-bullying legislation	-0.26	1.18	
	Special education requirements	-0.17	1.19	
	Education reform	-0.48	1.65	
	Parental involvement	-0.09	1.38	
	Student achievement	-0.35	1.03	
	Economy	-1.22	1.04	
	Resources	-0.35	1.15	
	Public support	-1.17	1.27	
	Job Satisfaction	-0.23	1.41	
	Hours	-0.46	1.34	
	Demands	-0.96	1.17	
	Admin support	-0.27	1.16	
	Time with colleagues	-0.82	1.05	
	Support staff	-0.86	0.77	
	Violence	0.14	1.25	
	Professional development	-0.46	1.18	
	Student behavior	-1.41	0.85	
	Student SEC	-0.64	1.22	
	Student-teacher relations	0.68	0.84	
	Class size	-0.68	1.13	
	Effects of Stress	Job commitment	0.23	1.41
		Effectiveness	-0.91	1.23
Student-teacher relations		-0.61	1.34	
Energy		-1.30	0.97	
Management		-0.52	1.27	
	Influence	-0.09	1.00	

Note. For full item descriptions, see Appendix D.

Comparing the item means gave an indication of which sources of stress and negative effects were the most common and most strongly felt among the group, as well. This closer look helped to determine if there was support for a more generalized approach for

stress management that would help teachers manage a variety of stressful situations and effects or if the program would involve a focus on specific sources and/ or effects of stress to increase effectiveness and relevance. The identification of the top stressors and stress effects can also inform future research.

The results of this analysis revealed that the majority of teachers marked multiple sources of stress as present and negative in their day to day lives. In fact, all but two of the item means for sources of stress were negative, and the average number of sources of negative stress was 12.27 ($SD= 3.71$) out of 21 total possible sources of stress. The Student-teacher Relationships score was positive and may provide an avenue for further research on how student-teacher relationships may be a source of positive stress and may influence the effects of overall negative stress on teachers. These results confirmed the variety among sources of negative teacher stress, as well as provided some insight into possible sources of positive stress for teachers.

Overall, the item means and frequency of -2 responses revealed that economic issues, lack of public support, and student behavior were the most commonly rated as the greatest sources of negative stress. The educational reform issue and high work demands were also rated as causing high levels of negative stress by almost half of the group. These sources reflected issues at a systemic level, a school wide level, and a classroom level. A program that was geared toward generalizing across these situations would be the most realistic and effective approach considering the current context and limited resources described in the literature. However future programming, which may have access to more resources, could include an analysis and possible inclusion of components to manage these specific issues.

Group means for each perceived effect of stress revealed that all of the effects of stress found in the research and included in this survey had overall negative mean scores, except Job Commitment ($M = 0.227$). Since the score for commitment to the job was not negative, it would seem that negative stress did not affect job commitment among this group. This finding aligned with the group's score on the Professional Investment Subscale of the TSI. Overall, the percentages revealed that lower energy levels, less teaching effectiveness, and weaker student-teacher relationships were the most commonly rated as the strongest perceived negative effects of stress. These effects were especially concerning, since energy is a necessary resource for stress management, and sense of efficacy in the classroom has been linked to actual performance for teachers and students. In addition, warm student-teacher relationships contribute to positive climate and student outcomes. Perhaps the most disturbing aspect of this negative effect was that Part 2 of this survey revealed that those relationships may be a source of positive stress for teachers. If those relationships suffer as a result of negative stress, teachers will be even less likely to have them as the positive source of stress that may they need to function effectively. These results confirmed and further clarified that this group of teachers were experiencing the negative effects of stress outlined in the research and were in need of programming to help their effectiveness as a teacher.

The last part of the TWBS highlighted the stress management techniques already being used by the target population (see Table 7). Other techniques that were listed in the free response space included acupuncture, listening to music, watching TV (two responses), spending time with family, socializing, drawing, painting, making things, praying, and homeopathic stress relief.

Table 7

Number of Teachers Who Report Using Each Stress Management Technique

	<u>Techniques</u>							
	Exercise	Substance	Vacation	Meditation	Counseling	Eating	Hobby	Self-care
Frequency	16	9	8	14	3	11	8	20

Note. Techniques listed in the free response space were included within the categories listed above.

The most frequent coping tools used by the group included exercise, meditation, and self-care. Strategies that included these coping tools were examined further in the review of existing programs and techniques and were considered for inclusion in the program components, since their current use implied that these techniques were tolerable and realistic for the target population.

In addition, it was important to note the use of unhealthy coping tools, substance use and eating, and the low frequency of participants attending counseling, which has been shown to be an effective strategy for stress management. An effective stress management program should not only include healthy coping tools but also look to replace unhealthy coping tools, as well as possibly include components that are reminiscent of techniques used within counseling to manage stress and build self-efficacy.

Discussion

The results from this needs assessment supported the need for programming for this target population that is realistic within the face of limited resources and multiple stressors. This group of 23 full-time, suburban teachers with an average of 10.09 years of experience had an overall group mean of 2.91 on the Teacher Stress Inventory (TSI), which put them in the Moderate Stress Level category when compared to the normative group, confirming the presence of negative stress and the relative need for stress

management among the group. In fact, all of the individual scores fell within the Significantly Strong Stress Level or the Moderate Stress Level groups when compared to the normative data.

Results of the Teacher Sense of Efficacy Scale confirmed that the overall group mean ($M = 6.94$) was also lower than the normative group, which implied that this group may also benefit from programming to develop self-efficacy. More analysis of individual scores revealed that there were more individual scores that fell below one standard deviation from the normative group mean than one standard deviation above that mean. Out of the three factors, teachers reported feeling the least effective on items that reflected their ability to engage their students.

Teacher stress scores on the TSI and on the TSES were significantly related, which confirmed the relationship found among research between stress and efficacy, and further supported the possibility of developing self-efficacy as a way to positively affect teacher stress management and vice versa. This type of programming can also build the resources needed to manage stress and increase the ability to engage students.

Further information about the target population gathered from the Teacher Well-Being Survey (TWBS) confirmed the presence of multiple stressors and highlighted the most common sources of negative stress and the most common negative effects of stress among this group, which aligned with findings from the previous research and measures.

The variety of sources of stress and the overall negative stress levels of the participants called for a whole group program that involved low-cost and low-energy strategies which have been shown to generalize across systemic levels, settings, and situations. The needs assessment also demonstrated the presence of the negative effects

of stress on these teachers' well-being and teaching effectiveness that were cited in the research, which further supported the need for a program to decrease the negative effects of stress on teacher and student outcomes and increase the beneficial effects of positive stress management and development of self-efficacy. These results were used to create the purpose for the program and to help set the goals and goal indicators for the program (see the following Program Design Document). In addition, the program was composed of two components to address both stress management and the development of self-efficacy. The strategies that were highlighted within this needs assessment were further investigated in the following review of current programming and techniques, which was also used to find information about the methods and techniques that would be used to create activities to support the purpose, goals, and components of the program. The eligibility standards for participation were also created to fit the target population as described through this needs assessment.

Although the sample size was small compared to the district's teacher population, the results were considered adequate to design a program for this target population, considering the completion of almost all of the measures that were distributed and the limitations of timing for the needs assessment meetings. Significant results were found among this group, regardless of the sample size. Also, the results supported many of the findings among the previously cited research regarding other teacher populations. If the program that was developed is proven to be effective, the detailed description of the population it was developed for can be used to make future decisions about its appropriateness for other populations. The measures used on this needs assessment can

also be used to gather baseline data from other populations to determine appropriateness or adapt goals for the program based on the group's needs.

CHAPTER IV

RESULTS AND IMPLICATIONS FOR PROGRAM DESIGN: REVIEW OF CURRENT TECHNIQUES AND PROGRAMMING

It is important for individuals who are experiencing negative job stress and the effects of that stress to learn new ways to cope with this stress. Behavioral approaches can include stress inoculation, relaxation, deep breathing, time-management training, rational emotive behavior therapy, team-building, and meditation (Angerer, 2003). Since teacher attitudes and perceptions may help mediate and manage stress from a multitude of sources, as was found within the previous research cited and the needs assessment, interventions that support perspective-taking and awareness of negative affect and beliefs may help decrease disturbed stress reactions (Forman, 1990). Considering this need, effective interventions may need acknowledgment of the activating situation and the ability to appraise situations in a less negative way. Teachers need to also be aware of their own irrational beliefs that may be contributing to work-related stress. Forman's work with teachers revealed such irrational beliefs as the needs for constant approval, complete control, fairness and punishment, lack of frustration, constant help, placement of blame for problems, and avoidance of problems, all of which were contributing to teachers' stress levels.

Teachers also need ways to build personal factors such as friendships, strong marital relations, and coping with differing degrees of life stress to be able to influence

the development of a prosocial classroom, which Jennings and Greenberg (2009) tied to decreased stress levels for teachers and increased levels of well-being. Currently, teachers reported that the most common coping strategies that they employ are the use of supportive outside relationships, a sense of humor, times of relaxation and meditation, the perception of stress as a problem to be solved, and the belief in efficacy; and they pointed out the need for a positive attitude (Richards, 2012).

Many stress management interventions for individuals focus on training them in coping tools to build positive responses to potential stressors (Cecil & Forman, 1990). However, since the research cited previously showed that stress comes from both individual and environmental characteristics, stress prevention programming must also consider how an individual's work environment may be changed to address stressors or the individual's ability to cope with stress. Dearborn's (2002) research on the effective development of leaders within the workplace cited the importance of producing leaders who motivate and engage their employees. While this concept can apply to administrators within the education system, it can also apply to teachers, since teachers are leaders within the context of their classroom. Dearborn found that leaders need to be trained in collaboration and the use of social networks but also receive practice in using emotional intelligence since they must be in tune with others' needs within a group. Development of these skills can also help build confidence in themselves and others, which can help support self-efficacy and collective efficacy. Emotional intelligence can be built through the development of self-awareness, self-management, social awareness, and relationship management (Goleman, 1998). Possible programming can look to build self-awareness and self-management through the concept of mindfulness and developing self-efficacy,

while social awareness and relationship management can be built through the use of a structured group process that guides both effective communication and problem-solving. Development of these characteristics will help build classroom leaders that can motivate each other and their students and reflective leaders who will be able to reflect on and adapt their own actions to meet varying needs. Jennings and Greenberg (2009) also revealed that influential factors for a prosocial classroom included organizational aspects as well, including coteacher support, principal and district leadership, school climate and norms, school district values and in-service opportunities, community culture, and local and federal education policy demands.

While the above theory and research supported the need for helping teachers and organizations develop coping tools and support systems to increase positive reactions to stressful situations and thus decrease negative appraisals and influences on future stress, it was also important to consider the idea of off-the-job recovery when developing any programming. Hahn, Binnewies, Sonnentag, and Mojza (2011) found that there are four off-job experiences that are the most important to recovery from job stress: physical detachment from work (which includes control of job-related thoughts), relaxation, mastery over challenges and new learning, and control over personal activities. Training that includes components to address each of these elements will positively influence recovery from job stress and increase self-efficacy and well-being. The authors related that type of training to the consideration of Bandura's (1977) four sources of developing self-efficacy: enactive mastery, vicarious experience, verbal persuasion, and psychological states. They made the case that this type of training can help build new resources and decrease emotional exhaustion and negative affect in the face of stress,

which in turn will lead to better health and the interruption of the “loss spiral” of energy and resources. In addition, effective programming for recovery must focus on building positive behaviors to replace those resources lost to previous stress and replenish future resources.

Programs have been designed that attempt to support stress management for individuals and within the organizational setting, and a closer look at these programs revealed what components an effective program should or should not include. Cecil and Forman (1990) designed an intervention for individuals to help them manage their reactions to potentially stressful situations but also included a focus on increasing organizational capacity. Their study evaluated the effects of both an individual stress inoculation program and a coworker support group when compared to a control group. Stress inoculation consisted of once a week meetings that lasted for 90 minutes and continued for six weeks. Within these sessions, teachers were educated about the theoretical definition of stress and causes and effects of stress. They also engaged in relaxation training, rational restructuring, and training in a cognitive-behavioral framework to help them understand how their thoughts, feelings, and actions would lead to increased or decreased stress. They also practiced the application of coping skills by following scripts and developing their own scripts for dealing with stressful situations. The coworker support group met for 90-minute sessions once a week, also for six weeks. The group sessions followed a problem-sharing process, where members provided each other with reassurance and support, successful coping strategies, and empathetic listening. There was a facilitator present who guided the discussions and problem-solving process. When compared to the control group, the stress inoculation training was

effective in reducing teachers' self-reported stress and increasing teachers' coping skills. Although the coworker support groups were not found to significantly affect teachers' stress levels when compared to the control group, the researchers attributed this lack of effectiveness to the short-term nature of the groups and the lack of skills training presented within the group. It was also possible that hearing about coworker stress may have actually contributed to the participants' own stress levels. The study of this program revealed a possible format for implementing a program within an organization to garner administrative support and build a collegial support system, as well as demonstrated effective training strategies that need to be included for a program to be successful. Both the significant results and the non-significant results were a key to designing an effective stress management program for teachers.

To support their theory of the need for off-job recovery for successful stress management, Hahn et al. (2011) designed and evaluated a program that included training in off-job recovery in addition to addressing participants' reactions to stressors. They used a positive focus and set goals to influence recovery; improve participants' self-efficacy and well-being; decrease participants' emotional exhaustion, perceived stress, and situational negative affect; and increase sleep quality. Hahn et al. used a training group and a control group. The two training sessions were conducted within one week of each other, the first lasting five hours and the second lasting four hours, respectively. There were nine to ten participants and one to two trainers in each group. The researchers used a pre and post survey to assess the effects of the training program. The Recovery Training Program included four modules (one for each recovery factor) and was comprised of both psycho-education and group and individual exercises. Participants began by reflecting on

work-related stress and recovery, sharing group experiences, and receiving education about the importance of recovery. The first module addressed control through reflection about present areas of low and high control, desire for changes in control, and barriers to control. Participants then engaged in goal setting and created intentions for implementation and time management. The second module addressed psychological detachment by having participants define detachment and discuss its importance. Trainers then introduced strategies taken from rumination research to help participants disengage from their stressful thoughts about work. These strategies included solving a riddle, using mindfulness techniques, and partaking in transition rituals to separate work and nonwork. Participants summarized their own key learning points and set a goal to promote recovery. The second training session covered the third and fourth modules, but first began with the participants discussing their progress on the goals they set within the first session. The third module was focused on promoting mastery experiences and participants reviewed activities that they had engaged in in the past that promoted feelings of success and achievement for them. The fourth module focused on relaxation and sleep, imagery, relaxation activities and unhealthy relaxation strategies, progressive muscle relaxation, and sleep hygiene. When Hahn et al. analyzed the results of their surveys, they found that participants had gained significant knowledge about recovery and demonstrated significant main effects for detachment, relaxation and control on measures distributed two weeks after the start of the training and four weeks after the start of the training. Mastery was only significant in the results from the second post-test, which occurred two weeks after the first training session. There was also significant improvement in participants' recovery-related self-efficacy and sleep quality. Results

from the third post-test, conducted four weeks after the first training session, also showed support for longer-term reduction in perceived stress and situation-specific negative affect. The researchers summarized their results by adding that future programming may need more follow-up and time for meeting goals and developing resources. Future programs may also need more consideration of situational and organizational factors that affect job stress and recovery.

