

AN INVESTIGATION OF THE EFFECTS
OF GIFTEDNESS, STRESS AND
GENDER ON ADOLESCENT
COPING RESPONSES

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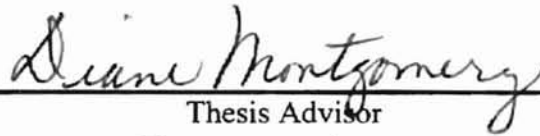
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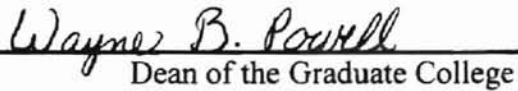
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CHAPTER 1

INTRODUCTION TO THE STUDY

Fifty years ago, only bridges were stressed. Humans were nervous, worried or fearful. Since 1950, "stress" has evolved from an engineering term to a cultural and emotional construct. According to Prevention Magazine's 1996 annual Prevention Index survey, nearly three quarters of adults (73%) said they felt great stress on a weekly basis. In 1983, fewer than six in 10 Index respondents (55%) had the same response. A study conducted by Market Data Enterprises, Ltd., found that 22.7 million Americans, or 12 % of the population, will suffer from an anxiety disorder at some point in their lives. Those who do not consider themselves stressed are still likely to deal with people who do, at home, at work or in the street. Since coping with a stressed person is stressful in itself, there is no avoiding stress.

To facilitate a better understanding of the arguments presented in this thesis study, a brief description of the organization of the introduction follows. The introduction includes the origins of stress, a formal explanation of the problem, the significance and purpose of the study, the theoretical framework for the study, the assumptions of the study, the research questions guiding the study, and the organization of the study.

Origins of Stress

Stress is the general response of the body to any intense, physical, emotional, or mental demand placed on it by one's self or others. Anything can be a stressor if it lasts long enough, happens often enough, is strong enough, or is perceived as stress (Kaplan, 1990). What is considered stressful to one person may not be to another. Seemingly

“positive” events or occurrences cause stress. For example, a student who works hard on a paper and gets an A may experience some level of stress if he/she was expecting an A+.

In today's society, there are so many problems plaguing our world that it would be hard to pinpoint any one cause of worry or anxiety among people. Often children are overlooked in this fast-paced world and yet, they too, can experience a large amount of stress and may exhibit symptoms of stress disease (Elkind, 1981). Although studies have been performed in the past to determine stress levels and potential problems for students, children today come to school with problems that are markedly different from those of only a generation ago. Beyond the anticipated adolescent problems of acne, being accepted by peers, and the struggle to earn their parent's trust, teens today must also face the threat of school violence, the pressures of drug use, and family turmoil that has erupted in an endless list of divorcees. These stresses, coupled with the unique pressures that gifted students place on themselves to succeed, can produce many deleterious side effects. Because school is such a large part of a child's life, the school experience is a highly significant factor in the child's life-stress situation. Unfortunately, many of the current practices in the school, far from helping children to cope, actually serve to exacerbate the stress situation (Chandler, 1997).

Compounding the problem is that there are many myths that need to be dispelled in order to fully understand the implications of stress. The American Psychological Association (1997) published an article that listed commonly held misnomers about stress. These myths include:

Myth 1: Stress is the same for everybody. Just as each individual is different so is the response to stimuli. What is stressful for one person may or may not be stressful to

another. Myth 2: Stress is always bad for a person. According to this view, zero stress makes people happy and healthy. In actuality, stress is like tension on a cello string. Too little and the music is dull and raspy; too much and the string snaps. The issue here is how to manage it. Mismanaged stress can be very harmful and even detrimental to a person's health. Myth 3: Stress is everywhere, so people can not do anything about it. This is not true; instead they can plan their lives so that the stress they face does not overwhelm them. Effective planning involves setting priorities and working on simple problems first, solving them, and then going on to more complex difficulties. Myth 4: The most popular techniques for reducing stress are the best ones. No universally effective stress reduction technique exists. Every person is significantly different from another. Their lives are different, their situations are different, and their reactions are different. Only a comprehensive individualized program will work. Myth 5: If no symptoms exist, then there is no stress. The absence of symptoms does not mean stress does not exist. Finally, Myth 6: Only major symptoms of stress require attention. This myth assumes that "minor" symptoms, such as headaches or stomach cramps, may be safely ignored. Minor symptoms of stress are early warning signals that the stress needs to be controlled or managed better.

Theoretical Framework

Building on Erickson's achievement of identity crisis (1968), Havinghurst (1972) identified tasks for each stage of human development, including eight tasks for the adolescent period: 1) Acquiring more mature social skills; 2) Achieving a masculine or feminine sex role; 3) Accepting the changes in one's body, using the body effectively, and accepting one's physique; 4) Achieving emotional independence from parents and

other adults; 5) Preparing for sex, marriage, and parenthood; 6) Selecting and preparing for an occupation; 7) Developing a personal ideology and ethical standards; and 8) Assuming membership in the larger community. Similarly, Frey (1991) found that, "Three major changes occur within every adolescent: biological maturation, attainment of new ways of thinking and learning, and shifts in psychosocial needs." Buescher (1985) broke down the psychosocial need into the need for independence, autonomy, adult role models, and achievement of coping skills, individuality, recognition, acceptance, and self-knowledge.

The gifted adolescent's response to these needs is often distinctly different from those of the average adolescent. Complicating the normal adolescent stages of development, Roedell (1984) identified seven vulnerabilities that may plague the gifted child. They are perfectionism; pressures from adult expectations; intense sensitivity to the messages of others; self-definition (an early search for meaning); alienation from the peer group because of disparate abilities; frequent placement in appropriate environments; and societal, age or gender conflict because of disparate development.

Although this research will not be focusing on these vulnerabilities, it is important to recognize that all students face stress to some degree, and; that gifted students couple these pressures with others. It is very likely that the level of stress they experience is higher than their non-gifted peers.

