A Comprehensive Stress Education and Reduction Program

Utilizing a Well-being Model: Incorporating the ASCA Student Standards

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Abstract

The American School Counselor Association developed national standards for students to provide a framework for a holistic approach to student academic, career, and personal/social development. While the ASCA Student Standards are comprehensive, little attention is given to stress. Adolescents are experiencing greater stress associated with academic performance, extracurricular activities and worry about the future. The utilization of a well-being model and the integration of the ASCA Student Standards into school counseling programs for middle and high students can create a more holistic approach to providing stress education and stress reduction techniques.

Keywords: stress, well-being, adolescence, ASCA Student Standards, school counseling program

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The American School Counselor Association (ASCA) developed the ASCA Student Standards to provide a framework for a holistic approach to student development. These standards are organized into three domains: academic development, career development, and personal/social development. These standards are comprehensive; however, given the changing academic environment and increasing stress levels in students (Lewin, 2011), there needs to be a greater focus on the management of student stress. Students are facing increasing stressors associated with academic, extracurricular, and college preparation. The ability to manage these stressors will not only benefit students in their current and future academic careers, but throughout their lifespan. The purpose of this article is to identify stress education and stress reduction techniques associated with a variety of ASCA Student Standards to encourage integration and greater application of stress into school counseling curricula to assist students in building life-long stress reduction practices. Additionally, this article will provide information on the stress response, the impact of stress on the adolescent brain and adolescent stressors. Finally, this article will outline a student well-being model. This model includes stress education and stress reduction techniques that counselors can integrate with other ASCA Student Standards in order to more comprehensively address stress in middle school and high school students.

The American School Counselor Association National Standards

With the onset of increasing educational reforms, student curricula have become more focused on educational standards associated with academic performance rather

than the holistic development of children (ASCA, 2004). Therefore, the ASCA Student Standards were developed to assist school counselors with all dimension of student success. ASCA standards identify and prioritize the specific attitudes, knowledge and skills that students should be able to demonstrate as a result of participation within a school counseling program (ASCA, 2004, p. 3). The ASCA Student Standards are arranged into three domains: academic development, career development, and personal/social development. Within these three categories are subcategories known as domains. Furthermore, each domain includes a standard, a competency and an indicator. It should be noted that the ASCA Student Standards serve as the foundation of the ASCA National Model: A Framework for School Counseling Programs. This framework represents more than 50 years of research, theory, and practice and helps school counselors to design and implement programs for students (ASCA, 2004).

Due to increasing adolescent stress it is imperative that the stress be more fully addressed within the school curriculum. Thus, the responsibility to address these issues falls under the prevue of school counselors as stated in the ASCA Student Standards, section PS:C1.10 (ASCA, 2004). The competency associated with this standard states that students will acquire personal safety skills. More specifically, the indicator states that students will learn techniques for managing stress and conflict. Stress is a very complex issue and should be addressed by more than just one indicator within the ASCA Student Standards. However, upon review of the ASCA Student Standards, it became apparent that many of the standards already outlined could be utilized to provide students the opportunity to examine and learn about their own stress, how they

perceive stress and provide students the resources and tools to reduce stress and to manage stressors.

ASCA Academic Development Standards and Stress

The purpose of the academic development standard is to guide school counseling programs to implement strategies associated with aiding student ability to learn. Table 1 outlines selected ASCA academic development standards and each standard's relationship to stress education or stress reduction techniques. Stress education and stress reduction techniques associated with the academic development standards include attitudes, behaviors, time- and task-management skills, communication, seeking information and support from others, goal setting, problem solving and decision making as it applies to current and future academic goals.

ASCA Career Development Standards and Stress

Career development standards guide school counseling programs to provide the foundation for the attainment of skills, attitudes and knowledge that assist students to make a successful transition from academia to the working world. Table 2 outlines selected ASCA career development standards and each standard's relationship to stress education or stress reduction techniques. Associated with the career development standards are stress education and stress reduction techniques associated with decision-making, setting goals, developing hobbies and vocational interests, balancing work and family, knowledge about changing work environments, time- and task-management skills, acquiring career information, identifying career goals, conflict management and the effect that work has on lifestyle.

Table 1

Academic Development Standards

ASCA Standard	Relationship to Stress
Standard A: **Students will acquire the attitudes, knowledge and skills that contribute to effective learning in school and across the life span.**	
A:A1 Improve Academic Self Concept • A:A1.5 Identify attitudes and behaviors that lead to successful learning.	• Attitudes and behaviors associated with self-concept that led to successful learning are also associated with stress reduction techniques.
A:A2 Acquire Skills for Improving Learning • A:A2:1 Apply time management and task management. • A:A2.3 Communication skills to known when and how to ask for help when needed	• When time management skills are learned and utilized, stress associated with overload can be reduced. • Communication skills are vital to the ability to seek out and ask for help. The use of resources is paramount to reducing stress.
A:A3 Achieve School Success • A:A3.1 Take responsibility for one's actions.	• When students take responsibility for their actions, it increases a sense of control. • The stronger one's perception of self-control, the less stress one experiences.
Standard B: Students will complete school with the academic preparation essential to choose from a wide range of substantial post-secondary options, including college.	
A:B1 Improve Learning • A:B1.4 Seek information and support from faculty, staff, family and peers.	• Support communication including emotional and informational support is necessary for stress reduction
A:B2 Plan to Achieve Goals • A:B2.1 Establish challenging academic goals in elementary, middle/jr. high and high school. • A:B2.3 Develop and implement annual plan of study to maximize academic ability and achievement. • A:B2.5 Use problem-solving and decision making skills to assess progress toward educational goals.	• Goal setting is a learned skill. Students need many opportunity to learn to set goals. Further, annual education plans can reduce stress of the unknown and increase student motivation. • Problem-solving and decision-making are skills that not only reduce stress but are necessary throughout the lifespan.
Standard C: Students will understand the relationship of academics to the world of work and to life at home and in the community.	
A:C.1 Relate School to Life Experiences • A:C1.1 Demonstrate the ability to balance school, studies, extracurricular activities, leisure time and family life. • A:C1.3 Understand the relationship between learning and work. • A:C1.5 Understand that school success is the preparation to make the transitions from student to community member.	• Overload is associated with the perception that one has too many tasks to complete and not enough time to complete them. • Learning to balance duties with leisure is important for work – leisure balance and reduces stress associated with competing needs. • Stress is a part of adulthood and as students transition from student to adult, the number of stressors typically increase.