While investigating both the theories and previous programming about effective stress management, a few strategies for coping with stress came to light that were seen across multiple studies and at both the individual and organizational levels. The concepts of psycho-education, self-awareness and mindfulness, self-efficacy, the problem-solving process, teacher input and support from administrators, a collective support system, and positive psychology and self-care for recovery were all echoed within the above research and deserved a closer look as possibilities for inclusion in an effective stress management program.

Mindfulness

Research by Shapiro, Brown, and Biegel (2007) suggested that self-care should include self-awareness, self-regulation and coping activities, as well as a balance of the self and other interests. This conclusion related to many others within stress management research, regardless of the terminology used. Justice and Espinoza (2007) referred to this identification, understanding, experiencing, and expressing of emotions as emotional intelligence and suggested that developing emotional intelligence was how individuals can deal with emotions in healthy and productive ways to encourage personal achievement, career success, and life satisfaction.

Davis and Asliturk's (2011) research revealed that when people appraise and respond to stressful events, they use both a specific format for the mental processing of events and an orientation to events and life that are resistant to threats. This combination of processing and orientation supported resilience in the face of significant stress. They referred to this orientation as a “realistic orientation” that helped individuals view stressful events in a less judgmental way, as if they can happen to anyone, and allowed for individuals to imagine a range of possible outcomes to support effective problem-solving. The mental processes that they found led to the highest levels of well-being related back to the concept of self-awareness, which they described as reflecting thoughtfully on experiences, setting meaningful and challenging goals, and developing a better understanding of the self and the context. This coping style led to the use of more coping strategies, the development of more social support, greater life satisfaction and less depression and burnout.

The origins of this awareness of attitudes and emphasis on coping can be seen within rational-emotive therapeutic techniques. Forman (1990) described rational-emotive therapy as addressing the internal causes of teacher stress to address both environmental factors and internal factors. It focused on irrational beliefs that teachers held that led to negative attitudes toward stressors. These negative attitudes led to excessive stress and low frustration tolerance, which set off a cycle of negative appraisals, increasing frustration, and more frequent irrational beliefs, which lead to more frequent and severe stressful events. School staff who took part in a rational-emotive staff development program, which included education about emotions, identification of thoughts and irrational beliefs, coping mechanisms, and building new thought patterns

showed a significant decrease in irrational beliefs (Forman & Forman, 1980). Rational-emotive stress management focuses on cognitive control and more recently on combining that cognitive control with stress inoculation training (Forman, 1990). Not only were participants educated about stress and how thoughts, feelings, and actions contribute to stress or well-being, they were also trained in skills such as relaxation and rational restructuring to lead to higher levels of self-awareness and more constructive reactions to stress. Stress inoculation training was found effective across a variety of school settings to reduce self-reported stress and anxiety and increase job satisfaction.

The needs assessment conducted as part of this program design further supported the possibility of using meditation as part of an effective stress prevention program. Many of the teachers reported using some type of meditation to try and manage their stress, which implied that meditation was considered tolerable by many of the teachers within the target population. Another tie in to using meditation and relaxation as effective stress management techniques was seen in Stanley's (2010) study of teachers working in highly stressful educational settings with violent students. Those teachers reported that they maintained their effectiveness through stress reduction, and spirituality was a successful coping tool for reducing anxiety and managing stress. Spirituality was considered any method that came from within, including meditation, deep breathing, exercise, time alone, and relaxation exercises. The effectiveness of these methods generalized across different settings and was also related to higher levels of rational detachment, which reduces stress and promotes positive relationships with students.

Most recently, the idea of self-awareness, emotional intelligence, realistic orientation, relaxation and meditation, and rational detachment can be seen within a stress

management technique called mindfulness. In *A Mindfulness-Based Stress Reduction Workbook*, Stahl and Goldstein (1998) described mindfulness as being fully aware of what is happening in the present moment without filters or judgment. It can be used in any situation and ties together self-awareness with the examination of mental processes from a more detached, outside perspective. The process allows insight into habitual thinking and actions and leads to changes to alleviate stress caused by those reactions and patterns. The goal of mindfulness is to be able to acknowledge concerns and learn to work with them in the face of stress and anxiety. It also helps to explore what works and does not work when dealing with challenges and explores stress-inducing patterns like negative self-talk, amplifying anxiety, exaggeration the negative and discrediting the positive, assuming you know what others are thinking, feeling the need to be the expert, focusing on what “should” be instead of what actually is, and the need to place blame. Based on its rationale and research, this workbook was considered as a possible guide for mindfulness topics and activities to be integrated into the components of the stress management program.

Hyland (2009) defined mindfulness in a similar way and stressed that non-judgmentally acknowledging thoughts and situations involves a thorough assessment of context, thoughts, and feelings to lead to more effective action. Research has shown that mindfulness training is increasing and has been effective across a range of contexts in the development of positive physical and mental health to reduce stress and increase positive outcomes (Conn, 2011; Gold et al., 2010; Hyland, 2009; Jennings & Greenberg, 2009). When educating participants about mindfulness, facilitators must include training on the presence of non-judgmental observations, patience, separation of present from past, and

trust and emphasize that it involves awareness, acceptance, and letting go of feelings and beliefs that contribute to problems (Hyland, 2009). Since it is individualized, the process also fosters engagement, motivation, and ownership which can increase social engagement and empowerment. Conn (2011) also pointed out that the benefits of mindfulness are also gained at a low financial cost and with low side effects, yet are generalizable across multiple settings, which can be especially useful in the face of the low levels of resources and high amounts of sources of stress that were revealed in the needs assessment.

Evans and Segerstrom (2011) tested their hypotheses that mindfulness may help individuals reduce engagement in repetitive thinking of any type and predispose them to positively directed thinking, since meta-cognitive awareness may allow greater choice of which thoughts individuals should focus on and repeat. In their study, mindfulness was negatively related to overall repetitive thought and negative types of repetitive thoughts (including worry and rumination) and positively related to positive repetitive thoughts such as attention regulation and those that demonstrated an accepting attitude toward experiences. These findings support the use of mindedness interventions to reduce stress, most specifically the use of nonjudgement and acting with awareness. Higher levels of mindfulness were also associated with exploring new options and different perspectives.

Specific studies have been conducted to investigate the effects of mindfulness on stress reduction. Jacobs and Blustein (2008), in their study of job insecurity and employment insecurity and how those issues contribute to work stress, found that working in an ambiguous situation can be just as stressful as being unemployed. However, employees that took a problem-solving approach to their situations and

demonstrated awareness through stopping, observing, and returning to the task at hand experienced less perceived stress. They practiced acceptance through impartiality, and Jacobs and Blustein attributed these mindfulness techniques with the workers' ability to cope with uncertainty and anxiety and increase their use of resources and ability to achieve clarity within their individual situations.

Shapiro et al. (2007) found that a Mindfulness-Based Stress Reduction (MBSR) program for therapists-in-training was linked to significant declines in stress, negative affect, rumination, state and trait anxiety, and to significant increases in positive affect and self-compassion within a controlled study. The program itself was also associated with an increase in mindfulness, showing the effectiveness of these techniques to both lead to the desired abilities and to reduce stress. Beddoe and Murphy (2004) revealed similar effects following a MBSR training program for nursing students. The program ran for eight weeks and included 2-hour sessions weekly with 30 minutes of guided meditation at home for five days a week. The program's goal was to increase empathy, which is linked to prosocial behavior and decreased distress, but also develop mindfulness as a protective factor against the personal stress and vulnerability that empathy may cause among those in the helping professions. The purpose of the course was to provide students with coping tools for dealing with personal and professional stress and to develop empathy. Participation significantly reduced anxiety and positive trends were observed across stress dimensions of attitude, time pressure, and total stress. Negative trends were observed across personal distress and fantasy. Home meditation added to the benefits and self-reports indicated that participants felt a sense of increased

well-being; improved coping skills; increased self-confidence; changes in thoughts, feelings, and reactions; more hopefulness; and more assertiveness.

Jennings and Greenberg (2009) also made the connection between promoting SEC and well-being through emotional intelligence training and mindfulness-based interventions. Emotional intelligence training led to more application of prosocial behaviors and social-emotional curriculum within the school environment, which enhanced student outcomes, and the mindfulness-based interventions used within that training increased awareness of teachers' internal experiences and promoted reflection, self-regulation, and caring. For example, a study of secondary school teachers found that mindfulness training reduced stress symptoms. A combined program involved emotional awareness and mindfulness training, which lasted for eight weeks, reduced self-reported depression and rumination and increased emotional self-awareness. The results of that study also suggested an improvement in classroom climate and an enhanced commitment to teaching.

The study by Gold et al. (2010) revealed that an MBSR training program designed for a group of primary school teachers led to improvement in anxiety, depression, and stress, as well as significant progression toward individual goals. The training program focused on meditation, decreasing emotional reactivity, and enhancing cognitive appraisal of stressful thoughts and events. The closeness of this population to the population being considered for the current program called for a closer look at the intervention itself. The MBSR program lasted for eight weeks and took place after the school day. Sessions lasted for two and half hours and included a five-hour day of silence on a Saturday between the fifth and sixth week. Examples and discussions were drawn

from the participants' current work experiences, reflecting an element of teacher input, and the trainer was available for phone or email support during the length of the program. If any participants missed a session, they were contacted by the trainer.

A larger-scale study conducted by Hoy, Gage, and Tarter (2006) of 2600 teachers across 75 middle schools revealed that faculty trust and school mindfulness were most effective if they existed together. Hoy et al. defined individual mindfulness as the scrutiny of thoughts and the revision of those thoughts based on experiences and investigation of the context. This definition of mindfulness demonstrates the awareness of thoughts and the revisions of those thoughts as mentioned previously within the summary of other mindfulness studies and programs. The authors then tie individual mindfulness into school mindfulness by defining school mindfulness as an awareness of certain ideals and a focus on those ideals, as well as the ability to consider contextual influences on problems and adapt to match solutions based on their ideals to the problems detected. In their study, administrators contributed to school mindfulness through encouraging faculty to investigate and adapt ideas, foster novelty in their classrooms, feel safe enough to take logical risks, experiment and be resilient. Mindfulness also helped administrators be more aware of changes that may lead to future problems and seek out ways to change school routines proactively to avoid those problems. Trust was an important ideal of mindful schools and was defined as a common belief that everyone was acting in a way that was in the best interest of the concerned parties, who, in the case of a school setting, were students and teachers. Trust within a school setting allowed for the openness for educators to discuss mistakes and problems, the ability for individuals to be able to challenge each other, and the chance of more learning from mistakes. Within this study,

principal and faculty mindfulness were significantly correlated and faculty trust was related to trust in principal and trust in colleagues. This faculty trust was a strong predictor of faculty mindfulness. This organizational tie-in showed the need for mindfulness within the workplace, as well as the benefits of garnering administrative support for programming.

Positive Psychology

Once an individual has gained awareness of their emotions and the ability to regulate those emotions through non-judgments and goal-setting, they may also have been able to incorporate an additional focus on the positivity that can be found within their emotions or a situation, which will lead not only to a reduction in stress but also to a further increase in well-being. Perry and Ball (2007) referred to teaching as an emotional event and hypothesized that the more emotional intelligence one has then the more positive emotions and responses they can experience, like joy, satisfaction, and pleasure with one's work. They also will have the ability to evaluate negative emotions, including anger and frustration, with the additional resources and competence needed to cope with those emotions through acceptance and release. Perry and Ball found that recognition of positively evaluated emotions can serve as a buffer against stress and can increase psychological well-being. Based on Lazarus' (1984) appraisal theory, a nonjudgmental appraisal can lead to effective responses which in turn benefit stress levels and resources, while a specifically positive-focused appraisal can lead to an additional lowering of stress levels and the potential for continual benefits and replenishment of resources through each experience.

Positive psychology is based on studying positive subjective experiences, individuals, and institutions to improve the quality of life and prevent psychopathology (Seligman & Csikszentmihalyi, 2000). This attempt to move away from a focus on the negative moves closer to how typical individuals maintain well-being based on their experiences and strengths. It requires both an awareness of the individual, as well as an awareness of how one can contribute to a collective sense of well-being to find different perspectives on situations and use the perspective that will be most beneficial. Focusing on strengths will allow an individual to foster such protective factors as courage, future mindedness, optimism, interpersonal skill, faith, work ethic, hope, honesty, perseverance, and ability to garner insight, all of which have been tied to resilience and well-being. Seligman and Csikszentmihalyi pointed out that distress mechanisms do exist for evolutionary reasons, which may explain the findings behind the sometimes positive effects of stress, but they use that evidence to support taking a positive focus on stressful situations to help support positive, necessary action that will have a beneficial impact on the outcome of a distressing event. This positive focus ultimately changes the appraisal and response cycle and builds competence, belongingness, and autonomy. If an individual can develop an enduring psychological trait for recognizing positive experiences and relationships, instead of a just a positive focus within specific events, that will lead to further stress prevention and generalizability across settings (Peterson, 2009; Seligman & Csikszentmihalyi, 2000).

In studies of positive psychological theory, positive emotions have been associated with benefits in health, work, and family (Kobau et al., 2010). Knowledge gained through education about positive psychology can foster psychological resilience

and promote mental health. This process of strengthening psychological competencies and resources not only enhanced well-being within individuals and communities, but it also prevented mental disorders. Positive psychology does not deny negative experiences but acknowledges them while focusing on using positive resources to resolve stressful situations. Although some stress can support personal safety, since research showed increased negative effects associated with increased stress levels, the development of resiliency in individuals may help them recover more quickly from stressful experiences and even be able to affect circumstances and context more successfully. Kobau et al.'s research demonstrated a link between using a more optimistic explanatory style and positive environmental effects, while a less-positive style was a predictor of depression. A study of an Army training program that taught positive psychology techniques through practicing gratitude, performing acts of kindness and using mindfulness-based techniques both pre- and post-deployment led to a maximization of satisfaction and the ability to cope with stress through a reinterpretation of stressful events (Kobau et al., 2010). The training also was shown to support positive overall affect, physical activity, sleep quality, and prosocial behavior. The training was asset-based, low cost, and current and actually showed evidence of having a low negative stigma among the organization.

Hart and Sasso (2011) found an increase of evidence for positive psychology throughout a large body of research, articles, and associations, as well as an increase in the numbers of citations but contend that it is still a complex field. Application has increased in counseling and health psychology but not as much in schools and educational psychology. Based on its association with resilience and positive coping and effective decision-making, as well as its practicality and low need for resources,

integrating positive psychology into a stress management program within the current educational system may be beneficial for teachers, students, and the organization itself. Since a focus on excellence, strength, and repair highlights successful adaptation and learning and gives credit to cognitive ability and self-efficacy, it will help within the educational context to identify helpful relationships, reach positive outcomes, support adaptation and resiliency in the face of organizational challenges, support effective teacher-student engagement and positive relationships, and promote competence and self-direction (Hoy & Tarter, 2011). It will also help teachers build happiness and commitment to their job and the welfare of others and lead to increased motivation and energy.

Self-Care

Although these theories and techniques seemed presentable and timely, teachers still need the energy and personal resources needed to employ them in the face of stressful situations. Effective programming also must include a focus on self-care to build these resources. Even the data collected within the needs assessment demonstrated that teachers most commonly employed self-care techniques and vacation and exercise, both of which can be considered specific forms of self-care. The spirituality methods that Stanley (2010) found to be effective in stress reduction also included self-care methods, such as time with family members and exercise.