Various leaders in the field of gifted education have proposed that gifted adolescents have a unique set of affective needs compared with their non-gifted peers (Colangelo and Pfleger, 1979; Silverman, 1983). The vast emotional range and intensity of feelings that gifted adolescents experience may make them seem quite contradictory:

mature and immature, arrogant and compassionate, aggressive and timid. These contradictions can often be explained through two widely used definitions in the field of gifted education: asynchrony and dyssynchrony (Piirto, 1994). Asynchrony in the gifted is a lack of harmony between the rates of their cognitive, emotional and physical development (Piirto, 1994). Furthermore, the advanced cognitive abilities and heightened intensity within the individual, combine to create inner experiences and awareness that are qualitatively different from the average adolescent (Morelock, 1992). These students are out of sync with their age peers emotionally and intellectually. Dyssynchrony implies a disparate rate of development of various capabilities. It is characterized by uneven development. Often a child displaying evidences of dyssynchrony will be more advanced in one area than another (Pirto, 1994).

Another theorist, who advocates the need for counselors, educators, and parents to understand the complex inner life of the gifted, is Kazimierz Dabrowski. A leader in gifted educational theory, his "Theory of Emotional Development" emphasizes the role of emotions in human development. The relationship between cognition and emotion, the development of value structures, and the heightened intensity of the gifted and creative are all explained in terms of "overexcitabilities"- which are described as greater capacities to respond to various stimuli." (Silverman, 1993). This extra capacity to feel and experience stimuli can often be painful and frightening, especially for a child of a young age or even an adolescent, when they have yet to completely understand the benefits of their passion, sensitivities or intensities.

The expanded awareness of the individual, deriving primarily from inborn emotional, intellectual, and imaginal overexcitabilities eventually leads to the

development of value structures that guide development in adolescence and adulthood. Both the overexcitabilities and the development in value system create a unique inner life that marks the gifted as different from their peers. These differences, often misunderstood, underscore the need for counseling (Silverman, 1993).

Statement of the Problem

Professionals seek to understand and help gifted students, but programs for the gifted are frequently lacking in social and emotional development domains, which are typically the most influential and beneficial to gifted students (Silverman, 1993). Because of the intense pressures gifted adolescents face (Rimm, 1987), they need to learn more about their responses to stressful situations and the coping strategies they employ when encountering stressful experiences. Although all students deal with stress to some degree, gifted and creative children are at high risk for potential health problems because they internalize pressures more easily than other students do. Once internalized, worry and anxiety often culminate in physical symptoms (Bossing, Ruoff 1982), school and mental problems (Rimm, 1987), and future destructive behaviors such as alcoholism, drug use, frequent illness, the need for constant sleep, overeating or starvation (Kaplan, 1990). As has been witnessed lately in the outbreak of violence in public schools, stress can even lead students to violent behavior against others.

When *Time* magazine ran the cover story "Stress, The Epidemic of the Eighties," (June 6, 1983) people hoped that the disease would not infiltrate the next decade. That notoriety in print was soon out done in 1990, by a Nightline television presentation of "Stress in the Workplace." Despite the concern, stress levels of many demographic groups including children, teenagers and the elderly have risen dramatically. The U.S.

Center for Disease Control (1986) reports that more than half of all deaths between the ages of one and 65 result from stressful lifestyles. Stress is also linked to the six leading causes of death-- heart disease, cancer, lung ailments, accidents, cirrhosis of the liver, and suicide. Moreover, between, 75%- 90% of visits to primary care physicians are from stress induced complaints of chronic pain, anxiety, chronic fatigue, addiction, and headaches, costing this nation more than \$300 billion in healthcare annually.

Significance of the Study

Not everything a student learns in school is encompassed in the formal curriculum. An important part of everyone's learning is viewing the world around him/her (Bossing, 1982). This perception influences and shapes many of the beliefs the person holds about life. Just as the proverbial college student learns much about the ways of the world outside the world of academia, adolescents also encounter many situations that teach them about life and help them mature. When students encounter any life event, whether it is perceived as good or bad, there is an incredible opportunity for inner growth. The current educational environment, though, often does not value the opportunity to use these experiences for development; instead, students are often left to deal with the situation within their own limited means. If the adolescent is a mature person he/she may acknowledge the benefits gained from communicating with an older adult. Often, though, adolescents turn to detrimental relationships and even drugs and alcohol to help them deal with the problems and stress that they face.

Compounding the problem, gifted students face daily problems that are essentially two-fold in nature: (1) Internal; those that are posed by an often critical understanding of self; and (2) External; those that are posed by daily interpersonal relationships with

family, friends, and others (Jensen, 1987). These problems predispose gifted students to feelings of stress. Many gifted students have a heightened sensitivity to their surroundings, to events, to ideas, and to expectations (Kaplan, 1990).

Traditionally, the social and emotional needs of gifted students have not been addressed due to the common assumption that cognitive or creative superiority naturally includes a positive self-image. Indeed, the research clearly indicates that gifted students present a unique set of affective needs (Marland, 1972). Many educators recognize that a student's academic success is directly correlated with his or her feelings of self-worth and confidence to apply acquired knowledge. In fact, the research literature indicates that cognitive learning increases when self-concept increases. As a result, researchers are overwhelming in their support for the inclusion of an affective (self-concept, social adjustment) component in K-12 instruction (Dabrowski, 1972; Kohlberg, 1975).

Depending on the findings of this study, significant influences in the field of education could be imminent. By helping teachers and guidance counselors better understand the social and emotional needs of the adolescent, many students could learn how to better deal with the stress and pressures they face. Without understanding the person as a whole being, with emotional issues that should be dealt with, the stress related diseases prevalent in our society will continue to plague our world.

This study will help school guidance counselors, as well as other pertinent professionals in the field of gifted education and adolescent development better understand the social and emotional needs of all learners. It will raise awareness about the issues and problems faced by all students as well as the unique needs that gifted students currently face in today's educational setting.

Programs and services need to be developed for all students, but especially gifted students because of the high level of pressure placed on most gifted students to excel, to be active, to create, and to succeed, not only in the classroom, but also in society. These programs and services should be geared to helping adolescents cope with the stress that is currently an inevitable part of life. Providing appropriate intervention for children and adolescents is important because often, adolescent problems can be risk factors for adjustments in adulthood. If students have a better understanding of how to deal with their specific "stressful" situations, many problems such as violence, ill health and other deleterious side effects of stress can be prevented.