Table 2

Career Development Standards

ASCA Standard	Relationship to Stress
Standard A: Students will acquire the skills to investigate the work of work in relation to knowledge of self and to make informed career decisions	
C:A1 Develop Career Awareness • C:A1.5 Learn to make decisions • C:A1.6 Learn to set goals • C:A1.9 Develop hobbies and vocational interests • C:A1.10 Balance work and leisure time	• Decision-making and goal setting are documented stress reduction techniques • Encouraging students to develop hobbies can create life-long leisure interests aiding in stress reduction
C:A2 Develop Employment Readiness • C:A2.1 Acquire employable skills such as working on a team, problem-solving and organizational skills • C:A2.3 Demonstrate knowledge about the changing workplace • C:A2.9 Utilize time- and task-management skills	• Change is a part of life and career development. Change should be viewed as an opportunity and students can be encouraged to determine how change creates stress for them • Continued lessons on the utilization of time and task management is integral to stress reduction and successful career development
Standard C: Students will understand the relationship between personal qualities, education, training and the world of work.	
C:C1 Acquire Career Information • C:C1.5 Describe the effect of work on lifestyle	• As students research potential career paths they can be encouraged to determine which stressors may be associated with that career path.
C:C2 Apply Skills to Achieve Career Goals • C:C2.2 Learn how to use conflict management skills with peers and adults	• Create role-plays or devise situations where students can assimilate conflict and conflict resolution. The more practice students receive, the more confident they will feel in their ability to navigate and negotiate conflict, reducing stress associated with conflict.

ASCA Personal/Social Development Standards and Stress

The personal/social development standard assists school counselors to provide a framework for personal and social growth. Table 3 outlines selected ASCA personal/social development standards and each standard's relationship to stress education or stress reduction techniques.

Table 3

Personal/Social Development Standards

ASCA Standard	Relationship to Stress
Standard A: Students will acquire the knowledge, attitudes and interpersonal skills to help them understand and respect self and others.	
PS:A1 Acquire self-knowledge • PS:A1.1 Develop positive attitudes toward self as a unique and worthy person. • PS:A1.3 Learn the goal-setting process. • PS:A1.4 Understand that change is a part of growth. • PS:A1.5 Identify and express feelings. • PS:A1.6 Distinguish between appropriate and inappropriate behavior. • PS:A1.8 Understand the need for self-control and how to practice it. • PS:A1.11 Identify and discuss changing personal and social roles. • PS:A1.12 Identify and recognize changing family roles.	• When stressors can be reframed in a more positive way, stress is reduced. • Goal setting is an important skill to the reduction of stress. • Due to adolescent brain development, emotions often overrule logic. When students are able to identify and positively express feelings, stressors can be minimized. In turn the positive expression of feelings leads to positive behaviors. • Change within the school and family environment is normal during adolescent development. When students learn to adapt to change and view it as an opportunity, stress associated with change can be reduced.
PS:A2 Acquire Interpersonal Skills • PS:A2.6 Use effective communication skills. • PS:A2.7 Know that communication involves speaking, listening and nonverbal behavior. • PS:A2.8 Learn how to make and keep friends.	• Effective communication is a document educative and stress reduction technique as communication is vital to interpersonal relationship. • Communication is also important to the development and maintaining of friendships. Learning how to communicate with peers and feeling confident in this ability reduces stress.
Standard B: Students will make decisions, set goals and take necessary action to achieve goals.	
PS:B1 Self-Knowledge Application • PS:B1.1 Use a decision making and problem solving model. • PS:B1.2 Understand consequences of decisions and choices. • PS:B1.4 Develop effective coping skills for dealing with problems. • PS:B1.6 Know how to apply conflict resolution skills. • PS:B1.8 Know when peer pressure is influencing a decision. • PS:B1.9 Identify long- and short-term goals. • PS:B1.12 Develop an action plan to set and achieve realistic goals.	• Each of these indicators is a documented skill associated with stress reduction.

ASCA Standard	Relationship to Stress
Standard C: Acquire Personal Safety Skills.	
PS:B1 Self-Knowledge Application ***PS:C1 Students will understand safety and survival skills.*** • PS:C1.7 Apply effective problem-solving and decision making skills to make safe and healthy choices. • PS:C1.9 Learn how to cope with peer pressure. • PS:C1.11 Learn coping skills from managing life events.	• Each of these skills problem-solving, decision-making and coping skills are documented stress reduction techniques.

Upon review of ASCA standards and the relationship to stress, the integration of specific skills emerges. The skills associated with goal setting, time- and task-management, decision making and problem solving cut across all three developmental standards (ASCA, 2004) and are established educative and/or stress reduction techniques (Girdano et al., 2013). This creates great opportunity for school counselors to integrate the concept of stress, stress education and stress reduction techniques into a variety of classroom based education, small group counseling and even one-to-one counseling.