Guy (2000) created guidelines for psychologists to use to promote effective self-care but also stressed that self-care should be used for anyone whose role includes reassuring, guiding, or challenging others. Guy's guidelines included creating a plan for comprehensive self-care that includes ways to maintain healthy relationship networks that

build feelings of value, respect, and nurturance. McWilliams (2004) highlighted the need for self-care to include not working too many hours, having periods of unscheduled time, vacation time, the ability to forgive oneself for withdrawing from their workload, attention to short- and long-term health, exercise, outlets for traits that are suppressed during work hours, opportunities for “playfulness,” areas of privacy and safe expression, and time with one's own family.

Development of Self-Efficacy

While all of the techniques mentioned included tie-ins to the development of self-efficacy, there were specific activities that could be included within a program that were found to directly impact self-efficacy. Using coping mechanisms may help build self-efficacy, but personal efficacy may also determine whether individuals engage in coping behavior, how much effort they expend to use them, and how long they will sustain these mechanisms while faced with challenges and stressful experiences (Bandura, 1977). Even the participation and persistence within activities that are perceived as threatening yet are relatively safe can produce feelings of mastery and self-efficacy and further demonstration of future reductions in stressful reactions. Bandura's model highlighted the four sources of self-efficacy, mentioned previously, and defined them as performance accomplishments, vicarious experiences, verbal persuasion, and physiological states. Although Bandura referred to this final source of self-efficacy as physiological, current researchers and authors have referred to this source as psychological to emphasize the role of the cognitions and beliefs linked to the emotional arousal that individuals experience and the attributions that they make in each situation (Bandura, 1977; Stajkovic & Sommer, 2000). Evidence from multiple studies that were based on these

sources demonstrated that self-efficacy can be raised through modeling and repetitive information, even if there are no enactive experiences involved (Bandura & Locke, 2003). Additional studies revealed that visualization can also alter efficacy beliefs without these experiences and led to increased perceived self-efficacy and coping efficacy. The more the participants believed that they could cope effectively in certain situations, then the higher the effectiveness of their actual coping performance. Ross and Bruce (2007) also found that teacher efficacy can be increased through the presentation of information, modeling, mentoring, and vicarious experiences. Modeling, exposure, repetitive information, and visualization can be used to support both self-efficacy and coping efficacy within a program, in addition to planning for and supporting actual action that may lead to increases in self-efficacy through enactive experiences. If teachers participate in situations that are emotionally charged, they will be able to form their response based on the emotional awareness that they gained previously and will manage those situations more effectively (Perry & Ball, 2007).

Tying in a component that helps individuals plan for and practice reactions and solutions to actual situations with the goal of enacting those plans would help support positive outcomes and future self-efficacy. Individuals who demonstrated proactive coping put forth more effort to remove potential obstacles before problems occurred, reached already-set goals, and continuously built up personal resources (Davis & Asliturk, 2011). These individuals also reported more personal growth. But to successfully use proactive techniques, individuals must be able to identify, interpret, and act in the face of potential threats. They need awareness of the current context, which can be gained through mindfulness, exposure, and vicarious learning. They also need to have

a future orientation for action and consider alternatives and consequences, which can be done through the use of problem-solving and belief in self-efficacy. Use of problem analysis and plan rehearsal have been positively associated with more problem solving, engagement of coping mechanisms, and well-being (Davis & Asliturk, 2011). Proactive coping predicted resilience and purpose, coherence, and fulfillment and supported a more positive appraisal of stressful events. Since traits and ability were more important than the predictability of an event, development of these will generalize across settings and situations.

Klassen and Chiu (2011) found that interventions designed to support self-efficacy lowered the negative effects of stress on teacher connections to the profession. Building self-efficacy may reduce the impact of stress on occupational commitment, which has been positively associated with self-efficacy and effective decision-making. Justice and Espinoza (2007) pointed out the need for development of interpersonal skills to support assertiveness and effective classroom management. Interpersonal skills can be developed through the use of self-management skills to increase motivation, time management, and commitment, which have been shown to contribute to high job stress and attrition. Intrapersonal development may also be necessary to support self-esteem and stress management.

These theories and research made a strong case for the development of self-efficacy, but they also demonstrated the need to consider a group format to support individual self-efficacy. Vicarious learning, perspective-taking, social support, and the development of interpersonal skills can all be done through a collective format. A group format would also lend itself to more monitoring, mentoring, and support for future

action, which were associated with self-efficacy, as well as provide positivity and social support, both of which have been directly linked to stress reduction. Fulton (1998) found that an approach to improve self-efficacy, called the Balint group method, provided a sympathetic and tolerant forum, which allowed employees to present situations that strained their professional relationships and focus on current, troubling issues. Personal awareness was increased and burnout was reduced through an increase in psychosocial self-efficacy through peer involvement. Ross and Bruce's (2007) program to increase teacher efficacy followed a group-wide, professional development format based on Bandura's (1997) sources of efficacy. The professional development program was comprised of a full day session followed by three 2-hour after school sessions. Each group was small and used classroom teachers as leaders and models to help support other teachers' mastery experiences through the appraisal of challenges and the self-assessment of competence. Competence was then built through information and activities and the redefinition of success. Vicarious experience was provided through peer observations and demonstrations, social persuasion was provided through positive statements and reinforcement, and physiological and affective states of stress, anxiety, and nervousness were addressed through a specific sequence of topics from least threatening to most threatening. The teacher-efficacy effects from the program were found to significantly improve classroom management, and results showed that individual efficacy could be influenced by outside information, peers, and change agents, as well as by the ability to adapt over time.

Bennett and Monsen (2011) reviewed four problem-solving approaches for teachers to enable them to develop solutions to problems within the classroom and build

their capacity to solve future problems effectively. All four approaches used a group format within an educational setting. The first approach was called Circles of Adults, which were meetings where teachers presented their own difficulties and then decided on a personal solution after multiple perspectives were presented. The groups were presenter-centered and decisions were not dependent on group advice, which gave the teachers the chance to recognize how emotions played into their responses and their students' responses. There was also a session facilitator and “graphic facilitator,” to record the main points of the problem and discussion in diagram form, in each group. The meetings had ten steps to follow throughout the program and within the sessions, including: set ground rules, present the problem, explore relationships, consider both helpful and harmful organizational factors, listen to the student's voice, listen to a summary of the information, generate a hypothesis, generate strategies and solutions linked to the hypothesis, agree on first steps and designate a coach to check in, and close with a summary comment from each participant. This training program provided a clear structure of support, was easy to understand, and was supported by previous case studies. The authors of the review did point out that the actual facilitator training process was unclear.

The second approach described by Bennet and Monsen (2011) used to increase teacher efficacy was coaching. They stated that coaching can be done at an individual level or a group level, if adapted, and involved ten phases to focus on systemic and personal job-related issues. In this approach, teachers worked with a mentor-type coach on understanding a problem, summarizing the problem, examining the systemic factors, developing a cultural understanding, considering all underlying personal factors,

exploring the multiple factors revealed, creating an “action menu” of possible solutions, planning action, evaluating the outcome of the solution chosen, and engaging in meta-evaluation over time. The sessions lasted approximately 45 minutes but descriptions of coaching within the literature did not reveal a specific frequency or requirements for who should be the coach and/ or trainee. The process was easy to understand but did not have a specific outline for timing. It was supported by multiple teacher self-reports.

The third approach for increasing teacher efficacy was through Collaborative Problem-solving Groups, which were based on understanding the social-emotional aspects of student behavior (Bennett & Mosen, 2011). These groups were used mostly to respond to problems with student behaviors and used teachers in the role of consultants. This approach needed support from administration and an initial meeting with interested teachers to discuss goals and expectations. Each group had a maximum of 12 participants, and each session lasted one to one-and-a-half hours. Group members were present to support individual understanding and possible solutions, not provide advice. Each session involved a case presentation, gathering of information, and group exploration of the issue. The case presentation involved a description of the behavior, solutions already attempted, and the teacher's perception of the outcomes. Teachers then asked questions to clarify the situation, and finally all the group members explored the information to develop alternative approaches to modify the teacher's response. The presenting teacher then chose a solution. Research supported this problem-solving process, which was similar to the first two described.

The fourth and final problem-solving approach described by Bennet and Mosen (2011) was called the Staff Sharing Scheme, which was also being used to manage

challenging student behavior. This approach has reportedly been used successfully in multiple settings and countries with the goal to develop problem-solving and decision-making skills. It involved three phases: one to assess the existing school processes for managing student behavior, the second to develop skills to specifically address the problems presented, and the third to conduct actual meetings of the Staff Sharing Scheme groups coordinating the use of a planned solution. Phase two consisted of ten, 2-hour sessions but could be adapted to five, 2-hour sessions. Skills taught included how to define problems, observe without bias, conduct interviews, and engage in Functional Behavior Assessments to develop and test hypotheses about behavior. Teachers and other school staff also learned a range of intervention strategies related to problematic behavior. Phase three meetings occurred monthly for 90 minutes and were used to troubleshoot any specific situations of problematic behavior that arose. The group explored the context of the problem and any other information, and then generated strategies that could be used by the problem-presenter. An action plan was then developed with specific goals, roles, and resources involved. Once the action plan was implemented and monitored, there was an evaluation and follow-up at the next meeting. This approach used a comprehensive approach and included multiple levels, as well as implemented strong training and structure. Initial results of empirical studies of this approach indicated it was an effective system, although time-consuming.

Overall research on the problem-solving process within these approaches indicated that teacher groups were useful for developing teacher efficacy (Bennett & Monsen, 2011). Much of the structure among these four approaches was similar, which showed the adaptability of this process. It was not a surprise based on other studies of

teacher groups and professional development programs that structured problem-solving led to higher levels of self-efficacy, especially when they allowed teachers to take an active role in improvement and student success and included teacher input, consideration of organizational conditions, and support from stakeholders and administration (Ruddy & Prusinski, 2012). Ruddy and Prusinski found that within their study of an Indiana professional development program, the most effective professional development involved collaboration, training, and monitoring to support teachers' growth and guard against isolation and disempowerment. Their research also supported professional development that was continual, used current information, and was collaborative. These types of professional development programs were most likely to change teacher practices and attitudes. Training must include a process of inquiry and action, as seen in the problem-solving approach, and continual monitoring and adjustment based on teacher feedback. Collaboration also improved morale, encouraged new skills and methods, and positively affected student achievement through teacher self-reflection and consideration of multiple viewpoints and experiences. Collaborative professional development led to a strong support system, which is one of the protective factors against the negative effects of stress, and built a positive working community, which can address organizational difficulties that contribute to stress. The Indiana professional development program also supported teacher retention and showed a need for more effective communication within the different levels of the educational system.

Collective Efficacy

As evidenced above, teacher self-efficacy can be improved through group activities and development, which in turn may lead to stress reduction and the

development of protective factors. But with the support for collaboration and group process, is it possible that such groups can also build collective efficacy among teachers and thus support stress management at both an individual and organizational level?

Woodbridge (2004) gave good insight as to what collective efficacy or lack thereof can look like within a study of a workshop that was provided for human service workers. Human service workers, like teachers, work directly to help clients and have emotional connections with and responses to those clients. Many workers viewed their clients as unmotivated, inconsistent, or unstable and struggled with how those views of their clients caused them to become disengaged from or negative about the world, themselves, and others. Their relationships suffered, and they described their work in terms of an “us” versus “them” split. This split into the “good” and the “bad” showed a tendency to identify with a collective against a stressor, and it was through this connection that collective efficacy was built to reinforce individual efficacy and the existence of a social support system. The workshop described by Woodbridge actually used the group members' connection of dealing with similar clients to create a sense of safety and similarity among them as they shared their struggles and validated each other's experiences. After rapport was built and the members felt that their belief of being “good at heart” was validated, the second activity forced the group members to sort out what was fact and what was perception in specific situations and then listen to the perspective of the client. The third activity had the group members develop practical ideas for dealing with clients that would avoid anxiety and loss of effectiveness. The emotional investigation that took place followed a format similar to the mindfulness techniques described previously and had participants separate the emotions from the actions, the

desired from the actual, what they could do differently now, and how they found relief in the face of negative emotions. The group built their collective efficacy as an effective “us” but also was forced to take other perspectives and let go of the defensiveness that made their clients the “them.” Participants reported a better ability to soothe themselves, take perspectives, lose defensiveness, gain understanding and effectiveness, and decrease anxiety.

Collective efficacy beliefs reflect group-level capabilities and have a positive effect on stress reduction (Klassen, 2010). McWilliams (2004) pointed out the need for those in the helping professions to have a confidential setting to talk about stress and specific sources of stress. These groups not only decreased isolation and loneliness for the individual, but they supported group honesty and multiply expertise within a setting to encourage ongoing learning. They also helped develop a network of professionals for continued information-sharing, increased introspection, and positive feedback, which benefited clients, the helping professionals, and the organizations within which they work. Fulton (1998) demonstrated that prevention and treatment of job burnout should include group meetings, better communication among staff and various levels, and joint activities. Group or staff discussions were essential to increase effective communication and although a facilitator was an important part of those discussions, the group format must allow for a free exchange of ideas and the tolerance of negative feelings. The organization needed to allow the expression of ideas, complaints, suggestions or questions without the fear of retribution. If a school administration allowed for a stress management program that involved a group of teachers collaborating openly within the school setting without retribution or negativity, it would be indicative of organizational

and administrative support, which supports successful management of job stress. These groups would also help all of the employees know what is expected of them and stay motivated, which protects them from role ambiguity and loss of emotional resources.

Specifically regarding teachers, there are multiple groups that have been developed to support effective collaboration. Bradley (1998) found that teachers in departments with low levels of collegiality tended to have more negative views of students. The most successful changes in practice and the more positive views of students were reported among teachers that belong to an active professional community. Without this support, teachers returned to previously ineffective teaching strategies or left the profession. Klassen, Usher, and Bong (2010) found the teachers' collective efficacy (TCE) was associated with job satisfaction and job stress across multiple cultural settings and based these findings on Bandura's (1997) theory of how perceived collective efficacy will affect group performance and individual efficacy.

With this need for collaboration and collectivity in mind, there are a number of recent movements and groups that were developed to support effective collaboration and collectivity. Within the school reform movements, schools in the city of Orange, New Jersey, divided schools into smaller units so that teachers and students could grow closer and stay focused (Mooney, 2007b). This design was also to provide structure that may be lacking in impoverished homes. Units of teachers meet twice a week to share notes, coordinate classes, and plan projects. Teacher group input has led to increased school security, uniforms, and weekly discussion groups between teachers and students, demonstrating examples of actual collective efficacy. Teachers also reported increased student feedback, connectivity to other teachers and administrators, and an overall

increase in enthusiasm for teaching. School policies such as these in Orange that were put in place with the support of colleagues and school leaders have been shown to mediate stress and help build a sense of collective efficacy, which refers to the “teachers' perceptions that the staff can work together to improve student learning and behavior” (Klassen, 2010). Collective efficacy is influenced by past success, observation of other groups' successes, and encouragement from influential others, all of which were considered in this group program design for teachers. Klassen also found that job resources such as social support, feedback, and collegiality boosted teacher motivation, and teacher confidence about collective efficacy to manage behavior resulted in lower levels of personal stress. Interestingly, Klassen found no difference in job stress or satisfaction across school levels, which supported a possible group that included both elementary and middle school teachers.