Stressful encounters of all types hold consequences, not only for the individual adolescent who encounters them, but also for others in her or his social environment as well. Furthermore, adolescents do not live in an insulated world, in which the only threat to their well being comes from adverse circumstances and events that they experience personally. Instead, adolescents are a part of a network of close interpersonal relationships with peers and families, and as a result, they are potentially vulnerable to the effects of stressful events experienced by others as well (Compas, Wagner 1991).

Purpose of the Study

The purpose of this study was to determine whether the level of stress, the nature of giftedness or the role of gender influenced adolescent coping strategies. Also, the study sought to determine if there were differences between males or females, gifted or non-gifted adolescents, or high or low stress levels on the type of coping strategies used when faced with stress.

Assumptions

An underlying assumption of this study was that by using students in already formed classes (Regular and Honors) there would be a higher probability of gaining a large number of both gifted and non-gifted students. The researcher needed a relatively large sample, so using already formed class groups was decided upon for several reasons. First, it helped the researcher avoid singling out any individual. By using already formed classes, the students believed that the entire class was being tested and not just them individually. This situation can often cause misunderstandings and hurt feelings among adolescents. Secondly, in order to gain permission to perform the study in the public school, the researcher had to concede to conducting the research in the most unobtrusive way. This approach was agreed upon by the school administrator as well as the gifted education teacher who did not see her students at any given time period. She suggested that already formed classes, that included large numbers of identified gifted students be used.

Limitations

It is possible that only testing those who obtained parental consent biased the study. Many of the students who did not participate in the study potentially could have had high stress levels also.

Research Questions

The following questions were posed in order to guide the research study:

- 1) How does giftedness, gender and stress level affect coping responses?
- 2) How does giftedness, affect the types of coping strategies employed?
- 3) How does stress level affect the types of coping strategies employed?

4) How does gender affect the types of coping strategies employed?

CHAPTER 2

REVIEW OF LITERATURE

Gifted adolescents face a myriad of pressures that compound already numerous stressors experienced by the average adolescent. The following review of literature will provide background information on the origins of stress, describe the sources of stress faced by gifted students, clarify the connection between stress and physical illness, explain the unique pressures faced by gifted adolescents, discuss adolescent stressors, explore coping strategies for dealing with stress, and provide rationale for more appropriate counseling and teaching practices to better serve the demanding needs of the gifted learner.

Origins of Stress Theory

Hans Selye (1956) pioneered most of the early research on stress and is often credited with borrowing the term from physics to refer to the human reaction to danger signals. Selye defined stress as a nonspecific response of the body to any demand placed on it; and as the rate of wear and tear on the body (1956). He noted that individuals might interpret or react to stimuli differently. His work has guided much of the literature in the field of stress research. Expanding his view, Lazarus and Folkman (1985) emphasized transactions between people and the environment, and hypothesized that cognitive variable and meditational processes are central to the experience of stress. From this viewpoint, stress results when individuals perceive events or situations as threatening; or as placing demands on them that exceed their ability to cope.

Although the term is used easily and often today, stress has proven difficult to define and study precisely. Attempts to define stress have focused on both the bodily reactions to stress, as well as the role of an individual's specific thoughts and attitudes in promoting stressful feelings. This approach has revealed that life events that are perceived as threatening to an individual's well being cause stress. These life events are frequently associated with life changes that are common in the lives of gifted adolescents.

Sources of Adolescent Stress

Adolescence is characterized by both intra-personal and inter-personal struggles. In the intra-personal domain, adolescence has been described as a period in which identity formation is a central developmental task. Achieving a sense of personal autonomy and an identity that is separate from the family is of utmost importance. Significant inter-personal tasks during adolescence are thought to include increased involvement with the peer group; balanced against continued attachment to the family (Compas & Wagner, 1991).

Teenagers experience more changes during adolescence than at any other period besides infancy. Some of these changes include: the physical changes of puberty (Hill, 1988); the development of formal logic (Inhelder & Piaget, 1958); and the emergence of new social-cognitive abilities (Shantz, 1983). All of this is occurring at the same time the adolescent is experiencing transitions and changes in peer networks, role expectations, transitions in schooling, and changes in family relationships (Smetna, Yau, & Braeges, 1989).

Sources of stress are frequently defined in terms of major life changes. Although most people assume this means only negative life change events. On the contrary, as

stated earlier, anything can be a stressor if it lasts long enough, happens often enough, is strong enough, or is perceived as stress (Kaplan, 1990). Seemingly happy events such as a wedding, a birth, or attaining a goal or other achievement are positive life events, but can still produce stress on the individual.

Although all adolescents have to deal with the biological changes occurring in their bodies, females especially can experience high amounts of stress as they mature and grow. Jeane Brooks-Gunn believes that certain social events are experienced differently as a function of pubertal development in girls. Puberty acts as a social stimulus for other social experiences, altering how adults and peers respond to the girl as her body develops. Studies have been able to separate the effects of age and pubertal development into two distinctly different elements. Some examples include: increased independence given to girls by their parents, interest by boys, and in some cases enhanced same-sex peer relationships, as a function of increases in maturity and controlling for age (Brooks-Gunn, Samelson, Warren, & Fox, 1986); Brooks-Gunn & Warren, 1988; Magnusson, Strattin, & Allen, 1985; Simmons & Blyth, 1987).