Prior to a more comprehensive discussion on the integration of stress related concepts into a school counseling program for middle school and high school students, it is important to understand the physiological stress response, the health effects of prolonged stress, and the impact of stress on the adolescent brain.

Stress and the Physiological Stress Response

In order to fully understand stress and the life-long implications of stress, it is necessary to understand the physiological stress response. Stress is a mind-body arousal that is necessary for survival. Further, the stress response is an innate and

complex activation of several body systems working in tandem to prepare the body to react to a stressor (Girdano et al., 2013). There are a variety of terms associated with stress and stress response. For the purpose of this article, the following terms will be used. Stress has both a medical and a general definition. The medical definition states that stress is a consequence of the disruption of homeostasis though physical or psychological stimuli. The general definition states that stress is condition that results when a person-environment interaction leads someone to perceive a painful discrepancy (real or imagined) between the demands of a situation and their social, biological or psychological resources (Girdano et al., 2013). A stressor is defined as any condition – physical, mental, emotional, social, economic or spiritual that causes a stress response (Girdano et al., 2013). Moreover, the stressor can be real or imagined. When a stressor is perceived by an individual, the physiological stress response is activated. Significantly, the concept of stress often brings to mind the negative consequences of being over stressed; however, stress can also be motivating which is known as eustress (Girdano et al., 2013).

Physiological Stress Response

The fight or flight response was introduced by Walter Cannon as the body's physiological response to a threatening situation (Girdano et al., 2013). Moreover, the fight or flight response is a mechanism that enables the body to procure a large amount of energy to respond to perceive threats and to prepare the body for survival (Kemeny, 2003). The initiation of the fight or flight response automatically puts the body on alert, releases stress hormones, causes the heart to beat faster, causes breathing to become more rapid, stimulates metabolism and enables large muscles to receive more

oxygenated blood (Girdano et al., 2013). Furthermore, when a threat is perceived as overwhelming, the body's response may be to freeze (Girdano et al., 2013; Utah Counseling and Mental Health Center, n.d.).

In addition to the fight or flight or freeze response, stress research has identified multiple body systems impacted by the stress response. The three most studied body systems include the autonomic nervous system, hypothalamic pituitary adrenal axis, and immune system (for a review of these systems, see Kemeny, 2003). With the activation of the stress response, certain body systems are activated while others are inhibited. This creates a more effective and efficient response to the stressor. When the stressor is acute (short-term) the body is able to respond to the stressor and recover with little impact on the body. However, chronic (prolonged) activation of the stress response can have detrimental effects on the body (McEwen, 2007; Kemeny, 2003).

The Prolonged Stress Response

The identification of prolonged stress resulted in the development of a theory known as the general adaptation syndrome (GAS). This theory indicated that humans not only have an innate mechanism (fight, flight, or freeze), they also have an adaptive response to a stressor (Girdano et al., 2013; Ganzel, Morris, & Wethington, 2010). This adaptive process occurs through three common responses to a stressor: alarm, resistance, and exhaustion. The alarm stage begins with the generalized stress response in which a complex physiological response is initiated by the presence of a stressor or stressors. Within this stress response, there is widespread simulation of the sympathetic nervous system. Additionally, there is an increase in the release of epinephrine creating an increase in heart rate, blood pressure and muscle tension.

According to Seyle (1956), the alarm stage is similar whether the stressor is acute or prolonged. With a prolonged stress response, the body enters the resistance phase of the GAS. In this phase, there is a channeling of the prolonged stress response (arousal of the multiple body systems) into a specific organ system. This is known as specific adaptation and is the body's attempt to maintain homeostasis. The prolonged stimulation of adaptation can be dangerous as the organ system will continue to adapt until the onset of disease (Girdano et al., 2013). Moreover, the engagement of specific adaptation can be initiated by experiencing physical, mental, emotional or behavioral stressors indicating that behavior, thought processes and emotional reactions may initiate and prolong the stress response. The third and final stage of GAS is exhaustion. This phase occurs after prolonged stress because the organ system involved in the resistance phase has been depleted. This stage is characterized by breakdown of the organ system and/or the transference of adaptation to a stronger body system (Girdano et al., 2013).

The GAS characterizes stress as a process by which the body attempts to adjust to a prolonged stressor in the most effective way possible; however, this adaptation has long-term effects on the body, namely through the onset of illness, disease, and even death (Girdano et al., 2013). Seyle's work was seminal in the study of prolonged stress and its impact on the human body. New research has greatly expanded the general concepts set forth by Seyle; the theory of allostasis is one such theory (Girdano et al., 2013). Simplistically stated, this theory indicates that the brain is the common mediator between the environment and the physiological stress response (Ganzel et al., 2010; Sterling & Eyer, 1988). Levine and Ursin (as cited in Ganzel et al., 2010) expanded this

concept with the report that the brain acted as gate in which all sensory input from all types of stressors were gathered prior to the initiation of any other physiological regulatory response. Most importantly input into the brain could be impacted by expectation and evaluation.

Adolescent Brain and Stress

Historically, researchers could only hypothesize about the development of adolescent minds, particularly teens. Research on adolescent brain development has increased over time as researchers sought to determine the inner workings of the adolescent brain (Steinberg, 2011; Roaten & Roaten, n.d.).