Another example of a type of group developed to help build collective efficacy is a community of practice (COP) group. Parker, Patton, Madden, and Sinclair (2010) initiated a qualitative study to examine one of these COP groups and defined COP as a group who shares a common practice put together in a particular context. These groups work toward a common goal, such as curriculum development or solving an organizational issue. Previously, COP's were found to support willingness, reflection, sharing, identity development, collaboration, and empowerment. The COP that these researchers chose to study was being instituted in a district where the atmosphere was described by staff as “disenfranchised” and where teachers were described as “complaining,” “demoralized,” and “tense.” Teachers in the COP reported that this goal-oriented approach led to a meaningful and purposeful outcome and attributed the results

to the initiation of a group when needed, the fact that every participant had a vision for the group, the support that was provided, the relationships that were built, and the empowerment that led to effective actions and reaching the goals that were set.

Nielsen, Triggs, Clarke, and Collins (2010) also reported the success of a professional learning community that was developed based on the idea of COP and with the goal to facilitate communication between cooperating teachers (those overseeing student teachers) and university-based teacher educators. This “dynamic collective” maintained a specific structure of sharing while participants were able to influence each other and adapt to changes. The authors highlighted this balance of flexibility and structure, as well as the ability for participants to self-organize (determine the most pressing issues to be discussed) as the most effective components of the group. The groups did not have a present agenda and allowed for variable attendance. The teachers reported that the most influential parts of the group were self-organization; the consideration of how factors were interrelated and bidirectional; acknowledgment, reflection, and acceptance of topics that caused tensions; articulation of resources and constraints; and the development of a decentralized network which allowed group members to share with others outside of the group.

Current professional development for teachers that incorporates similar processes and concepts is geared toward creating and supporting teacher learning that is continuous, collaborative, and connected to the teacher's daily reality. Goodnough (2010) studied inquiry groups that developed and implemented collaborative action projects. Groups occurred over a three-year period and involved over 50 teachers. Membership was relatively fluid and the structure of each group was different, depending on the context in

which the groups were run. The format of each group generally followed the problem-solving process of identifying problems, understanding them, developing action plans, sharing insight, and engaging in reflection. One teacher who was the subject of an extensive case study reported gaining general knowledge, the ability to reflect and adapt on personal actions and beliefs, and the perception of the effectiveness of collaboration and positive support from peers.

Vetter (2012) also published a case study of a teacher involved in a practitioner research group, who reported that involvement in the group led to a change in her beliefs and practices, as well as in her own ability to take on leadership and affect change. The group she was involved in was teacher-centered, constructive, and supportive and enabled teacher change through the problem-solving process. Vetter described the particular group the teacher was involved in as being geared toward promoting knowledge from the bottom-up and used the case study as evidence that teacher groups and mentoring are more likely to foster change. Involvement in these types of groups takes buy-in and practice in open communication and increased awareness. This teacher's change in her ability to take on leadership and feel effective was attributed to group validation, challenges, generation of alternatives, and support.

Pupil intervention teams (PIT) were also designed to increase supportive interactions with colleagues in a structured, goal-oriented way that also fostered emotional support, empathy, and positive regard (Lhospital & Gregory, 2009). In Lhospital and Gregory's study of the PIT process, they found that teacher distress was reduced through involvement in the PIT process and that team support predicted a decline in stress over the process itself. Within the PIT model, pre-referral teams increased

teacher collaboration and addressed high-need students. Since the PIT model is student-centered and leads to the enacting of plans developed by the team, it shows some connections to models that increase collective efficacy and reduce teacher stress. However, the model itself was not as useful for review for this particular program design, since it only addressed student needs and lacked flexibility for teacher input and changes in school policy. Lieberman's (1996) study of 15 educational reform networks also focused on groups that were originated to respond to legislative demands, but these groups were not dictated by specific educational policy and functioned in a more flexible way than pre-referral teams. Within this study, Lieberman revealed that the most effective networks functioned within an atmosphere of trust and support and sought out solutions for immediate problems that acknowledged the influence of context, which are similar results to many of the group studies described above. Lieberman highlighted the flexibility of these groups as being a better fit for the complex and ambiguous school settings. Sessions were organized by the group members, which allowed for the group members to have a voice and build commitment to each other. The most common formats involved sharing of information or use of the problem-solving process with a member-driven agenda. There were group leaders, who functioned as facilitators and linked members through arranging meetings, maintaining communication, gathering resources, and creating a shared space for learning. Results of this much closer look at the development of self-efficacy and collective-efficacy to help manage stress revealed a number of common formats, such as the use of the problem-solving process, and common topics, such as successful behavior management and communication. Many of the studies and programs described also revealed other common elements, such as the

need for flexibility, peer and organizational support, openness, and participant involvement. Use of these strategies and structures were important to consider for an effective program design, since teacher efficacy, both individual and collective, predicted teacher positive beliefs, functional behaviors, and valuable student outcomes (Ross & Bruce, 2007).

Discussion

The aspects presented within this research on effective stress management and self-efficacy development programs and techniques reflected both format and content. The timing of past programs and the research that suggested the need for more continuous programming and monitoring guided the timing of the program designed for this dissertation. The timing, personnel, and limited use of tangible resources within the program were also based on the need for the program to fit within the current context of limited resources and the many demands that are already being placed on teachers. The findings from this review that reflected the format of effective programming and techniques led to the specific structure of the components, phases, and activities. These format-based techniques included the use of educational resources, the problem-solving process, goal-setting, experiential and vicarious learning, practice, and structured communication. Since a group format and the use of teacher input were also supported by this review and fit into the current context, both of those techniques were also used.

Since the purpose and goals of the program were geared toward stress management and the development of self-efficacy, the methods and techniques highlighted in this review were used to form the content of the specific components, phases, and activities. Mindfulness, positive psychology, self-care, and the development

of both self- and collective-efficacy through goal-oriented problem solving were all included within the structure of the program sessions as ways to decrease stress, replenish resources, and prepare participants for future stressful situations. The use of these techniques also fit the findings of the needs assessment, since they generalize across a variety of stressful situations and seem to already be used by some of the target population. Since the structure of the sessions allows for participant input and the techniques being taught are generalizable, any specific issues that arose within the needs assessment, such as student behavior and engagement, or others that may arise during implementation can still be addressed if they are relevant to the participants.

CHAPTER V

RESULTS AND IMPLICATIONS FOR PROGRAM DESIGN: CONTEXT

ASSESSMENT

Ability to Commit Resources

Two out of three of the teachers interviewed reported that they felt able to commit the amount of time and energy needed to participate fully in the program. The third teacher replied that she did not know if she could commit the time and energy needed to participate, but her comments and suggestions reflected why other teachers may not be able to commit the time and energy needed. She did respond that she personally would be able to make the commitment based on the current context. All three of the teachers reported that the settings that they currently taught in would most likely be able to commit the resources necessary for the program to be implemented as proposed and that they thought there would be enough interested people within their setting to form a group of at least six participants.

Additional comments and suggestions made by the interviewees within this variable were that the program would be the most realistic if it did not start until October and that other teachers' ability to commit the necessary resources would be affected by their level of commitment outside of the school day. One teacher suggested shortening the program to every week for a shorter period of time (eight sessions). Both middle school teachers commented on the number of after school clubs and activities that

involved staff members, as well as the after school staff meetings and subject-area meetings. The elementary teacher did not express this concern.

Values

When asked about the values of themselves and other stakeholders, all three of the teachers responded that they believe stress management and prevention is an important issue for teachers and that they do not believe administrators, the community, and/ or the public feel that it is an important issue for teachers. Two out of the three of the interviewees commented that although administrators, the community, and/ or the public may say that it is an important issue, their lack of positive actions lead these teachers to believe that these beliefs are not true. One teacher did not have any ideas of how the program could be presented to administrators, the community, and/ or the public in a way that highlights the importance of this issue. Two teachers said that the presentation of the program should include actual teacher experiences backed up with information about previous similar programs and research that shows proven benefits of this type of programming.

Ideas

Teachers were next presented with a summary of the results of the needs assessment to see if their perception of the current state of affairs aligned with the results of the data collected. All of the teachers interviewed agreed with the results of the needs assessment related to current teacher stress levels, sources of stress, and perceptions of efficacy that were presented. One teacher was surprised that lack of parent involvement was not one of the highest sources of stress. All three teachers agreed with the results that there is a relationship between stress and efficacy and that there is a need for more stress

prevention and management to support teachers' sense of effectiveness. One teacher made additional comments that administration needs to be supportive of this type of programming, as well as be proactive about student issues and stick to student requirements and expectations.

Circumstances

All three teachers believe that their current settings are stable enough to support the program as it was proposed. One teacher mentioned that since teachers in their setting are already overwhelmed by procedures and requirements, it may be difficult for those teachers to participate. She also commented that the number of already scheduled activities may affect the implementation of the program within the setting but that consistent meeting dates and times that take these activities into account may help. She did not have any suggestions for how the program can be changed to accommodate overwhelmed teachers.

Timing and Obligation

When asked about the appropriateness of the proposed program, two of the teachers reported that they feel the program meets an immediate need within the school and that the timing of the phases and components of the program are appropriate. Although the third teacher felt that the program meets an immediate need, she was concerned that the timing of the phases did not take enough consideration of changes throughout the school year. She suggested that the phases be shorter or that there be breaks between each phase to align with more stressful school events

All of the interviewees reported that their level of commitment to themselves, their teaching position, and their students would lead them to feel obligated to both begin

and complete the program as proposed. One teacher reported that her level of commitment to her students is lower than she would like, but she felt that a program like the one described could actually help her improve that commitment so she would feel just as obligated, if not more obligated, to participate as if her level of commitment to her students was higher.

Resistance

Teachers were asked about any barriers that may affect the implementation of the program as proposed. One teacher reported that the ability of time that teachers are provided to complete their responsibilities may be a barrier to participation in the program based on teaching position, current high levels of job demands, and changes throughout the school year. She also reported that the location of the sessions within a school building may be intimidating and a different local building, like a library or association office, could be considered. Two teachers reported that lack of administrative support may be a barrier, although if administration agrees to program implementation, that would be a visible sign of positive action. They also mentioned that the use of research to support program implementation and the lack of cost associated with the program should be used when proposing to administration that the program be implemented.

Yield of the Program

All three of the teachers interviewed believed that the proposed program could have a positive impact on them, their teaching, and their students. Two out of three of the interviewees did not have any other suggestions for how the program could be changed to yield even greater benefits, but one teacher suggested including teacher input within the

sessions. One teacher also mentioned that she appreciated the phone interview; since she was able to be more forthcoming than she think she would have been able to have been within a focus group session.

Discussion

The only two questions that had a majority of answers reflecting disagreement related to ability to commit resources and the values of current stakeholders, so those responses and comments related to those responses were the first considered when looking at possible revisions to the program. Since both of the teachers who had concerns about scheduling program sessions were located in the middle school, mention of that possible difficulty was added to the program design document. An addition was also made to the responsibilities for the district-designated administrator that included the provision of a schedule of after school time commitments for teachers to the facilitator and the consideration of using a district-designated day for the program sessions. In addition, teachers will be asked to submit their preference for week day at the Program Interest Meeting before the program sessions begin. Groups will then be made accordingly to include the most number of teachers on the most preferred day of the week, with administrative approval. A revision was also made to the attendance requirement, so that participants are expected to attend 75% of the sessions, not 85%.

Since the interviewees all agreed about the lack of administration, community, and/ or public values within the areas of stress management and efficacy building among teachers, this issue was looked at more closely. Although the program design was not changed in light of this issue, since it already takes into account current teacher experiences, previous programming, and the current research base, any presentation of

this program to administration should include the documentation that can be found within this dissertation to highlight the importance of this type of programming. The facilitator should also include any additional research that has come to light since the publication of this dissertation to further support the value of this issue and point out to administration that implementation of this program is a supportive action in itself.

Other comments and suggestions from the interviews were also considered as possible revisions to the proposed program, even though they were not made by the majority of the interviewees. One particular teacher concern was related to the possibility of shortening the number of sessions or the length of the entire program or having breaks between phases so that participants with previous after school commitments may be more likely to attend. Since only one participant made these comments and the need for an ongoing program was supported by research, the program elements related to timing were kept in place. The change made to the expected attendance rate should also help address this concern. Other concerns that arose during the interviews related to problems with administration, the ebb and flow of stress throughout the school year, and dealing with teachers that may be overwhelmed by multiple challenges and demands. The existing element of the program that includes teacher input for the flow and content of sessions will help address these comments and concerns. The possibility of using a different location was only mentioned by one teacher, but the program was revised to include the facilitator gathering information about other possible locations before the Program Interest meeting and assessing teachers' preferences for locations at the Program Interest meeting.

CHAPTER VI

PROGRAM DESIGN

The program design presented in the following chapter follows the model described by Maher (1999) and was based on the results of the needs assessment, the review of relevant research and current programming, and the phone interviews conducted with current teachers, all of which are presented in earlier chapters. This model was developed to insure the relevance, usability, and justifiability of the program design through the use of evidence-based techniques and actual assessments of the current population and context to develop each element. Each element provides both the format and content of the particular program and guides how the program will be implemented, but the elements used may vary with the program being designed.

The first element included in the program design document is the statement of the program's purpose and goals (Maher, 1999). The program's purpose should include the target population that the program was designed for; the knowledge, skills, and/or abilities that the program is geared toward developing within that target population; and the general methods that will be used in the program to develop those knowledge, skills, and/or abilities. The goals should be based on the specific knowledge, skills, and abilities that are the focus of the program and should be SMART (specific, measurable, attainable, realistic, and timely). Goal indicators are used to specify how the goal will be reached and measured.

The next elements of the program design are the eligibility standards and criteria and the policies and procedures (Maher, 1999). These allow any individuals or organizations looking to implement the program to know which members of the target population can participate in the program and how program personnel will have to function within the program. The general methods and techniques are provided next and should be evidence-based. These methods and techniques tie together the relevant research and the current context and are used by the program personnel to facilitate goal attainment.

Maher (1999) refers to the next set of elements as the inventory of the program, since they must be developed before program implementation occurs. For the following program design, the elements that are included are the components, phases, and activities; the personnel; and the incentives. The components, phases, and activities provide the process of the program and how it will be implemented and are mostly presented in list form. The personnel element outlines the individuals who are responsible for implementing the program, their specific responsibilities, and any relationships that must be maintained among these individuals. The incentives are provided to increase the motivation of the personnel and participants and the likelihood that they will follow through on the program.

The final element is the program evaluation plan, which will be presented in the next chapter.

Program Purpose and Goals

Purpose

The purpose of this program is to support elementary (K-5) and middle school (6-8) teachers' stress management and development of self-efficacy within a suburban school district through evidence-based yet realistic and tolerable techniques and strategies. Knowledge, skills and practice will be provided by a group facilitator through a sequence of information sessions, self-reflection and planning activities, group sharing sessions, and periods of supported practice, and the methods used within this sequence will include the use of different learning modalities and facilitator and peer support, monitoring, and positive reinforcement. As a result of the program, the teachers will be able to identify their own thoughts, feelings, and behaviors associated with stress, fully appraise and manage stressful situations, implement coping tools and effective planning techniques, and feel more effective within the classroom.

Goals and Goal Indicators

- Goal #1 – Increase teachers' awareness of and abilities to cope with thoughts and emotions
 - Indicators:
 - Teachers will attend sessions to increase their mindfulness and knowledge of coping strategies.
 - Teachers will report an increase in their awareness of emotions and their ability to cope with thoughts and emotions on a self-report survey that is distributed at the last program session.