At the same time, girls' own experiences and interpretations of pubertal events influence how they respond to or interpret social events. As girls mature, they demand more independence from their parents (Simmons & Blyth, 1987). In some cases, they seek out girlfriends who are similar in pubertal maturation (Brooks-Gunn et al., 1986). This often is evidenced with girls who form relationships with girls older in biological age, but similar in biological processes. David Magnusson and his colleagues (1985) attempted to understand why early maturing girls are likely to engage in smoking and drinking sooner than later maturing girls. They found that the effect was due to many

early maturers having older friends who presumably were engaging in such behaviors, which were more normal for their age group. As their bodies change they desire to be around others who are in the same place developmentally that they are. Those girls who do not have this opportunity can face large amounts of stress if they are not comfortable with others who are slower in their maturation process

Sources of Gifted Adolescent Stress

Young gifted people between the ages of eleven and fifteen frequently report a range of problems as a result of their abundant gifts: perfectionism, competitiveness, unrealistic appraisal of their gifts, rejection from peers, confusion due to mixed messages about their talents, and parental and social pressures to achieve. Others experience problems with unchallenging school programs or increased expectations (Kaplan, 1990). The developmental issues that all adolescents encounter exist also for gifted students, yet they are further complicated by the special needs and characteristics of being gifted (Buescher & Higham, 1990). Rarely, though, are gifted students eager to verbalize the pressures they feel. Often counselors are left to categorize the students they see as either defensive and rarely willing to acknowledge the problems they are facing; and those who act equally defensive at home and in the classroom, but who are eager to understand their problems and pressures (Rimm, 1987).

The intricate thought processes these students possess are mirrored by the intricacy of their emotional development. Idealism, self-doubt, perceptiveness, heightened sensitivity; as well as the desperate need for understanding, acceptance, and love, all plague the gifted adolescent, often simultaneously. The gifted students' vast

ranges of emotionality often present unpredictable personalities to teachers, family and friends (Jensen, 1987).

As stated earlier, gifted students face both internal and external pressures. Ironically, some of the largest sources of pressure and stress originate from within the students themselves. The first of which is the pressure to be brilliant. Once a child has been labeled "gifted" the student often feels immense pressure to succeed at whatever area he/she has been identified as gifted in. Similarly, youngsters often berate themselves because they see possibilities and alternatives, but fall short of them, producing excessive self-criticism (Adderholt-Elliott, 1989; Powell & Haden, 1984; Whitmore, 1980). Perfectionism is another trait, which often can produce great amounts of stress. Gifted learners have the ability to see how one might ideally perform, but this combined with emotional intensity, leads many gifted children to set unrealistically high expectations for themselves. The next influencing factor involves risk-taking. In the same way that gifted youngsters see great possibilities, they often recognize potential problems in engaging in those activities. Avoidance of potential problems can mean avoidance of risk-taking, and may result in underachievement (Whitmore, 1980).

In some families, continual evaluation and criticism of performance--one's own and others--is a tradition. Any natural tendency to self-evaluate will likely be inflated thus increasing the risk for depression and/or academic underachievement. Families in particular, influence the development of social and emotional competence. Gifted children seem to be particularly vulnerable to any type of family turmoil. They are acutely aware of what is happening to others and may be unaware of their own feelings. There are three major areas of family turmoil which merit detailed examination because

of the large number of families affected, and because of the potential for stress that these situations pose: divorce, death and violence (Arent, 1985).

Altman (1983) purports that self-imposed high standards among the gifted, particularly if such standards are both excessive and unrealistic, may constitute a source of chronic stress that leads to frustration, guilt, or self-debasement. Altman further contends that gifted children are more likely to be exposed to adult problems and concerns, and as a result, will often experience sources of stress that are more common to adults than children (Metha, & McWhirter, 1997).

Stress and Physical Illness

The long-term effects of stress can be detrimental to all types of student learners. As well as the potential academic and social problems, it is essential that the numerous health problems associated with stress are reduced and eradicated. Recent research has increasingly confirmed the important role of stress in cardiovascular disease, cancer, gastrointestinal, skin, neurological and emotional disorders, and a host of disorders linked to immune system disturbances, ranging from the common cold and herpes, to arthritis, cancer and AIDS (Center for Disease Control, 1995). The need for better understanding of the unique problems and pressures gifted students face is apparent and should be of paramount concern to educators.

Stressors on gifted adolescents that increase their vulnerability and risk of suicide include high self-and societal expectations, the need to feel their gifts can and should be used to benefit society, and the strain of being intellectually capable while at the same time being socially immature (Delisle, 1994). Of particular concern, Dahlberg (1992)

notes that gifted youth who are suicidal, frequently select highly lethal methods of self-destruction, turning their intellect upon themselves.

Suicide is the leading cause of death among adolescents 15 to 19 years of age, the third leading cause of death among 15 to 24 year olds in the United States (Berman & Jobes, 1995) and is steadily increasing. A number of research studies have examined factors that appear to be related to suicidal risk. Two of those factors are depression and life stress (Metha, & Mcwhirter, 1997). In a review of the research on life events, social support, and suicide, Heikkinen, Aro, and Lonnqvist (1993) concurred that life events or life stressors play an important role in adolescent suicide. The high rates of substance use and abuse, (Wetzel, 1987; Johnston, O'Malley & Bachman, 1987) as well as other risk-taking behaviors are negative health outcomes in and of themselves, and reflect the dysfunctional strategies many teenagers use (Huba, Winegard, & Bentler, 1980) to cope with stressful life conditions and emotional distress.

Gad and Johnson (1980) found that measures of negative life changes were significantly correlated with variables such as number of visits to the doctor, reports of diagnosed illness, and self-reports of physical health problems. Johnson and McCutcheon (1980) also found that, at least with male subjects, life stress was significantly correlated with number of school days missed because of illness, reports of physical health problems, and self-ratings of physical health.

Studies have found life stress scores of adolescents to be significantly related to measures of anxiety and depression (Barrera, 1981) and to be correlated with increased levels of self-esteem, an external locus of control orientation, delinquent behavior, poorer school performance, and overall level of psychiatric symptomatology. Some studies have

also suggested that children and adolescents displaying specific types of psychological problems (e.g., suicidal tendencies, anorexia nervosa, (Schwartz & Johnson, 1985) show increased levels of life stress.

Stress and the Unique Needs of the Gifted

Gifted students' needs are remarkably different than their peers. There are many aspects of adolescent development, which affect gifted students. Studies indicate that three major changes occur during adolescent development: biological maturation, attainment of new ways of thinking and learning, and shifts in psychosocial needs. Buescher (1985) identified the latter as needs for independence, autonomy, adult role models, achievement of coping skills, individuality, recognition, acceptance, and self knowledge (Boreland, 1991).