Two areas of brain important during adolescent development and related to the stress response are the prefrontal lobe and the mid-brain limbic region. With regard to the prefrontal lobe, this is the last area of the brain to receive myelination and thus slower to develop (Roaten & Roaten, n.d.). Since this area is associated with logic and reasoning, it is not surprising that adolescents are more likely to respond to stressors emotionally rather than logically. The mid-brain limbic area is the area of the brain in which two important parts of the brain reside: the hippocampus and the amygdala. These two areas are also specifically related to the stress response. The hippocampus is associated with the storage and classification of experiences and learning and the development of memories. The amygdala interprets input and emotional regulation. Furthermore, with the introduction of a negative stressor, the amygdala readies the body for action (Roaten & Roaten, n.d.; Girdano et al., 2010).

The endocrine system is also associated with the stress response and is important to adolescent development. The adrenal glands play a very significant role in

the stress response. The adrenal medulla releases epinephrine and norepinephrine whereas the adrenal cortex is responsible for the release of cortisol and aldosterone (Girdano et al., 2013). When the stressor initiating the stress response is a short-term stressor, the cortisol that is released into the body is quickly dissipated and causes little harm. When the stressor is prolonged, cortisol continues to circulate in the body potentially causing harm (Girdano). The impact of cortisol on the brain with regard to adolescents may include harm to hippocampus, affecting student ability to store memories, which in turn impacts the learning process. Prolonged stress may influence the amygdala varying sleep patterns jeopardizing the learning process and academic performance and creates behavioral issues such as irritability, anger, and frustration (Roaten & Roaten, n.d.).

Stress and Adolescence

The level of stress experienced by adolescents has been documented in popular and academic literature; however, many adults underestimate the amount of stress that teen's experience or the consequences of this stress (LaRue & Herrman, 2008). Moreover, physiological and cognitive differences, underdeveloped coping mechanisms and lack of experience with dealing with stress may intensify stress levels of teens (LaRue & Herrman, 2008; Herrman, 2005).

Studies focused on stress and adolescents have indicated several sources of stress including: school, friends, the opposite sex, family and home life, lack of interest in education and the future (Hauan, See, Ang & Har, 2008; LaRue & Herrman, 2008). Research by Chandra and Batada (2006) found that students reported school work as the most frequent source of stress. Specifically, students reported worry about exams

and grades, fear of success or failure, test or performance anxiety, acceptance by teachers, poor student-teacher relationships, and looking toward the future. Furthermore, students reported worry about graduation and being accepted into college (LaRue & Herrman, 2008).

Parental expectation for college attendance is often established at a very young age. While this expectation can be positive, if these expectations are too great it may lead to chronic and prolonged stress (Parker-Pope, 2008). Furthermore, students preparing for college have complained about lack of sleep, stomach pain and headaches. Even more worrisome is the potential for these psychosomatic symptoms of stress to lead to more chronic conditions such as depression, eating disorders or other mental health issues (Parker-Pope, 2008).

In addition to academic stress, students reported that families and home environment was a major source of stress and included family conflict, worry about the well-being of family members, parent-teen conflict (such as being “nagged”), sibling responsibilities and conflict (Chandra & Batada, 2006). Additional stressors include parental pressure and money (LaRue & Herrman, 2008). Parental pressure is associated with cognitive appraisal and, as indicated previously, plays a role in amount of stress experienced by students. Findings from research associated with the stress response and the evaluative practices in the brain indicate that human evaluation or appraisal and expectation can impact sensory input into the brain and thus the activation of the stress response (Ganzel et al., 2010; Girdano et al., 2010; Sterling & Evyer, 1988). This concept supports the notion that cognitive appraisals can shape the physiological response to stressors. Therefore, it is possible for students experience

greater stress because of the actual demands placed upon them (i.e., parental pressure to maintain a specific GPA, parental or family expectations for college admittance, external pressures from teachers) as well as demands that students place upon themselves (i.e., the need for college acceptance to maintain a desired image, self-driven competitiveness between two students or siblings). How students cognitively appraise these demands, directly affects the amount of stress the student will experience. Moreover, it does not matter whether the pressures are real or imagined as either appraisal leads to the onset of the stress response (Girdano et al., 2013).

Stress Education and Stress Reduction Techniques

With the documentation of the health effects of prolonged stress, adolescents experiencing greater stress and the tendency for adults to disregard adolescent stress (LaRue & Herrman, 2008) there is a need for comprehensive and holistic school counseling program focused on stress education and stress reduction. Utilizing the ASCA Student Standards, stress education and stress reduction techniques can easily be integrated into existing programs such as time- and task-management, decision-making, conflict resolution, and problem solving. Moreover, with the utilization of well-being models, it is possible to ensure not only a more comprehensive approach to stress reduction, but a more holistic one as well.

Student Well-Being Models

Well-being models have been extensively researched (Fraillon, 2004) and are useful to the development and organization of a counseling curriculum particularly when a holistic approach is desired. While several models of well-being have been created (Ryff & Keys, 1995; Ardell, 1982) for the purpose of this article two student well-being

models will be reviewed. In 2003, Pollard and Lee completed an extensive review of child well-being. From this review, five domains of child well-being were documented. These five domains were psychological, physical, cognitive, economic, and social (Fraillon, 2004; Pollard & Lee, 2003). Physical well-being in students encompasses the notion of nutrition, physical activity, sex education, alcohol and drug education, and safety (Fraillon, 2004). Economic well-being is widely accepted as influencing student well-being; however, the ability for the school environment to improve well-being in this domain is limited (Fraillon, 2004). Psychological well-being is defined as the notion of intrapersonal well-being and is focused on an internalized sense of self and the capacity to function in one's environment. Specific characterizations include autonomy, sense of purpose, resilience, sense of self, self-efficacy and optimism (Pollard & Lee, 2003; Fraillon, 2004). Cognitive well-being is characterized by the reception and processing of information and include intelligence and reasoning (Pollard & Lee, 2003; Fraillon, 2004). Typically social well-being is defined as a broader dimension of social and emotional well-being. Social well-being includes such characteristics as: empathy, trust, peer relationships and mutual obligation (Fraillon, 2004).