- Completion of this goal will be indicated by a 75% attendance rate across all of the sessions and a 75% rate of teachers reporting positive changes in their abilities to identify and cope with thoughts and emotions by the end of the last session.
- Goal #2 – Increase teachers’ ability to manage stress
 - Indicators:
 - Teachers will take the Teacher Stress Inventory (TSI) at the Program Interest Meeting if they are planning on participating in the program. These baseline measures will be scored and kept by the facilitator/ program evaluator. Teachers will then take the TSI at the end of the last session of the program. These measures will be scored and kept by the facilitator/ program evaluator and compared to assess changes from baseline to post-program.
 - Completion of this goal will be indicated by a 75% rate of teachers who show a decrease of one standard deviation on their TSI score by the end of the last session.
- Goal #3 - Increase teachers’ use of self-care strategies
 - Indicators:
 - Teachers will enact a self-care plan to begin and maintain at least one self-care strategy on a routine basis.
 - Teachers will report the frequency of their use of self-care strategies and how closely they are following the plan that they developed during

the program sessions on the self-report survey distributed at the last session.

- Completion of this goal will be indicated by 95% of teachers reporting the use of at least one self-care strategy since the beginning of the program and 75% reporting that they are partially or completely following their self-care plans.
- Goal #4 – Increase teachers’ sense of efficacy in the classroom
 - Indicators:
 - Teachers will attend sessions to increase their knowledge of and use of the problem solving process. The facilitator will take attendance at all sessions.
 - Teachers will take the Teachers’ Sense of Efficacy Scale (TSES) at the Program Interest Meeting if they are planning on participating in the program. These baseline measures will be scored and kept by the facilitator/ program evaluator. Teachers will then take the TSES at the end of the last session of the program. These measures will be scored and kept by the facilitator/ program evaluator and compared to assess changes from baseline to post-program.
 - Completion of this goal will be indicated by a 75% attendance rate and a 75% rate of teachers who show an increase of one standard deviation on their TSES score.

Eligibility Standards and Criteria

A teacher is eligible to participate in the program if he/she meets the following standards and criteria:

- Is currently teaching full-time in the district that has approved implementation of the program,
- Is currently teaching students in Kindergarten through 8th grade,
- Participated in the Program Interest meeting, and
- Attends 75% of the program sessions.

Policies and Procedures

Facilitator

The group facilitator will implement the program as described to the best of his/her ability. If the facilitator does not implement the program to the best of his/her ability, the district-designated administrator will discuss the issue with the facilitator and come to a resolution. If the facilitator continues to not implement the program as described or agreed upon, contact will be discontinued.

The facilitator will present the proposed program to the district administrators before the school year of implementation begins. This presentation will include the information that was documented in this dissertation, any additional research that supports the use of this program, and the acknowledgement of administrator support for teachers as demonstrated through implementation. If approved for implementation, the facilitator will seek out possible locations within the district and within the community, the schedule of afternoon events for the schools involved, and possible approval for using a district-designated day for the sessions.

The facilitator will report to the district-designated administrator prior to the Program Interest Meeting, prior to conducting the first session, approximately midway through program implementation, and after termination. The facilitator will also report to this administrator for any issues or concerns that do not violate the confidentiality agreement among the group. If the facilitator does not report to the district-designated administrator, then the administrator will contact the client.

Groups will consist of approximately six to eight participants. If there are more than eight teachers interested, the facilitator will receive the district's approval to conduct more than one group at a time. Special consideration may need to be made for the separation of elementary and middle school teachers if there are scheduling conflicts, especially among middle school teachers who participate in other after school activities. The facilitator will reach out to participants who do not have 75% attendance after any session to assess their willingness and ability to continue their participation and participants who missed a session without notifying the facilitator beforehand.

The facilitator will take data and administer evaluative protocols as described in the program components and evaluation outline. The facilitator will also ensure that all incentives described are administered.

Teacher Participants

The teacher participants will attend the Program Interest Meeting and complete all baseline measures. If they do not attend the Interest Meeting and/ or complete the required measures, they may not be allowed to participate in the program.

The teacher participants will attend at least 75% of the scheduled sessions. If they do not attend at least 75% of the scheduled sessions, their involvement in the program

may be terminated by the facilitator. Teacher participants will only receive incentives based on their actual attendance and participation. The teachers will contact the group facilitator prior to the group session if they will not be able to attend the session.

The teachers will attempt to implement plans that are developed within program sessions and participate in discussions to monitor the plans. If teachers are unable to implement or maintain plans, they will participate in a discussion to address the issues and revise the plan.

The teachers will abide by the confidentiality agreement among the group members. If they do not abide by this agreement, they will meet individually with the group facilitator to discuss the issue. If they continue to break confidentiality, they will not be allowed to participate in further group sessions.

Methods and Techniques

The following methods and techniques, as gathered from the research and needs assessment, will be used to ensure that the program components and phases are evidence-based, effective, and realistic.

Mindfulness/ Positive Psychology

Mindfulness will be defined as the awareness, acknowledgement, and acceptance of present thoughts, feelings, and behaviors and their interactions in a nonjudgmental way. This method will be taught and practiced through the use of mindfulness techniques, such as mindful breathing, mindfulness in everyday life, meditation, self-inquiry, and interpersonal communication. Once the participants are knowledgeable about mindfulness and are using some mindfulness techniques correctly, positive psychology

will be introduced through the use of positive reframing of thoughts, feelings, and behaviors.

Self-Care Techniques

Participants will be encouraged to evaluate current self-care techniques and develop an action plan to implement and maintain at least one self-care technique on a routine basis. Participants will discuss their progress on the plan at each following session and will be encouraged to revise their plan as necessary.

Group Problem-Solving

A group problem-solving process will be used to discuss teacher initiated topics and issues. The problem-solving process will allow for definition of the problem, assessment of contextual variables that are affecting the situation, generation of possible solutions, selection of a solution, and ongoing monitoring of progress. Teachers will use a structured form of communication during these discussions to encourage active listening, self-reflection, and perspective-taking, as well as build rapport. Teachers will use action planning to enact their own learning and modeling and group discussions to encourage vicarious learning. Ongoing feedback will also be provided during these discussions.

Visual/ Auditory Cueing

Visual reminders of the confidentiality agreement, the structured communication technique, and the problem solving process will be distributed and displayed at all sessions. Worksheets will be used to support mindfulness techniques and action planning. Music and guided meditation may be used to support the use of mindfulness techniques. Graphic Organizers will be used to gather and summarize information during the problem-solving process.

Positive Reinforcement

Positive reinforcement for group participation and implementation of action plans will be provided through social praise during group discussions, light refreshments for attendance, and professional development hours.

Components, Phases, and Activities

A Program Interest Meeting will be held in September, and the program will consist of 16 sessions that take place every other week starting in October. Sessions will take place on the same day and location during the designated week and will not be held if school is not in session. The location will be a school designated by the district but teachers from other schools will be included in the program. The exact time for the program will be agreed upon by the district and the facilitator and will allow the most teachers to participate as possible. The sessions will last approximately ninety minutes and will be comprised of two components, each lasting approximately half of the session time. The first half of the session will focus on mindfulness and the second half will focus on using a group problem-solving process to build efficacy. Facilitators are encouraged to follow the format described but also be flexible to any changes that are needed, as well as integrate the use of visual and auditory aides and positive reinforcement.

Program Interest Meeting

The Program Interest Meeting will preferably take place in the same location and at the same time that the program sessions will take place, which will insure that interested teachers will be able to realistically get to the location at the designated time. However, the Program Interest meeting will last approximately one hour, and the day of

the week and location may be changed after the Program Interest meeting based on participants' preferences. The meeting will be conducted by the program facilitator and will consist of the following activities:

- Introduction of the facilitator
- Summary of the relevant research
- Introduction of the program's purpose and goals
- Summary of the components of the program
- Description of the teachers' eligibility standards and criteria
- Description of the teachers' policies and procedures
- Description of the incentives for teachers' participation
- Information regarding the first program session
- Time for questions and answers,
- Collection of preferences for day of the week and location, and
- Administration of the baseline measures to interested participants.

Mindfulness Component

Facilitators are encouraged to use whatever resources they feel best fit the group or activities described below. *A Mindfulness-Based Stress Reduction Workbook* (Stahl & Goldstein, 2010) has definitions, scripts, worksheets, and activities that may be useful to support the activities in this component. Other than the first session, most of the next seven sessions follow a similar format of checking-in, reviewing the previous session and homework activities, learning a new technique, practicing the technique, and receiving a new homework activity for practice. After approximately eight sessions, the focus of this component will shift to positive psychology and developing a plan for self-care.

Although the mindfulness techniques can be part of a self-care plan and activities themselves can be done more mindfully, activities that encourage relaxation or positive change like reading a book or exercising are not the same as being mindful. Participants should understand that distinction before they begin their self-care plans.

Introductory Phase

Session one (30 – 45 minutes)

- Introduction to Program (facilitator)
 - Review timing of program sessions and components, format of each session, and expectations for participation
 - Explore meaning and limitations of confidentiality
 - Introduce current stress theory (Appraisal Theory, Reciprocal Determinism, and the connection of thoughts, feelings, and actions)
 - Define mindfulness and benefits of mindfulness
 - Introduce format of the mindfulness component:
 - Understanding mindfulness
 - Learning and practicing mindfulness techniques
 - Using positive psychology
 - Developing a plan for self-care
- Group Sharing (participants take turns)
 - Participant introductions
 - Current thoughts, feelings and actions
 - Positive things about self and hopes for program

- Activity – Stress List (whole group)
 - Participants create a list of specific stressors and stressful situations then rate the stressors from one to ten (with one implying a cause of low degrees of stress and ten implying a cause of high degrees of stress)
- Group Discussion (whole group)
 - How is stress or anxiety about people/ work/ the world/ your own habits affecting your life?

Session two (30 – 45 minutes)

- Group Activity - Mindful Eating (whole group)
 - Participants eat some small item of food like a small piece of fruit or cookie
 - Facilitator directs participants to focus completely on the food and leads the participants to explore the food with all of their senses as if they have never seen or eaten it before
 - Facilitator encourages the participants to acknowledge any intrusive thoughts and then come back to the food item
 - Facilitator continues to lead the participants through all the parts of the process of eating and instructs the participants to congratulate themselves for taking the time to do the activity and try something new when they are finished
- Group Discussion (whole group)
 - What did participants notice during the activity?
 - What thoughts came to mind?
 - How did the activity feel in the beginning?

- How did the participants feel at the end?
- Introduce Mindful Check-ins (facilitator)
 - Procedures that will be used to begin each session during the Practice Phase
- Practice Mindful Check-ins (whole group)
 - Participants sit in their chairs in a comfortable position, preferably with eyes closed
 - Facilitator encourages them to be still and focus on the directions being given
 - Facilitator leads the participants in a guided meditation and instructs them to do the following:
 - Check-in with any feelings in their body and mind and accept any of those feelings, thoughts, or body sensations without judging them
 - Notice the feelings that they have been carrying with them throughout the day without analyzing those feelings or judging them
 - Allow the participants approximately three minutes to check in with themselves and then finish by congratulating them for taking the time to check-in
- Group Discussion (whole group)
 - What thoughts or feelings did you notice or found that you had been carrying through the day?
 - Facilitator acknowledges these thoughts and feelings without judgment or analysis and encourages participants to do the same
- Homework Activity (whole group)

- Pick at least one activity before the next session to do mindfully or do a mindful check-in at least once before the next session

Techniques and Application Phase

Session three (30 – 45 minutes)

- Mindfulness Check-in (whole group)
 - Use directions from previous session
 - Follow with group discussion as in previous session
- Review
 - Review topics and techniques discussed and practiced during previous mindfulness session (facilitator)
 - Share experiences with homework activity (whole group)
 - Discuss reactions, difficulties, and successes
 - Enter practice activity and experience into a Practice Log Worksheet (log can be kept by participants or facilitator)
- Introduce Mindful Breathing (facilitator)
 - Provide ideas behind and benefits of mindful breathing
 - Discuss how minds wander and how to address these thoughts nonjudgmentally by acknowledging that the mind has wandered and refocusing it
 - Highlight the need for participants to revisit negative thoughts or feelings at another time to help them deal with recurring issues
- Practice Mindful Breathing (whole group)

- Facilitator leads participant through guided practice of new technique for five minutes
- Homework Activity (whole group)
 - Practice a mindful activity, mindful check-in, or mindful breathing at least twice in the next two weeks.

Sessions four and five (30 – 45 minutes each)

- Mindful Check-in and Discussion
- Review
 - Previous session (facilitator)
 - Homework Activity (whole group)
 - Discussion
 - Practice Log
- Introduce Addressing Thought Patterns (facilitator)
 - Provide handout that describes each thought pattern and possible mindful responses
 - Negative self-talk
 - negative statements and judgments about the self
 - mindful response includes acknowledging negative self-talk and changing judgments into nonjudgments
 - “Should” statements
 - rules that we create for ourselves and others and thoughts we have about when we or others break those rules

- mindful response includes acknowledging these rules and trying to change them into nonjudgments about related actions
- Blaming
 - thoughts that hold others or ourselves responsible for situations (usually ones with negative outcomes)
 - mindful response includes the separation of what participants can and cannot change and the allowance of time later to address the situations that they can control and change
- Exaggerating the negative
 - thoughts that focus on the negative of a situation and discredit the positive
 - mindful response includes acknowledging both the positive and negative of a situation by making them two different thoughts or connecting them with the word “and”
- Mind reading
 - thoughts that relate to what someone else might be thinking
 - mindful response includes acknowledging these thoughts and reminding the self that there is no evidence that they know what the other person is thinking
- Catastrophizing
 - expecting the worst outcome
 - mindful response includes observing the event and thoughts from the outside instead of drawing conclusions

- Being the expert
 - responses and thoughts geared toward constantly providing more information, creates a constant pressure to have more answers
 - mindful response includes acknowledging the desire to provide the right answer or not let go of a discussion until the other person agrees with you and reminding the self that there may not be an end to this pattern if a response follows
- Explain the meaning of each thought pattern and how the participants can use mindfulness to acknowledge and respond to each type of thought pattern
- Have participants provide examples of each type of thought or statement
- Encourage the participants to use mindfulness to
- Practice the new technique (whole group)
 - Identify at least one of these patterns that participants have noticed within their thoughts
 - Write down at least three statements that fit these negative patterns on one side of a piece of paper
 - Write down a mindful response on the other side of the paper that is specifically tailored to the type of thought that it is
- Homework Activity
 - Schedule a mindful check-in or mindful breathing exercise during the next week

- Record at least three negative self-statements and a nonjudgmental, mindful response to those statements

Session six (30 – 45 minutes)

- Review (as conducted in previous sessions)
- Introduce Body Scan (facilitator)
 - Explain use to encourage mindfulness of the body
- Practice Body Scan (whole group)
 - Sit, stand, or lay down in a comfortable yet alert position
 - Facilitator leads participants first in a mindful check-in and encourages them to acknowledge thoughts and feelings they are having as well as those they have carried around all day
 - Facilitator encourages participants not to judge or analyze these thoughts or feelings
 - Guided mindful breathing for approximately three minutes
 - Guided mindful scan throughout whole body
 - Soften areas that are tense or let those areas be if they cannot soften
 - Start at where their feet are touching the floor and move through all the parts of the feet, legs, and thighs
 - Move to the hips, pelvis, abdomen, and chest
 - Move to the fingertips, lower and upper arms, shoulders, neck, jaw, face, forehead, and top and back of the head
 - Conclude with mindfulness of the entire body and breathing throughout the body