Independence is a common affective characteristic of the gifted that is developed throughout childhood, so this often does not present as many problems for them as their peers. An adolescent need that is more difficult for the gifted is finding gifted adult role models. Often schools and other organizations will supply mentors to students with similar career interests, but seldom do they pair gifted adolescents with gifted adults who possess well developed decision making skills or high self esteem levels that are important for gifted adolescents to view as they develop.

Individuality frequently presents a problem for gifted adolescents in that there may be a conflict between society's stereotypical expectations for age, sex, and racial groups and the gifted adolescent's need to fulfill individual expression. It is often the macho football star who is the hero of the school, not the mathematical wizard (Roedell,

1984). Consequently, discovering and expressing one's individuality can be difficult for gifted adolescents.

Coping Strategies for Dealing with Stress

In response to dealing with the identification in the differences that are discovered, a number of researchers have attempted to discover coping strategies that help individuals increase their resistance to stress. Kuczen (1987) identified three specific characteristics possessed by individuals who cope well to circumstances usually reported to be stressful. The three characteristics were control, challenge and commitment. Individuals who handle stressful situations well have a strong sense that they can have an impact on the events in their environment. Several researchers in the areas of gifted education (Blackburn & Erickson, 1986; Delisle, 1984) have found that gifted students frequently feel the need to control and direct their own learning experiences, while many school curricula seldom offer this opportunity to students. The second coping skill is challenge. Individuals who remain relatively immune to stress are able to see new and potentially difficult circumstances as an opportunity for new growth. Finally, the third important coping strategy that appeared to reduce stress was commitment. Individuals who cope well, realize that it is through their efforts alone that stressful circumstances are dealt with. Gifted adolescents may draw on many resources including their peers, parents, or teachers, but, ultimately, they realize that it is their responsibility to face and negotiate challenging circumstances.

Since stress is an individualized matter, its control must also be individualized. A particular control technique may work for one person, yet be totally ineffective for another. It is vital to first help the gifted adolescent become aware of themselves and the

signals of stress they experience. This technique may be particularly effective with gifted adolescents because they are hyper sensitive to feelings about themselves and others (Gridley, 1987). Often, stressful experiences are encountered with the presence of a physiological symptom because mental and emotional stress create tension that signal to the body it is being stimulated in a negative manner. Encouraging gifted adolescents to be aware of their own bodies and how stress affects them, can be a very helpful tool (Bireley & Genshaft, 1991).

The gifted adolescent often lacks information about specific coping skills that are effective in dealing with everyday problems of psychosocial adjustment. It has been suggested (Roedell, 1984) that adults frequently expect the social maturity of the gifted to match their intellectual development. When these two levels of development are uneven, adults may characterize the gifted individual as having a behavior problem. In actuality, the gifted adolescent is responding as effectively as possible given the difference between intellectual maturity and socio-emotional maturity, which is frequently common in this population. Another reason gifted adolescents lack coping skills is that, throughout childhood they are given positive feedback primarily for their intellectual capabilities. In the end, this leads to the development of the belief in adolescence that only by being smart can one be accepted (Powell & Haden, 1984). Thus, social and coping skills are developed more slowly in the gifted. This leads to emotional distancing of the gifted from others, as well as an emotional detachment from their emotional life (Powell & Haden, 1984).

Approaches to managing stress vary, depending on the source and the individual gifted adolescent. In general, approaches to managing stress include teaching the

individual to be aware of bodily responses to stress, identifying faulty beliefs that may exacerbate stress, developing positive coping strategies, and practicing relaxation techniques. Individuals working with gifted adolescents experiencing stress also may find it helpful to teach positive problem-solving strategies, or increase certain daily activities such as physical exercise or the use of creative outlets such as writing or singing. At times the adolescent may need the support of a caring adult individual. When educators come to a deeper understanding and acknowledgment of this need in the education of the gifted, then the needs of gifted adolescents will be fully met.

Counseling and Teaching Practices

Lack of understanding or support for gifted children can create significant problems for the gifted teenager. A main task of development at the adolescent level is to establish one's identity. For bright children who have been audience-centered and admired most of their lives, there are special pressures. The audience, which surrounded them for years, becomes an increased burden as they seek admiration and acceptance after every deed performed.

Gifted children, by definition, are "unusual" when compared with same-age children, at least in cognitive abilities, and require different educational experiences (Kleine & Webb, 1992). Schools, however, generally group children by age. This presents the child with a dilemma: conform to the expectations of the average child or be seen as a nonconformist. Gifted children, particularly the more creative, do not like to conform. Nonconformists violate or challenge traditions, rituals, roles, or expectations. Such behaviors often prompt discomfort in others. The gifted child, sensitive to others' discomfort, may then try to hide abilities. Gifted children need several peer groups

because their interests are so varied. Their advanced levels of ability may steer them toward older children. They may also choose peers by reading books (Halsted, 1994). Such children are often thought of as "loners." The conflict between fitting in and being an individual may be quite stressful. This can lead to depression, which is usually evidenced by being angry at oneself or at a situation over which one has little or no control over.

The needs for appropriate guidance counseling, which include addressing stress and its role in the lives of gifted students, is crucial to the success of gifted adolescents. Counselors and other school personnel must begin to realize that gifted adolescents have unique cognitive and affective needs. A counseling component must be developed to meet these special needs. Through a better understanding of stress and its role in the lives of gifted adolescents, educators can better serve the needs of their students.

CHAPTER 3

METHODOLOGY

The purpose of this study was to examine the effects of giftedness, stress level and gender on adolescent coping responses. This chapter will describe the subjects solicited for the study, the instruments administered, the procedures and design of the study, and the data analysis that was used.

Subjects

Participants for this study were solicited from a volunteer sample of ninth grade students from a school district in the Oklahoma City metropolitan area. The district serves a community of over 100,000 people. The socioeconomic and ethnic information provided here is based on the school's last census information taken in 1990. The ethnic makeup of the district consists of 74% Caucasian, 14% black, 4% Asian, 5% Hispanic and 3% Native American. The average household income is about \$32,000. The school district offered grades Early Childhood through the twelfth grade in the 1997-98 school year. It is comprised of 18 elementary schools, 5 middle/junior high schools, and three high schools. The school system provides educational services to approximately 19,000 students with 15.7% of the student population qualifying for gifted and talented programs and 10.1% qualifying for special education programs. The high school used in this particular study serves approximately 1600 students. Of these 1600 high school students, about approximately 250 students are identified as gifted.