Another study by Soutter, O'Steen, and Gilmore, 2013 reported a student well-being model from a different perspective. The Student Well-Being Model (SWBM) contains 7 domains of student well-being. These domains include having, being, relating, feeling, thinking, functioning, and striving. A brief overview of these domains follows.

Having is associated with resources, tools and opportunities. Characteristics of having include standards of living, employment, income, resources, and opportunities.

Being focuses on the concept of self throughout the development trajectory including characteristics of identity, integrity, demographics, and health status. Relating encompasses the relationships and interpersonal connections. Characteristics are interpersonal relationships, relationships to place and relationships as meaning. The domain of feeling focus on emotions and includes the characteristic of socio-emotional education. Thinking encompasses cognitive appraisals including strategies, decisions and errors and the characteristics of curiosity, creativity, decision-making and mindfulness. The well-being domain of functioning is associated with activities, behaviors and individual experience. The final domain is known as striving and includes motivation, goals, and future orientation (Soutter et al., 2013).

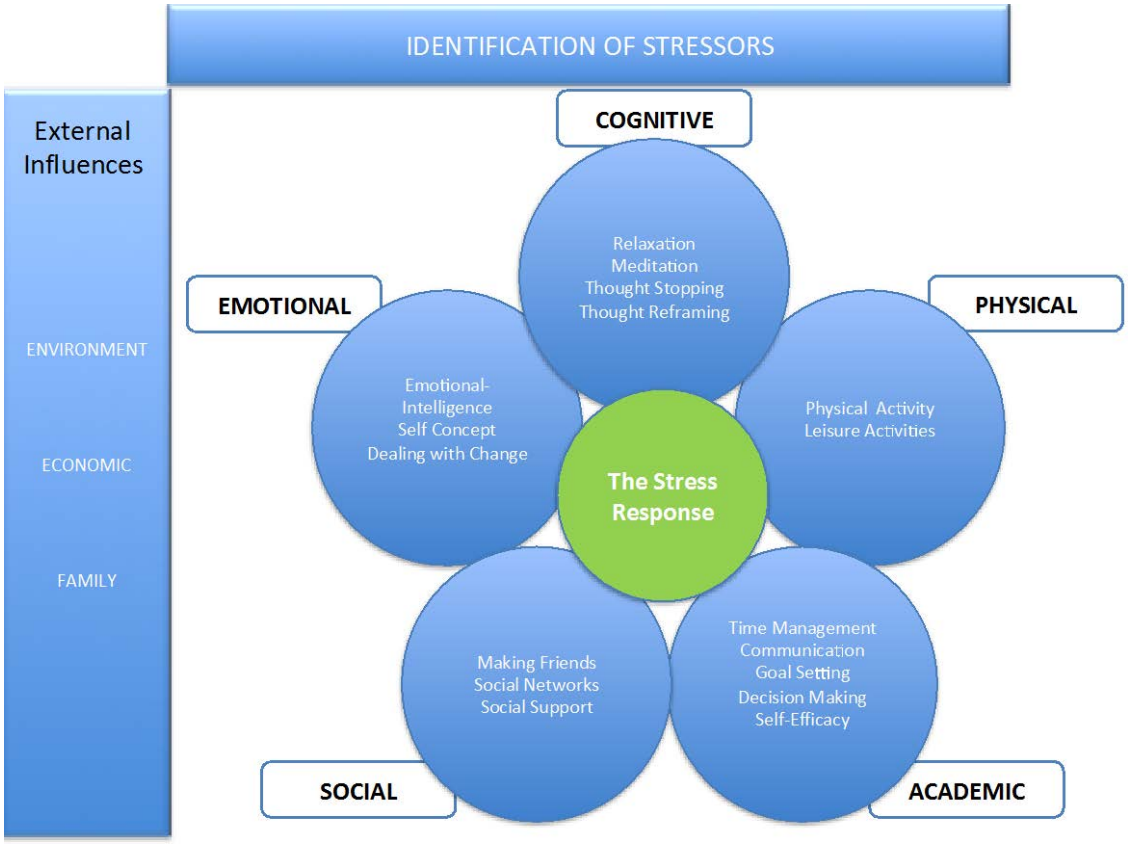
Health has been defined by the World Health Organization (1948) as "…a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Thus, through this definition, health is directly related to well-being. Moreover, cognitive appraisal is the process of categorizing a stressor in relation to one's well-being (Kemeny, 2003; Lazarus & Folkman, 1984). This creates a meaningful link between stress, health and well-being. For the purpose of this article, the author has created a well-being model for the integration between well-being domains, stress education and stress reduction techniques.

Integrating Stress Education, Stress Reduction Techniques, and Student Well-Being

In order to promote the development of a comprehensive and holistic school counseling program focused on stress education and stress reduction techniques, a stress and student well-being model was developed. Figure 1 depicts this well-being

model for students including five domains of well-being as selected by the author: cognitive well-being, physical well-being, academic well-being, social well-being, and emotional well-being.

Figure 1.