- Congratulate self on taking part in the scan
 - Group Discussion (whole group)
 - Thoughts, feelings, and reactions
 - Homework Activity (whole group)
 - Facilitator reviews techniques previously introduced (mindful activity, mindful check-ins, mindful breathing, acknowledging and addressing negative thought patterns, and body scans)
 - Schedule practice of two techniques during the next two weeks
- Session seven (30 – 45 minutes)*
- Mindful Check-in (whole group for five minutes)
 - Review (as conducted in previous sessions)
 - Introduce Identifying Emotions in the Body (facilitator)
 - Have participants create a group web or chart with fear, confusion, anger, sadness, shame, love, and joy in each space
 - Have participants identify what bodily sensations that they associate with these emotions, how they manifest, and what thoughts and images come to mind when they think about these emotions
 - Practice Identifying Emotions in the Body (whole group)
 - Conduct a guided sitting body scan
 - Facilitator encourages participants to think about how each emotion may relate to different parts of their body as they reach those body parts during the scan

- Acknowledge how the emotions affect the body and thoughts without judging the emotions or trying to avoid them
 - Facilitator instructs participants to be aware of any signals from their bodies that relate to their current emotions and consider what those sensations might mean
 - Activity – Stress List Check-in (whole group)
 - Look over stress list from the first session and re-rate the stress levels associated with these stressors
 - Facilitator encourages participants to do this activity mindfully and be aware of their breathing and any similarities or differences in their thought patterns when they think about the stressors now as compared to the first session
 - Add any additional stressors to the list
 - Homework Activity
 - Schedule two mindfulness practice activities over the next two weeks
 - Engage in one, unscheduled mindfulness technique.
- Session eight (30 – 45 minutes)*
- Introduce STOP (facilitator)
 - STOP technique (stop, take a breath, observe, proceed)
 - Practice STOP (whole group)
 - Group Discussion (whole group)
 - Progress with mindfulness
 - Thoughts and feelings about the techniques as well as the overall program

- Introduce Positive Psychology (facilitator)
 - Explain that positive psychology is a way of reframing our thoughts and feelings about a situation in a positive way
 - Give examples of situations and statements that can be reframed positively
- Practice Positive Psychology (participants take turns)
 - Share a negative thought from the previous week or current day
 - Explore a mindful response that acknowledges these thoughts without judging them
 - Reframe those thoughts from a positive perspective with the help of the rest of the group, if necessary
 - Write down a negative thought from the previous week or current day and the effects of that thought
 - Reframe that thought positively and write down the resulting statement
- Homework Activity (whole group)
 - Record at least five negative thoughts or feelings over the week and then rewrite them using a nonjudgment or from a positive perspective

Session nine (30 – 45 minutes)

- STOP Check-in (whole group)
- Review (as conducted in previous sessions)
- Practice Positive Psychology (whole group)
 - Write down a negative experience from the past week, all of the thoughts and feelings associated with that experience, and the effects of that experience

- Reframe the situation from a positive perspective and write down the thoughts and actions that might have resulted if that perspective had been used during or after the situation occurred
- Introduce Acts of Kindness (facilitator)
 - Explore how acts of kindness in everyday moments can increase mindfulness in a situation and increase positivity
 - Have participants brainstorm moments where they can act with kindness, including difficult moments, everyday moments, and moments with loved ones
 - Discuss what those acts of kindness might be
- Homework Activity (whole group)
 - Practice at least one mindfulness technique and at least three acts of kindness
Sessions ten and eleven (30- 45 minutes each)
- STOP Check-in (whole group)
- Review (whole group)
- Introduce Self-care (facilitator)
 - Explain the differences between the mindfulness perspective and self-care activities for relaxation or positive change
 - Although both are designed to help break negative patterns and cope with negative thoughts and feelings, mindfulness is an overall way of looking at ourselves and situations while self-care techniques help us recover from stress and rebuild personal resources.
 - Explore self-care techniques

- Group Discussion (whole group)
 - Brainstorm and list different techniques for self-care such as exercise, yoga, spending time with friends and family, journaling, reading a book, and eating
 - Explore each technique and discuss whether it is healthy or unhealthy and why
 - Discuss barriers to implementing self-care activities in their life and how they might be able to address those barriers
 - Explore motivational strategies for supporting the use of a self-care plan such as involving someone else, receiving positive feedback, using rewards, just doing it, using music, and tracking progress
- Develop a Self-care Action Plan (whole group)
 - Choose one self-care activity and write down a specific goal for implementing that activity
 - List the steps to follow to implement the activity, any barriers, and at least one motivational strategy (which may also be included in the steps of the plan)
- Group Sharing (participants take turns)
 - Share and revise action plans
- Homework Activity (whole group)
 - Try the chosen self-care activity (not necessarily enact action plan)

Monitoring Phase

Sessions twelve through fifteen (30 – 45 minutes each)

- Mindful Check-in/ Guided Meditation/ Body Scan (whole group for five to ten minutes)

- Group Sharing (participants take turns)
 - Share positive thoughts and experiences from the previous week
 - Review action plans
 - Share progress
 - Revise plans
- Homework Activity (whole group)
 - Begin/ Continue self-care plan

[At the completion of the mindfulness component during session fifteen, participants will revisit their Stressors list from the first session and re-rate these sources of stress to increase awareness and possible motivation to continue using the techniques introduced during the program.]

Group Problem-Solving Component

This component uses structured communication, a group-problem solving process, and participant input to help the participants address stressful situations. It is important that the facilitator encourage perspective-taking, empathy, positive feedback, and creativity while discouraging advice-giving or domination of the discussion by one group member. Although the first session that focuses on one particular participant's situation uses a self-selected participant, the facilitator can decide how the selection process will continue based on what seems the best for the group. Participants can continue to be self-selected or can be selected by the facilitator, but all participants must have at least one session that is focused on them. Participants can also be selected before the session and contacted by the facilitator, so that they are prepared to share a stressful situation with the group. Once each participant has been the focus of a session, the

sessions will move into the development of a plan for the whole group to address a systemic issue or implement a group project.

Introductory and Practice Phase

Session one (30 – 45 minutes)

- Introduce Structured Communication (facilitator)
 - TACT (One participant Tells their story or problem, the group may Ask questions to clarify, the group may then Comment on the story or problem, and the participant who began the discussion Tells the group how they are feeling or what solution they are going to try)
 - Discuss benefits of and barriers to using this technique
- Practice TACT (participants take turns)
 - Share a story from the day
 - Facilitator encourages group members to follow the TACT structure and focus on the perspective of each individual participant as well as other factors that may have affected the situation
 - Facilitator encourages each participant who shares to respond openly to the group with their thoughts and feelings about the situation, as well as what they did or would like to do in the future

Session two (30 - 45 minutes)

- Review (facilitator)
 - Review the topics and techniques from the previous problem-solving session
- Practice TACT (participants take turns)
 - Share a stressful situation from the previous week

- Use the TACT strategy to engage in a peer discussion
- Introduce the Problem-solving Process (facilitator)
 - Explain the steps of the problem-solving process and give examples
 - Define the problem
 - Consider all of the internal and external factors that may be affecting the problem or possible solutions
 - Generate possible solutions for the problem
 - Choose a solution and make a plan to implement the solution
 - Evaluate the effectiveness of the plan and revise, if necessary

Session three (30 - 45 minutes)

- Review (conduct as in previous session)
- Practice the Problem-solving Process (whole group)
 - Solve a riddle using the problem-solving process and structured communication

Application Phase

Session four (30 – 45 minutes)

- Review (conduct as in previous session)
- Apply the Problem-solving Process (facilitator)
 - Have one self-selected participant share a specific problem that is causing them stress
 - Lead the group in using the problem-solving process
 - Have a group participant record the problem, factors affecting the problem, and possible solutions on a graphic organizer

- Have the participant of focus choose a solution and develop a plan, using peer feedback, that the participant can follow to try and implement the solution
- Have the participant of focus or the recorder write down the solution and the plan.

Sessions five through eleven (30 – 45 minutes each)

- Review (facilitator)
 - Check-in with the plan developed during the previous session
 - Discuss progress on the plan, any changes to the problem or factors affecting the situation, and any resolutions
 - Revise the plan as a group, if necessary
 - Check-in with any other plans that have been developed

- Apply the Problem-solving Process (new participant)

Session twelve (30 – 45 minutes)

- Review (facilitator)
 - Check-in with plans developed during previous sessions
- Group Discussion (whole group)
 - Share desires for positive change at the school or district level
 - Identify a common goal for the group
 - Prioritize the importance among the group of the changes on this list
 - Apply the problem-solving process and develop a plan for change
 - Record the plan and assign roles and activities to complete plan

Sessions thirteen through fifteen (30 – 45 minutes each)

- Review (facilitator)

- Check-in with individual progress toward personal goals
- Review the group plan and progress
- Lead the group to revise the plan, if necessary
- Discuss any resolutions

Termination Session (90 minutes)

- Review/ Summary (facilitator)
 - Explore topics from previous sessions
 - Mindfulness techniques
 - Positive psychology
 - Self-care
 - Problem-solving process
 - Explore how participants have integrated any of these methods and techniques into their lives and how they feel it has affected their thoughts, feelings, and behaviors
 - Reinforce progress and success with implementing any of the methods and techniques
 - Discuss current and future barriers to implementing these changes and how the participants may be able to motivate themselves to continue using the methods and techniques that worked for them
 - Provide resources for future use of the topics and activities introduced during the program.
- Evaluation (whole group)
 - Complete the Program Evaluation Survey, the TSI, and the TSES

Personnel

Facilitator

The facilitator can be a counselor, psychologist, social worker, or individual with similar training that is designated by the district to be capable of implementing the program as described. The facilitator's responsibilities include:

- developing the resources necessary to implement the program
- implementing the program to the best of his/ her ability,
- taking data on teacher attendance,
- contacting teachers related to attendance requirements and missed sessions,
- administering the Teacher Stress Inventory and the Teachers' Sense of Efficacy Scale at the Program Interest Meeting and at the last session of the program,
- scoring the previously mentioned measures and using them to evaluate the appropriateness of the program and program effectiveness,
- administering the Program Survey to teachers at the last session and using them to evaluate perceptions of program effectiveness, and
- ensuring the administration of incentives as described

The facilitator must report to the district-designated administrator once before the beginning of the school year and at least three times during the introduction and implementation of the program and be available by phone and email for teacher participants to contact them as needed.

District-designated Administrator

The district-designated administrator must meet with the group facilitator at least once before the beginning of the school year and three times during the introduction and implementation of the program. He or she must also be available to meet with the group facilitator if the need arises. This administrator is responsible for providing the facilitator with a schedule of after school events, considering the use of district-designated day for sessions, administering the incentives as described and ensuring the use of any resources and facilities as described. The administrator must maintain a relationship with the facilitator by contacting him/ her before program implementation, approximately half way through implementation, and after termination of the program if the facilitator does not contact the administrator.

Incentives

The incentives for the teacher participants include administrative support for stress management and self-efficacy development programming, ongoing social praise from peers and the facilitator, and input into the program sessions and topics. The district will also provide professional development hours, within contractual limitations, for participation and attendance. Light refreshments will be provided at each program session for all of the participants.

Facilitator incentives will be agreed upon before the implementation of the program and will follow contractual limitations, if the facilitator is bound by district contracts. Possible incentives may include a stipend, professional development hours, in-service credits, practical hours for graduate student work, or compensatory time.

CHAPTER VII

PROGRAM EVALUATION PLAN

The program evaluation plan follows the model outlined by Maher (1999) and allows for the gathering and analyzing of data to support judgments about the program's worth and merit. The plan is based on the program goals as outlined in the previous chapter and uses the designated goal indicators to facilitate the collection of data and the ability to make those value judgments. It follows a step-by-step procedure based on each goal and can be followed by the personnel who implemented the program and/ or an additional program evaluator. An additional part of the evaluation is designed to strengthen the empirical support for the program's effectiveness at reducing stress and increasing self-efficacy.

Goal #1 - Increase Teachers' Awareness of and Abilities to Cope with Emotions

1. The facilitator will take attendance at every program session and will calculate the individual teacher attendance rate as a simple percentage. The facilitator/ program evaluator will then calculate the mean percentage of teacher attendance for the whole group.
2. The facilitator will distribute the Program Evaluation Survey to the teacher participants at the last session (see Appendix I). The facilitator/ program evaluator will count how many teachers report an answer of "Agree" on Items 1 and 2 and calculate a simple percentage of positive answers out of the whole group.

3. The facilitator/ program evaluator will compare their results from the attendance rate and the teacher self-reports to the following goal indicators:
 - Completion of this goal will be indicated by a 75% attendance rate across all of the sessions and a 75% rate of teachers reporting positive changes in their abilities to identify and cope with thoughts and emotions by the end of the last session.

Goal #2 - Increase Teachers' Ability to Manage Stress

1. The facilitator will administer the Teacher Stress Inventory (TSI) at the Program Interest Meeting to any teachers who are planning on participating in the program (see Appendix A). These baseline measures will be scored using the test developer's procedures and kept by the facilitator/ program evaluator.
2. The facilitator will then administer and score the Teacher Stress Inventory at the end of the last session of the program. Differences in Total Stress scores from the baseline to the second administration of the measure will be calculated for each participant and compared to the standard deviation from the normative group that can be found in the test manual. The facilitator/ program evaluator will calculate the percentage of teachers whose scores decreased by one standard deviation or more out of the whole group.
3. The facilitator/ program evaluator will compare their results from the comparison of the TSI scores at baseline and post-program to the following goal indicator:
 - Completion of this goal will be indicated by a 75% rate of teachers who show a decrease of one standard deviation on their TSI score by the end of the last session.

Goal #3 - Increase Teachers' Use of Self-Care Strategies

1. The facilitator will distribute the Program Evaluation Survey at the last session and gather information about the frequency of the participants' use of self-care strategies and how closely their use of the strategy aligns with the plan that they developed.
2. The facilitator will check surveys for a response of "Disagree" on Item #3. If any surveys have that response, they will not be included in the following steps for evaluating this goal.
3. The facilitator/ program evaluator will calculate the percentage of teachers who respond "1-3" or "4 or greater" on Item #4 on the remaining surveys.
4. The facilitator/ program evaluator will calculate the percentage of teachers who respond "Partially" or "Completely" to Item #5 on the remaining surveys.
5. The facilitator/ program evaluator will compare their results from the rates of teachers reporting the use of a self-care strategy and their perception of how closely they followed their plan to the following goal indicators:
 - Completion of this goal will be indicated by 95% of teachers reporting the use of at least one self-care strategy since the beginning of the program and 75% reporting that they are following their self-care plan.