The average age of the participant was between fourteen and sixteen years of age and was participating in a freshman level English course. Three teachers volunteered to

allow the students in their sections to participate in the study. Of these three sections, two were considered regular ninth grade English courses and one was considered an honors ninth grade English course. All three sections included non-gifted and gifted males and females. These particular classes were used because of their availability during the semester of testing, the willingness of the teachers to cooperate and allow time out of their regular curricula, and the desire to gain an appropriate number of both gifted and non-gifted students.

Identification of Gifted Students

On the test instrument, students were asked if at any time in their academic careers they had been identified for a gifted program. This school system uses several identification measures to place gifted students into its program. The system recognizes that exceptionality may occur in general intellectual ability, specific academic ability, creativity, thinking skills, leadership and/or combine in varying patterns. Identification measures follow:

The student may be placed in the gifted program in this district either through automatic placement or assessed placement. Identification is an ongoing process extending from first through twelfth grades.

Automatic placement occurs when the student scores in the top 3% on a nationally standardized test of intellectual ability according to the law of the State of Oklahoma. Acceptance into Counterpoint, a district program for talented students, also immediately qualifies students for the gifted program and services offered.

Assessed Placement can occur through a variety of measures. The first is that of nomination. The student can make the nomination himself, or it can come through a

teacher, parent and/or another peer. This option creates a pool of students for further assessment and evaluation. The criteria for nomination include: 1) A score of 120 or more on a nationally normed IQ test; 2) Achievement test scores at or above the 85th percentile nationally in the Total Language, Total Math, and/or Reading batteries of a standardized achievement test; and/or 3) Recommendations by self, peer, parent, and/or teacher(s). There are many procedural safeguards the system has developed in order to ensure due process for all potentially identifiable and identified gifted students.

Instruments

The Life Event Scale for Adolescents (LES-A) developed by R. Dean Coddington (1972), was used to assess the kinds of environmental stressors faced by adolescents. The LES-A is a 50-item self-report questionnaire. It is one of the few adolescent life-event scales available. The instrument assesses the impact of a stressful environment and the amount of adjustment required of an adolescent to manage a stressful encounter. The LES-A can be used as a research instrument to evaluate the emotional, behavioral, and physical effects of a single stressful event or a cluster of such events. It is similar to and appears to be a downward extension of the Holmes and Rahe (1967) Social Readjustment Rating Scale (SRRS). Like all event scales, the development of the LES-A was based on a theoretical model of stress that infers that life events create change, which require a certain amount of adaptation and adjustment on the part of the individual. Moreover, it is believed that some events are more stressful than others are. Thus, the change or adjustment required for the more traumatic and/or undesirable events is far greater than minor or less significant events. Such views of change and adaptation are based on the

seminal work of Cannon (1939) and Selye (1956). Consequently, on this particular instrument responses are weighted differently depending on the response.

In developing the LES-A, Coddington followed the standard methodology used by Holmes and Rahe (1967) and other developers of life event schedules. Coddington (1972) used birth of a sibling as a standard and assigned it an arbitrary weight of 500 life change units. He then asked social workers, teachers, pediatricians and adolescents to help derive items and item weights for the LES-A. The participants assigned numbers of life change units to life changes using birth of a sibling as a baseline.

Normative data for the LES-A was obtained from 3,500 adolescents. This information shows that the instrument is appropriate for adolescents aged twelve and over. The items for the LES-A are almost the same as those on the Life Event Scale Adapted for Children between the ages of six and eleven, except in several instances where items are rephrased or reflect age-related life events. For example, beginning the first year of senior high and dating and relationship problems appear on the LES-A whereas beginning the first grade and such like events as death of a puppy appear on the LES for Children. Item weights were also adjusted to reflect age differences in units of adjustment required by each age group.

The instrument consists of a list of weighted life events. The items on the scale are summed to derive the total score. Values range from 0 (no life change units) to 2,100 (high life changes). Individuals with a high total score (i.e., 471 or higher) are at risk for developing symptoms of distress and/or forms of maladaptive behavior (Coddington, 1984). Scores can also be obtained from three sub scales. The scale was divided into three sub scales in order to evaluate the relative impact of uncontrollable, desirable, and

undesirable events. Coddington (1972) developed these sub scales in his inventory in order to improve on the SRRS (Holmes and Rahe, 1967), which was criticized for not taking into consideration the valence or quality of each life event. In other words, it was believed that undesirable or uncontrollable events pose more threat than controllable and desirable events.

Coddington (1984) has found test-retest reliabilities of .69, .67, and .56 for high-school students at three-, seven-, and eleven-month intervals. Correlations between responses of adolescents and their parents on life-event items shows a modest, but significant, relationship at the seven-month interval ($r=.57$). Predictive validity was tested in a study using 84 fourth-grade students. Children who were low achievers and had life-event scores over the 40th percentile were three times more likely to experience behavior problems (Coddington, 1984). In addition, the LES-A was able to predict 45% of students having academic problems. It seems, however, that the LES-A is most effective in predicting maladaptive behavior when assessments are made soon after impactful events have occurred. The greater that the time lag is between the assessment of the life events and the occurrence of the events, the lower the correlation is between the LES-A and maladaptive behaviors.

The LES-A, is a one-page, self-report inventory requiring approximately five minutes for administration. Item weights appear alongside each life event, with months reflecting Summer, Fall, Winter, and Spring seasons appearing respectively, in four columns to the right of each life event. Respondents are requested to write the weight of each life event that occurred in the preceding year in its appropriate column. For example, if the death of a parent occurred in June of the past year, the adolescent would

write in the item weight for the parents' death in the column marked summer. Life-event items are divided into three areas: family events, over which the adolescent had no control, desirable extra-familial events, and undesirable extra-familial events. Scores are obtained for each type of life event.