Student Well-being, Stress Education, and Stress Reduction Techniques

Associated with each domain of well-being are stress education or stress reduction techniques that could be incorporated into a school counseling program. Stress education and reduction techniques can be used within a classroom, in small groups or even during individual counseling sessions. Central to this model is the prolonged stress response and its impact on body systems, which is the greatest challenge to student well-being. Additionally, there are three factors potentially external to student well-being:

environment, economic circumstances, and family dynamics. These external factors are more difficult to influence through a school counseling program since these factors can and do occur outside of the school environment. Finally, the identification of stressors is placed at the top of the model depicting it as the most important component for student well-being. In order for students to successfully manage stress, it is critical for students to become aware of and understand their own stressors. Awareness and understanding begin with the identification of personal stressors and how these stressors influence their own well-being.

Identification of Stressors

From an educational perspective, it is important for students to understand that most stress is due to perception (cognitive appraisal). For the most part, how one perceives life events determines the level of stress experienced by the individual. For instance, one student may become stressed out because he/she does not have a date for prom; likewise another student without a prom date may experience no stress because they do not perceive prom to be important to them. Research has indicated that humans have filters that affect our perception (cognitive appraisal) of stress and therefore the activation of the stress response. These filters include experience, emotional reactivity, thought processes, opinions, and belief systems (Girdano et al., 2013).

One technique common to the identification of stressors is to categorize stressors by relationship and by magnitude (Health Hints, 2009). Categories associated with relationships are environmental stressors, family and relationship stressors, work stressors, and social stressors. Categories associated with magnitude include

accidental hassles, major life changes, ongoing problems and self-generated stressors. School counselors can use this technique to encourage students to identify stressors in their life.

External Factors

This model acknowledges that there are external factors that impact student stress and well-being. These external factors are home environment, economic considerations, and family dynamics. External factors are those that may or may not be influenced by school counseling programs. Moreover, the environment within the home, the amount of parental education and income, and the unique characteristics of one's family are commonly outside the control of the student. These factors can impact both the amount of stress experienced by students and ultimately student well-being.

The Physical Domain, Stress, and Stress Reduction

As outlined previously, the stress response is a physiological response to a stressor. This physiological response has physical manifestations such as rapid heartbeat, increased respiration, and increased muscle tension. Prolonged activation of the stress response may lead to headaches, back or neck pain, insomnia, and irritability (Girdano et al., 2013). The physical signs of stress can be managed through physical activity (Girdano et al., 2013). Physical activities include a variety of a cardiovascular and strength training activities. Typically, physical activity is incorporated within the school system via physical education classes; however, the amount and length of these required courses varies. While high school students may not be required to engage in physical activity within the school system, encouraging life-long physical activity is important for many reasons, including the reduction of stress. Physical activity has been

shown to reduce epinephrine and cortisol levels in the brain; chemicals known to cause harm during periods of prolonged stress (Girdano et al., 2013). Additionally, the identification of life long leisure activities associated with physical activity are critical the development of long-term stress reduction practices.

Cognitive Domain, Stress Education, and Stress Reduction

The cognitive domain encompasses stress education and stress reduction techniques such as negative automatic thoughts, thought stopping (thought suppression), thought & belief mistakes, and cognitive restructuring. Thoughts allow us to anticipate and to assume a defensive posture. Most causes of stress stem from the thought process and how we perceive our world. One way in which thoughts influence stress is through internal beliefs. When these internal beliefs are irrational and self-defeating, the result is stress (Abrams & Ellis, 1994). Thus, stress is magnified through automatic negative thoughts (ANTs). ANTs seem so real that we do not stop to question or analysis them; we believe them to be absolute truth and/or factual (Sharp, 2006). Consequently ANTs can cause one to lose perspective, engage in one-track thinking, accentuate the negative, and view stressful situations in a distorted fashion. It is possible to modify ANTs through the utilization of thought stopping techniques. Thought stopping (or though suppression) helps individuals to become aware of their ANTs and can be used to help a person deliberately try to stop certain internal thoughts (Sharp, 2006).

As humans we engage, either intentionally or unintentionally, in thought beliefs and mistakes. The most common types of thought beliefs and mistakes include overgeneralization, mental filters, magnification, minimization, disqualifying the positive,

and all or nothing thinking (Girdano et al., 2013; Sharp, 2006). Overgeneralization causes people to mistakenly conclude that things are worse than they really are. Mental filters occur when someone systematically attends to a portion of the information present in an event while forming their appraisal of that event. Magnification occurs when a negative event is blown out proportion and takes on layers of meaning it does not actually contain. Minimization is when one deflates the actual meaning of a very positive event. Disqualifying the positive happens when people pay attention to positive information, but find a reason not to count it as they form their appraisals. All or nothing thinking occurs when cognitive appraisals become highly polarized; there is only “black” and “white” thinking and nothing in between (Girdano, 2013). Often, individuals are not aware of these thought beliefs or mistakes as the reaction is a habit, not a logical thought. Furthermore, one’s emotional reaction to a stressor is “always produced by a belief, attitude or opinion” (Girdano et al., 2012, p. 95). Therefore how someone perceives (thinks about) a stressor is based upon one’s belief, attitude or opinion creating an emotional response. This emotional response is often exhibited through behavior. If one’s perception is marred by a thought belief or mistake, the reaction to the stressor may create greater stress for the individual. For example, a student has decided that a teacher does not like him. The student has conceived this perception through a mental filter – only hearing the negative comments that the teacher has made about his academic performance and discounting any positive comments. The student becomes angry and disengages from the class. The teacher gets frustrated because the student has disengaged and so the teacher disciplines the student for lack of participation. The student’s perception that the teacher does not like him is reinforced

and the student begins to act out in the classroom. The student's perception that the teacher does not like him becomes a belief. Once the belief has formed, the student's behavior will continue to decline creating greater stress for the student and the teacher.