Goal #4 – Increase Teachers' Sense of Efficacy in the Classroom

1. The facilitator will take attendance at all sessions and calculate the individual attendance rate for each participant. The facilitator will then calculate the mean percentage of the group's attendance rates.
2. The facilitator will administer the Teachers' Sense of Efficacy Scale (TSES) at the Program Interest Meeting to any teachers who are planning on participating in the

- program (see Appendix B). These baseline measures will be scored according to the test developers' directions and kept by the facilitator/ program evaluator.
3. The facilitator will administer the TSES at the end of the last session of the program. These measures will be scored, following the test developers' directions. Individual differences between the baseline TSES Total Score and the post-program scores will be calculated for each participant. The facilitator/ program evaluator will compare these differences to the standard deviation of the norm group and calculate the percentage of teachers whose scores increased by one standard deviation or greater out of the whole group.
 4. The facilitator/ program evaluator will compare their results from the group rate of attendance and the percentage of teachers who improved by one standard deviation or greater on the TSES to the following goal indicators:
 - Completion of this goal will be indicated by a 75% attendance rate and a 75% rate of teachers who show an increase of one standard deviation on their TSES scores.

Overall Program Effectiveness at Reducing Stress and Increasing Self-Efficacy

Although the program evaluation plan outlined by Maher (1999) is strictly based on the specified goals of the program, further empirical support for the program will be helpful in making future decisions about the use of the program and the techniques described within the research review and the program. The results can also be used to support future research that may be conducted related to stress management and the development of self-efficacy. To assess the overall effectiveness of the program at reducing stress and increasing self-efficacy, paired sample t-tests will be conducted to

compare the results of the TSI and the TSES gathered at the Program Interest Meeting with the results of those same measures gathered during the last session of the program. These tests will be used to assess the significance of any within-subject changes that may be attributed to the participants' involvement in the program. If there are significant differences between the pre and post measures that demonstrate a reduction in stress and/or the development of self-efficacy, these results will provide empirical support for the program. However, these results will need to be interpreted with caution, since they do not rule out possible confounds, such as time. Although these tests will not rule out possible confounds, the use of a control group was not included in this evaluation plan because of the desire for creating a realistic program and evaluation plan given the current contextual challenges described previously. Future researchers and/or implementers of the program may benefit from considering the use of a control group if it is deemed realistic within their given context.

CHAPTER VIII

SUMMARY

Throughout the development of this stress management and efficacy-building program, the research cited clearly demonstrated that teacher stress is ever-present and negatively affects teachers and students alike. In addition, the presentation of cyclical models of stress and the support for the bidirectional relationship between stress and efficacy highlighted the importance of dealing with these issues proactively to prevent even greater negative effects of stress on well-being and efficacy within the classroom. However, stress management programming does not seem to be an important or well-supported part of the current social climate, which only compounds the difficulties that teachers are facing. So while stress from administration, legislation, society, school climate and events, and student behavior grows; teachers have fewer opportunities to build the personal characteristics needed to face these challenges and fewer chances to experience success. These lost opportunities then lead to the addition of personal stress symptoms to the list of stressors. This evidence creates a strong defense for the development and implementation of programming based on current research and evidence-based methods and techniques.

But even after compiling the extensive research on stress and efficacy theories, sources and effects of teacher stress, and the benefits of stress management and the development of self-efficacy to highlight the importance of addressing these issues as

part of effective programming, an additional challenge remained. If the current context of teaching is so stressful and there are multiple factors affecting teacher stress levels and the effects of stress on their teaching, how can a program be designed that is evidence-based but also realistic and tolerable for teachers who are already stressed?

The process used to design this program followed Maher's (1999) model to ensure that it was relevant, justifiable, and practical. Based on this model, a needs assessment was conducted among the target population, current programming and techniques were researched and reviewed, and a context assessment was conducted to assess how well the context could support the proposed program. The needs assessment revealed that the target population within this suburban district was experiencing negative stress from multiple sources and negative effects of stress on their well-being and teaching. The results of the needs assessment also demonstrated that the target population's sense of efficacy was significantly and inversely related to their levels of negative stress. Thus, the program was developed to address those needs in a relevant way. The results of the needs assessment will also help support the possible use of this program in the future for similar target populations. The review of programs and techniques for managing stress and building self-efficacy was used to develop the evidence-based yet hopefully tolerable components, phases, and activities within the program. Finally, the feedback from the phone interviews, conducted to assess whether the context could support the proposed program, was used to revise the proposed program and increase the usefulness of the program. An evaluation plan was also developed to help assess the effectiveness of the program.

Unfortunately, even after the development of a program that is relevant, evidence-based, and as tolerable and realistic as possible, it is difficult to know if those at the forefront of educational reform, those that need this type of current research and programming, will consider implementing this program. Even the teachers involved in the design of this program expressed disbelief that their administration would ever consider implementing any program that was not specifically geared toward student achievement through direct student contact and instruction. Even though the design takes into consideration the limited resources within schools and highlights the benefits for students and teachers alike, it is hard to know if a district will be willing to take the initial step toward supporting teacher well-being and efficacy in light of the lack of administrative and public support for teachers. And the fact that teachers are so overwhelmed and need a program like this one so much may be the exact reason that they find it difficult to expend the time and energy needed for the program. The reasons that this research and this program are so important are the exact same reasons that it may be difficult to get implemented within a school system.

But if a district takes the first step and implements this program, it can help amass student benefits through multiple levels, even in the face of current challenges. Just the implementation of this program shows a supportive work environment, especially if the district-designated administrator can make sure to supply the necessary resources and incentives and trust the teachers to attend and implement any action plans that are developed. The inclusion of teacher input also shows support for teachers and helps the program respond flexibly to individual needs in a timely fashion. The process to build self- and collective-efficacy will help create an ongoing system of support and expertise

among the teachers, as well as empower individual teachers to bring about positive change. In addition, the teachers will have the chance to develop their personal resources and characteristics, which will help them build resiliency, manage stress, and respond more effectively to students, parents, administration, and other stakeholders in future situations. All of these benefits for teachers can benefit students in multiple ways, including higher achievement and more positive student-teacher relationships, that are well-supported by the research and lead to greater job satisfaction and dedication for teachers.

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APPENDIX A

Letter of Introduction

Dear Teachers,

I am currently conducting research to assess teacher well-being, sources of teacher stress, and the possible effects of stress on teachers and their students. The goal of this needs assessment is to support the design of a stress prevention program for teachers that is timely, evidence-based, and relevant and tolerable for full-time teachers. In addition, this assessment will highlight the important issue of teacher well-being and how recent and chronic events contribute to stress and affect multiple levels within a school, including our students.

I would like to invite you to attend a brief meeting on _____ at _____ p.m. in _____ to complete a questionnaire about your current well-being and two additional measures, one that focuses on teacher concerns and another that focuses on self-efficacy. Completion of these three components will take approximately 10 – 15 minutes, and refreshments will be provided. You are not required to put any identifying information on the assessments, and all the results will be kept anonymous. Any reporting or publication of this material will be done in a manner that does not identify individual or organizational names directly or indirectly. Your participation is voluntary and would be greatly appreciated, since it will directly impact the design of the program and the information that is disseminated about the issue.

In addition to the needs assessment, I will be conducting a focus group during the summer to ensure that the proposed program design is relevant and tolerable for teachers. More information about the focus group will be available at the needs assessment meeting. If you are willing to be contacted about participating in the focus group, you will be asked to submit your contact information separately from the measures at that time. All contact information that is provided will be kept confidential and separate from

the measures so that there is no risk of there being identifying information on any of the measures.

This research is being conducted as part of a doctoral dissertation in school psychology at the Graduate School of Applied and Professional Psychology at Rutgers, The State University of New Jersey and is being supervised by Dr. Cary Cherniss and Dr. Anne Gregory. Since this research project is being conducted as a part of a doctoral dissertation, any information collected may be discussed with my supervisors. Dr. Cherniss and Dr. Gregory are bound by the same confidentiality stated here.

This letter and research protocol was approved by the Rutgers Institutional Review Board for the Protection of Human Subjects on _____ and expires on _____. If you have any questions related to the research, please contact me at (732) 501-6693 or at helensro@eden.rutgers.edu. Should you have any questions regarding your rights as a research participant, you can contact the Sponsored Programs Administrator at Rutgers University at 732-445-2799.

APPENDIX B

Teacher Stress Inventory (TSI)

TEACHER CONCERNS INVENTORY

The following are a number teacher concerns. Please identify those factors which cause you stress in your present position. Read each statement carefully and decide if you ever feel this way about your job. Then, indicate how strong the feeling is when you experience it by circling the appropriate rating on the 5-point scale. If you have not experienced the feeling, or if the item is inappropriate for your position, circle number 1 (no strength; not noticeable). The rating scale is shown at the top of each page.

Examples:

I feel insufficiently prepared for my job. 1 2 3 4 5

If you feel very strongly that you are insufficiently prepared for your job, you would circle number 5.

I feel that if I step back in either effort or commitment,
I may be seen as less competent. 1 2 3 4 5

If you never feel this way, and the feeling does not have noticeable strength, you would circle number 1.

	1	2	3	4	5
HOW STRONG?	no strength; not noticeable	mild strength; barely noticeable	medium strength; moderately noticeable	great strength; very noticeable	major strength; extremely noticeable

TIME MANAGEMENT

- | | | | | | |
|--|---|---|---|---|---|
| 1. I easily over-commit myself. | 1 | 2 | 3 | 4 | 5 |
| 2. I become impatient if others do things to slowly. | 1 | 2 | 3 | 4 | 5 |
| 3. I have to try doing more than one thing at a time. | 1 | 2 | 3 | 4 | 5 |
| 4. I have little time to relax/enjoy the time of day. | 1 | 2 | 3 | 4 | 5 |
| 5. I think about unrelated matters during conversations. | 1 | 2 | 3 | 4 | 5 |
| 6. I feel uncomfortable wasting time. | 1 | 2 | 3 | 4 | 5 |
| 7. There isn't enough time to get things done. | 1 | 2 | 3 | 4 | 5 |
| 8. I rush in my speech. | 1 | 2 | 3 | 4 | 5 |

Add items 1 through 8; divide by 8; place your score here: _____

WORK-RELATED STRESSORS

- | | | | | | |
|---|---|---|---|---|---|
| 9. There is little time to prepare for my lessons/responsibilities. | 1 | 2 | 3 | 4 | 5 |
| 10. There is too much work to do. | 1 | 2 | 3 | 4 | 5 |
| 11. The pace of the school day is too fast. | 1 | 2 | 3 | 4 | 5 |
| 12. My caseload/class is too big. | 1 | 2 | 3 | 4 | 5 |
| 13. My personal priorities are being shortchanged
due to time demands. | 1 | 2 | 3 | 4 | 5 |
| 14. There is too much administrative paperwork in my job. | 1 | 2 | 3 | 4 | 5 |

Add items 9 through 14; divide by 6; place your score here: _____

PROFESSIONAL DISTRESS

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

Add items 15 through 19; divide by 5; place your score here: _____

DISCIPLINE AND MOTIVATION

I feel frustrated...

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

Add items 20 through 25; divide by 6; place your score here: _____

PROFESSIONAL INVESTMENT

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

29. I lack opportunities for professional improvement. 1 2 3 4 5

Add items 26 through 29; divide by 4; place your score here: _____

EMOTIONAL MANIFESTATIONS

I respond to stress...

30. ...by feeling insecure. 1 2 3 4 5

31. ...by feeling vulnerable. 1 2 3 4 5

32. ...by feeling unable to cope. 1 2 3 4 5

33. ...by feeling depressed. 1 2 3 4 5

34. ...by feeling anxious. 1 2 3 4 5

Add items 30 through 34; divide by 5; place your score here: _____

FATIGUE MANIFESTATIONS

I respond to stress...

35. ...by sleeping more than usual. 1 2 3 4 5

36. ...by procrastinating. 1 2 3 4 5

37. ...by becoming fatigued in a very short time. 1 2 3 4 5

38. ...with physical exhaustion. 1 2 3 4 5

39. ...with physical weakness. 1 2 3 4 5

Add items 35 through 39; divide by 5; place your score here: _____

CARDIOVASCULAR MANIFESTATIONS

I respond to stress...

40. ...with feelings of increased blood pressure. 1 2 3 4 5

41. ...with feeling of heart pounding or racing. 1 2 3 4 5

42. ...with rapid and/or shallow breath. 1 2 3 4 5

Add items 40 through 42; divide by 3; place your score here: _____

GASTRONOMICAL MANIFESTATIONS

I respond to stress...

43. ...with stomach pain of extended duration. 1 2 3 4 5

44. ...with stomach cramps. 1 2 3 4 5

45. ...with stomach acid. 1 2 3 4 5

Add items 43 through 45; divide by 3; place your score here: _____

BEHAVIORAL MANIFESTATIONS

I respond to stress...

46. ...by using over-the-counter drugs. 1 2 3 4 5

47. ...by using prescription drugs. 1 2 3 4 5

48. ...by using alcohol. 1 2 3 4 5

49. ...by calling in sick. 1 2 3 4 5

Add items 46 through 49; divide by 4; place your score here: _____

TOTAL SCORE

Add all calculated scores; enter the value here _____.

Then, divide by 10; enter the Total Score here _____.

APPENDIX C

Teachers' Sense of Efficacy Scale (TSES) – short form

Teachers' Sense of Efficacy Scale¹ (short form)

Teacher Beliefs		How much can you do?								
Directions: This questionnaire is designed to help us gain a better understanding of the kinds of things that create difficulties for teachers in their school activities. Please indicate your opinion about each of the statements below. Your answers are confidential.		Nothing	Very Little	Some Influence	Quite A Bit	A Great Deal				
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1.	How much can you do to control disruptive behavior in the classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
2.	How much can you do to motivate students who show low interest in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
3.	How much can you do to get students to believe they can do well in school work?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
4.	How much can you do to help your students value learning?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
5.	To what extent can you craft good questions for your students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6.	How much can you do to get children to follow classroom rules?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
7.	How much can you do to calm a student who is disruptive or noisy?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
8.	How well can you establish a classroom management system with each group of students?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
9.	How much can you use a variety of assessment strategies?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
10.	To what extent can you provide an alternative explanation or example when students are confused?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
11.	How much can you assist families in helping their children do well in school?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
12.	How well can you implement alternative strategies in your classroom?	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

APPENDIX D

TEACHER WELL-BEING SURVEY

1a. Please fill in the following information.

Number of years teaching: _____

1b. Please circle your responses for the following items.

Grade level taught: Elementary (K-5) Middle (6-8)

Majority of student population that you work with:

General Education Special Education

2. Now please consider how much you agree with the following statements about how current issues in education have affected your well-being within the last three months. Read each statement and circle the number that best corresponds with your opinion.