The Adolescent-Coping Orientation for Problem Experiences (A-COPE) developed by Patterson and McCubbin (1987), is a self-report inventory designed to assess adolescent coping style and behavior strategies. The A-COPE was developed as a part of the Family Stress, Coping and Health Project directed by Hamilton McCubbin. It was administered to determine which coping strategies, if any, are employed by the students to help them when faced with stressful situations. Coping strategies are defined as behaviors exhibited in response to a stressful situation.

The development of the A-COPE began by having a group of thirty, tenth eleventh and twelfth graders complete the Adolescent-Family Inventory of Life Events and Changes (A-FILE; McCubbin, Patterson, Bauman, & Harris, 1981). The answers to this inventory were used as a stimulus for interviewing each respondent. In the interviews, the adolescents were asked how they managed their most difficult personal life stress, the most difficult life stress faced by a family member, and difficult life events in general. These responses were used to generate 95 items for the initial revision of the A-COPE inventory. The test authors described these items as reflecting both desirable and undesirable behavior and as representing the three primary coping functions: 1) direct action (problem-focused coping), 2) altering meaning (appraisal-focused coping), and 3) managing tension (emotion-focused coping).

As the next step in instrument development, these 95 items were administered to a group of 467 junior and senior high school students. These students were asked to complete a questionnaire in which they responded, on a 5-point scale, to how often they used each of the 95 behaviors when they felt tense or were confronted with difficulties. On the basis of this sample's responses, 27 items were removed from the scale either because of infrequent use or minimal variance. The remaining 68 items were factor analyzed, resulting in 54 items with factor loadings of .40 on the twelve sub scales; each scale had an eigenvalue of 1.0 or greater.

The 54 item A-COPE items have been collapsed to provide the user with twelve sub scales that assess different coping patterns among adolescents between thirteen and eighteen years of age. The objective of this questionnaire is to provide an assessment of how the adolescent manages the developmental tasks confronted during the transition from childhood to young adulthood. The test authors suggest that the coping style that develops during this time has significant implications for future adult adjustment.

The 12 strategies tested within sub scales are: 1) ventilating feelings, 2) seeking diversions, 3) developing self-reliance, 4) developing social-support, 5) solving family problems, 6) avoiding problems, 7) seeking spiritual support, 8) investing in close friends, 9) seeking professional support, 10) engaging in a demanding activity, 11) being humorous, and 12) Relaxing (McCubbin & Patterson, 1987).

The purpose of the A-COPE is to assess how often adolescents use different behaviors or strategies in situations where they face difficulties or feel tense (Patterson & McCubbin, 1987). The instrument has the potential to help adolescents better identify the types of coping behaviors and patterns they currently utilize by breaking their responses

into twelve sub scales. This self- education function may be quite useful to guidance counselors, mental health professionals and educators as a means to helping students with the role of stress in their lives. This instrument also has been suggested as a pre/post assessment instrument for intervention programs designed to facilitate adolescents coping with life stress and/or developmental tasks.

A unique characteristic of the A-COPE inventory is that the theoretical conceptualization underlying the instrument is derived from an integration of individual coping theory and family stress theory (Moos & Billings, 1982). As a consequence, an adolescent is conceived of as needing to manage both individual demands and those related to the family and the community. Successful coping is achieved when the adolescent is simultaneously able to fit into the family and the community, which includes the adolescent's peers. Patterson and McCubbin (1987) propose that a "fit" occurs when there is a reciprocal balance between each system's demands and capabilities.

The authors begin the assessment by providing the respondent with a description of the purpose of the questionnaire and a definition of coping. In particular, coping is operationalized for the adolescent as "individual or group behavior used to manage hardships and relieve the discomfort associated with life changes or difficult events" (Patterson & McCubbin, 1987).

The directions are simple and straightforward; the respondents are to decide how often they use the specified behaviors when they are confronted with life stresses. Each of the items on the A-COPE has five alternative responses: 1) never, 2) hardly ever, 3) sometimes, 4) often, and 5) most of the time. The respondent is simply asked to circle

one of the alternative responses for each statement and to make sure all items are answered.

Both instruments, the Adolescent Coping Responses for Problem Experiences (A-COPE) and the Life Event Scale for Adolescents (LES-A) were found to have good reliability, with alpha reliabilities of .9 and 1.0 respectively.

The twelve sub scales for the A-COPE instrument, with their separate reliability data follows: Sub scale 1- Ventilating Feelings; alpha reliability .7; Sub scale 2 – Seeking Diversions; alpha reliability .6; Sub Scale 3 – Developing Self-reliance and Optimism; alpha reliability .7; Sub Scale 4 – Developing Social Support; alpha reliability .6; Sub Scale 5- Solving Family Problems; alpha reliability .7; Sub Scale 6- Avoiding Problems; alpha reliability .8; Sub Scale 7-Seeking Spiritual Support; alpha reliability .8; Sub Scale 8-Investing in Close Friends; alpha reliability .5; Sub Scale 9-Seeking Professional Support; alpha reliability .5; Sub Scale 10-Engaging in Demanding Activity; alpha reliability .7; Sub Scale 11-Being Humorous; alpha reliability .9 and Sub Scale 12 – Relaxing; alpha reliability .6.

Procedure

After the application to the Oklahoma State University's Institutional Review Board was approved (Appendix D), the researcher contacted the teachers who had agreed to allow their classes to participate. Each of the sections taught by the participating teachers were canvassed, with over 200 students exposed to the research opportunity. Solicitation occurred through the use of a prepared script (Appendix C) explaining the details of the study. Each of the participating teachers read the solicitation script and then handed out student assent forms (Appendix B) to willing participants. At that time, those

students who desired to participate in the study signed the form, agreeing that their rights and responsibilities as a participant had been explained to them. Because the students were under age eighteen, they had to have their parent's permission to participate, so they were also given a parent consent form (Appendix A) to take home and have signed by one of their parents or guardians. It might have appeared that such a large solicitation opportunity would have yielded a larger number of participants, but the number was dependent on the student gaining parent permission and also returning the appropriate form to school. This was difficult for many of the students to do.