Once one has become aware of ANTs and/or thought beliefs or mistakes, cognitive restructuring can be utilized for stress reduction. Cognitive restructuring includes thought reframing and the "double standard" technique. The thought reframing technique utilizes the following questions to encourage the person to logically think through the stressful event. These questions include: Is this thought really true?, Am I overemphasizing the negative?, What is the worse that could happen?, Is there anything positive about the situation?, Is there another way to look at the situation? The double standard technique is based on the idea that when explaining adverse events, we are much harder on ourselves than we are on our friends. Additionally, when someone relies on realistic and fair standards for the assessment of others, unrealistic standards are set via internal dialogues.

Relaxation and meditation are two additional and well established stress reduction techniques that can be used by students to reduce stress levels (Girdano et al., 2013). There are many definitions and types of relaxation techniques to reduce stress. Some relaxation techniques focus on reducing external stressors through cognitive appraisals and awareness of life events to reduce individual stimulation of the stress response. Other relaxation techniques are focused on the mind-body connection in attempt to decrease stimulation, create a calming response, reduce internal monologues, and promote a sense of well-being (Girdano et al., 2013). Relaxation

techniques can be used in academic settings to assist students with management of stress as well as to teach life-long stress reduction.

Meditation has been practiced for thousands of years. Originally, it was meant to help people deepen their understanding of the sacred and mystical forces of life (Girdano et al., 2013). Presently, many people turn to meditation for relaxation and stress reduction. Meditation produces a deep state of relaxation and a tranquil mind as well as a sense of calm, peace and emotional stability. Meditation can have lasting effects on emotional and physical well-being. As meditation can clear away the information overload that builds up every day, help one gain new perspectives provide a new ways of handling stress and other problems and increase self-awareness (Girdano et al., 2013). Meditation should be incorporated within a stress education program. School counselors can teach and encourage students to use a variety of meditation techniques.

Social Domain, Stress Education and Stress Reduction

Selected stress education and stress reduction techniques associated with the social well-being domain are social networks, social support and developing and building friends. A social network is defined as a group of family, friends and peers that you can rely on to listen to you and support you during times of leisure as well as during times of need (Mayo Clinic, 2012). The development of a support network is important as it provides students with a sense of belonging, an increased sense of self-worth, and the feelings of security (Mayo Clinic, 2012). Social support occurs with the development of social networks. Social support can be effective in the management of stress. Research has indicated that supportive communication can improve outcomes for

stressed individuals. Moreover, emotional support (expressions of affection and sympathy) can relieve distress while informational support (information and advice) can assist in the decision-making process (MacGeorge, 2005). Additionally, school counselors can utilize friendship-building activities to assist students in making friends. Often, friendships are built when two people share similar activities. Thus, students should be encouraged to join clubs, engage in extracurricular activities and talk to other students in their classes who appear to have similar interests. The building and maintaining of friendships also incorporate such skills as decision-making and effective communication.

Emotional Domain, Stress Education & Stress Reduction

There are three stress education and reduction techniques associated with the emotional domain emotional intelligence, coping with change, and self-concept. Emotional intelligence consists of five basic components: self-awareness, self-management, self-motivation empathy, and interpersonal skills (Girdano et al., 2013). Increasing student emotional intelligence assists student in understanding how their emotions impact their interaction with others. Students with higher levels of emotional intelligence typically have more successful interactions with others (Girdano et al., 2013).

Change is a common life event and from a philosophical outlook, change is the only constant. Therefore change should be expected, not feared; however, for most individuals, change can create stress and anxiety (Girdano et al., 2013). When change occurs it can trigger the grieving process as a degree of loss is felt with giving up what is known or familiar. Also, there is a degree of threat with change due to fact that it

creates new demands that are unknown. Moreover, unknown demands can create uncertainty, anxiety and fear. The concept of change needs to be addressed in middle school and high school students as each academic year brings about change. School counselors can assist students in understanding the change process and assisting them to understand which components of change is worrisome to them. This is important not only throughout their academic career, but throughout their lifespan. Additionally, school counselors can work with students to affirm that change is an opportunity for growth.

Self-concept is defined as the way we perceive ourselves and directly influences one's behavior. Self-concept is constructed from beliefs of how we actually are, what we want to be and what we think we ought to be (Girdano et al., 2013). Self-concept consists of six components including: self-awareness, self-worth, self-love, self-esteem, self-confidence and self-respect (Girdano, 2013). Educative sessions on self-concept can be utilized to provide students a more comprehensive view of themselves. Specifically, this allows students the opportunity to understand their own unique characteristics that affect how they perceive, react and cope with stress.

Academic Domain, Stress Education, and Stress Reduction

Stress education and stress reduction techniques associated with the academic domain of well-being are more skill-based than those discussed in other domains. These skills need to be taught and integrated throughout students' academic careers. These skills are time- and task-management, communication, goal setting, and decision-making. Time management is the management of time to be used to one's advantage. Time management is a skill few people master, but it is one that most people need (Girdano, 2013).

The biggest influence on time management is procrastination, putting off something until it absolutely must be done (Girdano et al., 2013). Procrastination affects many students and there are several reasons as to why students procrastinate. These reasons are poor time management, difficulty concentrating, fear and anxiety, negative beliefs, personal problems, boredom with the task, unrealistic expectations, and perfectionism and fear of failure. In order to overcome procrastination it is important for students to recognize situations where they become self-defeating. Additionally, school counselors can help students to: 1) identify goals, strengths and weaknesses, 2) understand student values and priorities and 3) encourage students to study in small blocks of time, rather than in one large block of time to reduce the potential for students to feel overwhelmed (Girdano et al., 2013).