	- 2 Strongly disagree	- 1 Disagree	0 Neutral/ No opinion	+ 1 Agree	+ 2 Strongly agree
Current Legislation					
No Child Left Behind has positively affected my personal well-being.	- 2	- 1	0	+ 1	+ 2
I worry about how The Anti-Bullying Bill of Rights will affect me.	- 2	- 1	0	+ 1	+ 2
Special Education requirements do not put strain on my well-being.	- 2	- 1	0	+ 1	+ 2
Pension and benefit reform issues have increased my personal stress levels.	- 2	- 1	0	+ 1	+ 2
Environmental Factors					
The majority of my students' parents take positive action when needed.	- 2	- 1	0	+ 1	+ 2
The overall push for student achievement has improved my personal teaching	- 2	- 1	0	+ 1	+ 2

experiences.					
Current economic issues do not affect my students.	- 2	- 1	0	+ 1	+ 2
The community resources that are available are adequate to support me.	- 2	- 1	0	+ 1	+ 2
There is currently enough public support for teachers.	- 2	- 1	0	+ 1	+ 2
Job/ School/ District Factors					
I am satisfied with my job.	- 2	- 1	0	+ 1	+ 2
I am satisfied with the number of hours I spend working on job-related tasks.	- 2	- 1	0	+ 1	+ 2
The demands of teaching do not negatively impact my well-being.	- 2	- 1	0	+ 1	+ 2
Administrative support is adequate.	- 2	- 1	0	+ 1	+ 2
I would like to spend more time with my colleagues.	- 2	- 1	0	+ 1	+ 2
More support staff would decrease my stress levels.	- 2	- 1	0	+ 1	+ 2
I worry about school violence.	- 2	- 1	0	+ 1	+ 2
Current professional development is adequate to meet my personal needs.	- 2	- 1	0	+ 1	+ 2
Student/ Classroom Factors					
Student behavior does not impact my well-being.	- 2	- 1	0	+ 1	+ 2
My students display social-emotional	- 2	- 1	0	+ 1	+ 2

competence.					
I find it easy to maintain positive relationships with my students.	- 2	- 1	0	+ 1	+ 2
My current class size does not increase my stress.	- 2	- 1	0	+ 1	+ 2

3. For the next part of this survey, please consider how much you agree with these statements about the effects of stress on your teaching within the last three months. Read the statements and circle the number that best corresponds with your opinion.

	- 2 Strongly disagree	- 1 Disagree	0 Neutral/ No opinion	+ 1 Agree	+ 2 Strongly agree
My commitment to teaching has increased regardless of my personal stress levels.	- 2	- 1	0	+ 1	+ 2
My effectiveness as a teacher has suffered as a result of stress.	- 2	- 1	0	+ 1	+ 2
My relationships with students have not been affected by stress.	- 2	- 1	0	+ 1	+ 2
My energy levels have decreased as my stress has increased.	- 2	- 1	0	+ 1	+ 2
My ability to manage student behavior has not been affected by stress.	- 2	- 1	0	+ 1	+ 2
My ability to influence change has increased regardless of stress.	- 2	- 1	0	+ 1	+ 2

4. Please choose any of the below techniques that you have tried within the last three months to relieve stress. Please add any others where appropriate.

- | | |
|--|--|
| <input type="checkbox"/> Physical exercise | <input type="checkbox"/> Using alcohol or other substances |
| <input type="checkbox"/> Vacation | <input type="checkbox"/> Meditation/ Deep breathing |

- Individual or group counseling
- Eating
- Develop/ Maintain a hobby
- Set aside time for self-care (nap, massage, reading, etc.)
- Other:

APPENDIX E

Focus Group Information Letter

Dear Teachers,

Thank you for your previous involvement in the needs assessment that I conducted to assess teacher well-being, sources of teacher stress, and the possible effects of stress on teachers and their students. Since the goals of my dissertation are to highlight the important issue of teacher well-being and to support the design of a stress prevention program for teachers that is timely, evidence-based, and relevant and tolerable for full-time teachers, I will be conducting a summer focus group to strengthen my completion of these goals. Your participation would be greatly appreciated and will directly impact the design of the program and the information that is disseminated about the issue.

At the focus group session, participants will be asked to provide feedback about the results of the needs assessment and the proposed program design. More specifically, participants will be asked to provide feedback about the proposed goals and components of the program, the timing of the sessions and overall program, and the perceived benefits of and barriers to participation in the program. The focus group will be conducted at a mutually-agreeable location and will last approximately ninety minutes. Refreshments will be provided, and the session will be recorded electronically and through notes taken by the interviewer during the session. You will be contacted by phone within a month after the focus group to receive a summary of the feedback that was collected at the focus group and ensure that the summary of the information reflects your memory of the focus group. This phone interview will take approximately 15 minutes and the completion of the phone interview will signal the completion of your participation in the project. If you choose/ chose to be contacted about participating in the focus group, please be assured that any personal contact information that you provided will be destroyed at the completion of the research project. Information from the focus group session and phone interview will be collected anonymously, and any reporting or publication of this material

will be done in a manner that does not identify individual or organizational names directly or indirectly.

If you are willing to be contacted regarding the focus group, please fill out the contact form that is attached to this letter. Remove this letter and keep it for your information. Then please place the completed contact form into the envelope marked “FG Forms.” If you would like to submit a blank form, please do so. All contact information will be kept separate from the measures collected for the needs assessment so that no identifying information is included with the data collected and will be destroyed at the completion of the research project.

This research is being conducted as part of a doctoral dissertation in school psychology at the Graduate School of Applied and Professional Psychology at Rutgers, The State University of New Jersey and is being supervised by Dr. Cary Cherniss and Dr. Anne Gregory. Since this research project is being conducted as a part of a doctoral dissertation, any information collected may be discussed with my supervisors. Dr. Cherniss and Dr. Gregory are bound by the same confidentiality stated here.

This letter and research protocol was approved by the Rutgers Institutional Review Board for the Protection of Human Subjects on _____ and expires on _____. If you have any questions related to the research, please contact me at (732) 501-6693 or at helensro@eden.rutgers.edu. Should you have any questions regarding your rights as a research participant, you can contact the Sponsored Programs Administrator at Rutgers University at 732-445-2799.

APPENDIX F

Focus Group Contact Form

If you would be willing to participate in a focus group session to provide feedback about the proposed program that will be developed using the information gathered from these measures and other research, please put your name and contact information below.

The session will take place during the summer and will last approximately 90 minutes. Refreshments will be provided, and all information that is collected during the session will be recorded anonymously. Please see and keep the introductory letter attached to this form for more information.

Name:

Please contact me by:

Phone #: _____

Email: _____

APPENDIX G

Semi-Structured Focus Group Session Protocol

Thank you for meeting with me today. The purpose of this focus group is to gather feedback about a possible program geared toward help teachers manage stress and build their feelings of effectiveness. The program purpose and goals were developed based on data collected about teachers current stress levels, sources of stress, effects of stress, and feelings of effectiveness. The possible components and procedures of the program have been based on that data and current research. However, it is important that this program be relevant, useful, and timely for teachers. So today you will be asked about those aspects of the programming that may affect a teacher's ability or desire to be a part of it. Do you have any questions about the purpose of the interview?

Let me first review the process we will follow for this focus group. We will be meeting for no longer than ninety minutes. There is no one but us present in this location, and any statements that you make will be anonymous. I will be recording the session and taking notes on what is being said, but there will be no identifying information on any recording or notes, nor will any be used in the reporting or publication of this project. Your participation is voluntary, and you may choose to leave the focus group at any time. You may also choose not to answer a specific question.

Within a month of this meeting, you will be contacted by phone to discuss the results of this focus group. This interview will be conducted with all of the members of the group to confirm that the information summarized is accurate and will last approximately 15 minutes. All information from the phone call will be anonymous, and all of your contact information will be destroyed at the completion of the project.

Before we begin do you have any questions?

Assessment of Relevant Context

[This portion of the focus group would start with a brief description of the purpose and goals of the program, as well as the components that have been developed thus far. A handout will also be provided outlining the purpose and goals, the possible phases and components, the possible procedures for the program, and the possible resources needed to develop the program. This information cannot be determined until the completion of the needs assessment analysis and the review of the relevant research.]

A: Ability to commit resources

1. Do you feel able to commit the amount of time needed to attend the program?
2. Do you feel able to commit the amount of time needed outside of attending face-to-face meetings?
3. Do you feel that you would have the energy necessary to complete the components of the program?
4. Do you think that the setting you work in would be willing and able to commit other necessary resources, including a place to meet and the time needed?
5. Do you think that enough people in your setting would be interested and able to make a large enough group for the proposed program?
6. Do you feel that any costs associated with the program would be prohibitive for you and/ or for the setting you work in?
7. If you answered no to any of these questions, how do you think the program can be changed to increase the ability of you or your setting to commit the resources necessary for the program?

V: Values of the teachers and stakeholders

1. Do you believe that stress management and prevention is an important issue for teachers?
2. Do you believe that your administration, community, and/ or the public feels that it is an important issue for teachers?
3. Do you have any other beliefs about the value you or anyone else may put into this program?

I: Ideas about the current state of affairs

1. Do you agree with the results of the data collected about current teacher stress levels and sources of teacher stress?
2. Do you agree with the perceived effects of teacher stress?
3. Do you agree that there is a need for more stress prevention and management to help support teachers' sense of effectiveness?
4. Do you have any other perceptions about the current state of teacher stress?

C: Circumstances within the school setting

1. Do you believe that your setting is stable enough to support the program as it is proposed? Consider staff and administrative turnover, consistent scheduling of after school meetings and events, etc.
2. Are there any other circumstances in your setting that may affect the implementation of the program as it was described?
3. If you believe that there are circumstances that would affect the implementation of the program, how do you think the program can be changed to better fit the circumstances?

T: Timing of program

1. Do you feel that this program meets an immediate need within schools?
2. Do you feel that the timing of the phases and components of the program as described are appropriate?
3. If not, how do you think the timing of the proposed program can be changed to be more appropriate?

O: Obligation felt toward yourself and your students

1. At this time, do you feel that your level of commitment to yourself may affect the obligation you feel to begin this program? To complete this program?
How?
2. At this time, do you feel that your level of commitment to your teaching position may affect the obligation you feel to begin the program as described? To complete the program described? How?
3. At this time, do you feel that your level of commitment to your students may affect the obligation you feel to begin the program as described? To complete the program described? How?

R: Resistance that might be encountered

1. What barriers, if any, do you think there would be for this program if it were to be implemented at your school?
2. How can the proposed program be changed to effectively address these barriers?

Y: perceived Yield of the program

1. Do you believe that this program can have a positive impact on you? If yes, what do you think that impact might be?
2. Do you believe that this program can have a positive impact on your teaching? If yes, what do you think that impact might be?
3. Do you believe that this program can have a positive impact on your students? If yes, what do you think that impact might be?
4. Is there any other way that you think the proposed program can be changed to yield an even greater benefit to you and/ or the other stakeholders?

Thank you very much for your participation in this focus group. The information you provided will be used to revise the program and ensure its relevancy, usefulness, and timeliness.

APPENDIX H

Semi-Structured Phone Interview

Thank you for speaking with me today. The purpose of this phone interview is to gather feedback about a possible program geared toward help teachers manage stress and build their feelings of effectiveness. The program purpose and goals were developed based on data collected about teachers current stress levels, sources of stress, effects of stress, and feelings of effectiveness. The possible components and procedures of the program have been based on that data and current research. However, it is important that this program be relevant, useful, and timely for teachers. So today you will be asked about those aspects of the programming that may affect a teacher's ability or desire to be a part of it. Do you have any questions about the purpose of the interview?

Let me first review the process we will follow for this phone interview. We will be speaking for approximately 20 minutes. There is no one but you and I on the phone presently, and any statements that you make will be anonymous. I will be taking notes on what is being said, but there will be no identifying information on any of the notes, nor will any be used in the reporting or publication of this project. Your participation is voluntary, and you may choose to terminate the interview at any time. You may also choose not to answer a specific question.

Once this phone interview is completed, that will signal the end of your involvement in this project. All of your contact information will be destroyed at the completion of the project.

Before we begin do you have any questions?

[The interview starts with a brief description of the purpose and goals of the program, as well as the components that have been developed thus far. As each variable is introduced, the pertinent information related to that variable will be summarized then the related questions will be asked. At the end of each variable, the interviewer will summarize the responses and will only move on if the interviewee confirms the accuracy of the notes.]

A: Ability to commit resources

1. Do you feel able to commit the amount of time needed to participate fully in the program? If no, how do you think the program can be changed to increase your ability to commit to the time needed?

2. Do you feel that you would have the energy necessary to complete the components of the program?

If no, how do you think the program can be changed to increase the likelihood of you having enough energy to complete the program?

3. Do you think that the setting you work in would be willing and able to commit other necessary resources, including a place to meet and the time needed?

If no, how do you think the program can be changed to increase the likelihood that the setting you work in would be able to commit the necessary resources?

4. Do you think that enough people in your setting would be interested and able to make a large enough group for the proposed program?

If no, how do you think the program can be changed to increase the interest levels or participation among the teachers in your setting?

V: Values of the teachers and stakeholders

1. Do you believe that stress management and prevention is an important issue for teachers?
2. Do you believe that your administration, community, and/ or the public feel that it is an important issue for teachers?
3. If no for either answer, how do you think the program can be presented in a way that highlights the importance of this issue?

I: Ideas about the current state of affairs

1. Do you agree with the results of the data collected about current teacher stress levels and sources of teacher stress?
2. Do you agree with the perceptions of efficacy in the classroom?

3. Do you agree that there is a need for more stress prevention and management to help support teachers' sense of effectiveness?
4. If no for any answer, what do you believe about the current levels/ sources/ effects of stress, and/ or current techniques for managing stress/ building effectiveness?

C: Circumstances within the school setting

1. Do you believe that your setting is stable enough to support the program as it is proposed? Consider staff and administrative turnover, consistent scheduling of after school meetings and events, etc.
2. Are there any other circumstances in your setting that may affect the implementation of the program as it was described?
3. If you believe that there are circumstances that would affect the implementation of the program, how do you think the program can be changed to better fit the circumstances?

T: Timing of program

1. Do you feel that this program meets an immediate need within schools?
2. Do you feel that the timing of the phases and components of the program as described are appropriate?
3. If not, how do you think the timing of the proposed program can be changed to be more appropriate?

O: Obligation felt toward yourself and your students

1. At this time, do you feel that your level of commitment to yourself leads you to feel obligated to begin this program? To complete this program?

2. At this time, do you feel that your level of commitment to your teaching position leads you to feel obligated to begin the program as described? To complete the program described?
3. At this time, do you feel that your level of commitment to your students leads you to feel obligated to begin the program as described? To complete the program described?
4. If not, is there any change your level of obligation may change if the program changed? If so, how do you think the program can be changed to increase your level of obligation?

R: Resistance that might be encountered

1. What barriers, if any, do you think there would be for this program if it were to be implemented at your school?
2. How can the proposed program be changed to effectively address these barriers?

Y: perceived Yield of the program

1. Do you believe that this program can have a positive impact on you?
2. Do you believe that this program can have a positive impact on your teaching?
3. Do you believe that this program can have a positive impact on your students?
4. Is there any other way that you think the proposed program can be changed to yield an even greater benefit to you and/ or the other stakeholders?

Thank you very much for your participation in this phone interview. The information you provided will be used to support possible revisions the program and ensure its relevancy,

usefulness, and timeliness. Your participation in this research project is now complete.

Do you have any other additional questions?

APPENDIX I

Program Evaluation Survey

PROGRAM EVALUATION SURVEY

Please fill in the following information.

Number of years teaching: _____

Please circle your responses for the following items.

Grade level currently teaching: Elementary (K-5) Middle (6-8)

Majority of student population that you work with: General Education Special Education

Now please answer each of the following questions based on elements of the program that you have been involved in. Circle the response that best corresponds with your reaction to each statement.

1. My awareness of my present thoughts and feelings has increased as a result of this program.

Disagree Neutral/ No change Agree

2. My ability to cope with these thoughts and feelings has increased as a result of this program.

Disagree Neutral/ No change Agree

3. I feel that I understand what is meant by the phrase "self-care."

Disagree Agree

4. I have implemented the following number of self-care strategies since the beginning of my involvement in this program.

None 1-3 4 or greater

5. I followed and/ or am currently following the self-care plan that I developed as a result of this program.

Not at all Partially Completely

6. Please list the self-care strategies that you have used, if any, since beginning the program.