Communication skills are essential to dealing with stressful situations due to the fact that many life events are interpersonal. If effective communication skills are not developed, the ability to express personal feelings becomes difficult and can lead to the onset of stress. Moreover, when communication is attempted but not effective, stress may be compounded (Hayes & Eddy, 1985). Therefore, teaching effective communication skills is an important tool for students to obtain in order to manage stress throughout the lifespan.

Decision-making occurs when one must make a choice between two or more outcomes. According to Hayes and Eddy (1985) there are three assumptions that are associated with the decision-making process. First, the there has to be more than one alternative (otherwise there is not decision to be made). Second, there must be a consequence that is associated with the decision to be made. Third, there must be a

degree of risk involved in the decision. Often, stressful situations and life events require that a decision be made. When students are able to learn decision-making skills and practice making decisions when the consequences and risk are less tenuous, their skills are well developed by the point in time of the lifespan when decisions are associated with greater risk and consequence.

Goal Setting is an important stress reduction technique that is a learned skill. The ability to write goals that are specific and attainable takes time and practice. Furthermore, it is necessary to develop short-term and long-term goals, which can provide structure and motivation, particularly within an academic setting. Goal setting should be incorporated early on in a student's academic career and should be added on to at the beginning of each academic year. Furthermore, the attainment of student goals should be rewarded as all these techniques can increase motivation and reduce stress (Girdano et al., 2010).

Conflict resolution is another skill that is essential to the reduction of stress. There are many different theories associated with conflict resolution that school counselors can use to teach students how to effectively resolve conflict. Moreover, the benefits of conflict resolution for the management of stress can also be addressed.

The organization of stress education and stress reduction techniques into a well-being model creates the opportunity for students to receive a more holistic education. Another technique used in the management of stress is known as AAAbc Paradigm of Stress. This technique as a whole is holistic approach to stress education and stress management. It is included here as this paradigm can be used by school counselors as

a way to bring all five of the well-being domains together for continued integration of stress management.

The AAAbc's of Stress

The last and most comprehensive stress reduction technique is known as the AAAbc's of Stress (Loving-Tubesing & Tubesing, n.d.). This technique is associated with the all five domains of student well-being: academic, cognitive, emotional, physical and social. This technique is based upon a decision making model and encourages students to Alter stress, Avoid stress, or Accept stress. Altering stress includes the utilization of problem solving techniques, using direct communication and promoting organization and time management skills. Avoiding stress incorporates building skills to remove oneself from a stressful situation and learning specific skills to effectively avoid the stressful situation (decision making, time management and clear communication). Acceptance is also necessary as stress cannot always be altered or avoided.

Acceptance of stress is an important thus, it necessary to prepare students with the skills needed to accept stress. Therefore, associated with the *acceptance* of stress is *building* resistance and the *changing* perception. Building resistance includes skill building associated with four domains of well-being; physical, mental, social and spiritual (Loving-Tubesing & Tubesing, n.d.). Students can physically increase their tolerance to stress through physical exercise, a healthy diet and the utilization of relaxation techniques. Mental resistance can be built through positive affirmations, learning to set goals and priorities and helping students to understanding their core values. Social resistance is strengthened when students have developed support systems, investing in relationships with others and have learned to develop a clear

communication style. Students who have developed spirituality can call upon learned resources such as meditation or prayer (Loving-Tubesing & Tubesing, n.d.).

Changing perception of stress is associated with how the student defines the stressful event. Teaching students skills associated with their ability to change their perception of the stressor is important. Additionally, it is important for the student to consider changing any unrealistic expectations or irrational beliefs that they may have regarding the stressor. Specific techniques might include goal setting, identification of realistic vs. unrealistic expectations and developing skills to increase students understanding of their belief system – particularly with regard to being able to identify an irrational belief.

Implications for School Counselors

This article provides a well-being model for integration of stress education and stress reduction techniques into school counseling programs. Furthermore, these stress education and stress reduction techniques are directly related to several ASCA National Standards for Students. School counselors can use the well-being model to develop a more comprehensive stress management curriculum. It is imperative for students to become aware of their stressors and to be encouraged to identify stressors specific to them as stress directly impacts the learning process. Additionally, it is important for school counselors and students to understand that some sources of stress are beyond student control. This concept is reflected in the by the external factors depicted on the model. However, school counselors should encourage students to discuss stressors associated with these factors.

The categorization of stress education and stress reduction techniques into domains of well-being was intended to aid school counselors in understand the breadth of stressors and the impact of stress on student well-being as well as to outline specific techniques for school counselors to use to reduce student stress levels. It should be noted, that it is not the author's intention for this model to be exhaustive, rather a visual representation of stress education and stress reduce techniques for middle and high school students.

The stressors associated with adolescence is increasing as students are experiencing more pressure to succeed academically, prepare for college earlier and be successful in extracurricular activities. These pressures are prolonging the stress response in many students. Prolonged stress is detrimental to student well-being as it directly affects the learning process. The ASCA National Student Standards were adopted to promote holistic student development. While these National Standards are comprehensive, there is only one indicator associated specifically to stress. Upon review of the National Student Standards, there are many other standards in which stress education and stress reduction can be integrated. Together, the integration of stress into already established student standards for holistic student development and the use of a well-being model to aid the development of stress education and stress reduction techniques creates a more comprehensive and holistic approach for school counselors to use when developing stress programming in middle and high schools.

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