A self-report section on the top of the first instrument determined two of the independent variables (gifted/non-gifted and male/female). It asked the respondent to answer if they had ever been identified for a gifted program. It also asked them to state their age and sex. The independent variable (high/low stress) was determined by summing the total number of LES-A responses to gain a score representing the mean number of stressful life events experienced by the participants during a twelve-month period. The calculated sum divided the participants into two groups (low and high stress level). Those with a score of 471 or higher were placed in the high stress group and those with a score of 470 or lower were placed in the low stress group. The numbers of 471 determining high stress level and 470 determining low stress level were determined by the test publisher's instructions.

For analysis of the A-COPE, a total of the overall number of coping strategies was calculated and used, with negative or counter-coping responses reversed. Separate t-tests were performed on the twelve sub scales of the A-COPE in order to understand the

differences for each of the three variables: gender, group (gifted or non-gifted) and stress level (high/low).

Anonymity was insured, because no names were used on any form of the instrument packets. Instead, on the name line the student wrote in the English teacher's name of the class he/she was enrolled in.

Teachers of any class group that demonstrated a high number of life stress responses or low number of coping strategies were given resources by the school counselors that they could make available to the interested and/or students needing help in their classes. Some students needed additional support in dealing with stress, or learning how to develop more defined and beneficial coping strategies.

The instrument packet was completed in the time frame offered by the block scheduling that this school adhered to. It did not exceed more than one class period (90 minutes).

Design

The design for this study was causal/comparative, thus accommodating three independent variables. Causal/comparative research is a type of descriptive research; however, it also attempts to determine reasons, or causes, for the phenomena.

Data Analysis

The researcher conducted an analysis of variance with three independent variables: 1) Group (Giftedness/Non Giftedness) 2) Stress levels (high/low) and 3) Gender (male/female). Group and gender were determined by self-report questions on the test instrument. The sum of the total number of responses on the Life Event Scales for Adolescents (LES-A) determined stress level. The dependent variable was coping

strategies as determined by responses on the Adolescent Coping Strategies for Problem Experiences (A-COPE). T-tests were performed on the twelve sub-scales to determine what differences occurred within each of the three independent variables: group (gifted/non gifted, stress level (high/low) and gender.

CHAPTER 4

RESULTS

The purpose of this study was to determine the effects of giftedness, gender, and level of stress on the amount of coping strategies used by adolescents. And, to determine the differences between groups (gifted/non-gifted, male/female, and high/low stress levels) on the types of coping strategies used. This chapter will present the statistical results of the data for each of the research questions as conducted for the research study as well as the findings of secondary analysis that was conducted.

Table 1 shows the descriptive statistics for the research study. Eighty respondents participated in the study, with forty identified as gifted at some time in their academic careers, and forty never identified as gifted. Of the eighty students, fifty were females and thirty were males. Of the thirty males, thirteen were classified as non-gifted and seventeen were classified as gifted. Of the fifty females, twenty-seven marked that they had never been identified in a gifted program, while twenty-seven said they had been identified as gifted. There were eleven non-gifted low stressed females and sixteen non-gifted high stress females compared with nine non-gifted low stress males and four non-gifted high stress males. There were seven gifted low stress males and ten gifted high stress males compared with nine low stress gifted females and fourteen gifted high stress females.

Table 1

Descriptive Statistics

Group	Gender	
	Male	Female
Low Stress		
Non-gifted		
<u>M</u>	177.11	165.73
<u>SD</u>	18.37	25.77
<u>N</u>	9	11
<u>Total</u>		20
Gifted		
<u>M</u>	168.571	164.67
<u>SD</u>	18.698	9.18
<u>N</u>	7	9
<u>Total</u>		16
High Stress		
Non-gifted		
<u>M</u>	144.50	172.63
<u>SD</u>	34.34	19.14
<u>N</u>	4	16
<u>Total</u>		20
Gifted		
<u>M</u>	139.40	167.29
<u>SD</u>	28.46	26.19
<u>N</u>	10	14
<u>Total</u>		24

The Life Event Scales for Adolescents (LES-A) instrument was used to determine the stress level of the participants. High and low stress groups were formulated by using the LES-A totals of the mean number of stressful life events experienced by the participants during a twelve-month period. Those with a score of 471 or higher on the LES-A were placed in the high stress group and those with a 470 or lower on the LES-A were placed in the low stress group.

Classification into gender group and ability group (gifted/non-gifted) were based on answers from self-report questions located at the top of the LES-A instrument. One question stated, "Have you ever been identified for a gifted program? Yes or No". The other one simply asked for the participant to state his or her sex as either male or female.

Research Question 1

How does giftedness, gender and stress level affect coping responses?

The researcher conducted an analysis of variance with three independent variables: 1) Group (Gifted/Non-gifted) 2) Stress Level (High/Low) and Gender (Male/Female) to determine this answer. The dependant variable was the use of coping strategies as calculated by the responses on the Adolescent Coping Orientation for Problem Experiences (A-COPE). (See Table 2)

Table 2

Anova Summary Table

Source	df	f
Group (G)	1	0.7
Stress (S)	1	4.8*
Gender (GN)	1	2.9
G x S	1	0.0
G x GN	1	0.1
S x GN	1	8.9**
G x S x GN	1	0.1
<u>S</u> within-group		
Error	72	(605.0)

Note. Values enclosed in parentheses represent mean square errors. S = subjects.

*p<.05. **p<.01.

No significant difference was found in the three-way interaction between gender, stress level and giftedness. This indicates that a combination of the student's gender, identification as gifted or non-gifted, and level of stress did not influence the amount of coping strategies used by the respondent. Significance was reported though, in a two-way interaction between stress level and of gender. (Figure 1) It was revealed that the females experienced greater stress than the males, but also employed more coping strategies than the males when faced with stress encounters. This indicates that, although females experienced a higher level of stress than males, they were also able to handle it better because of the use of more coping strategies.

Figure 1

Significance of Two-way interaction between gender and stress level

	Males	Females
Low Stress	173.37	165.25
Hi Stress	140.86	170.13

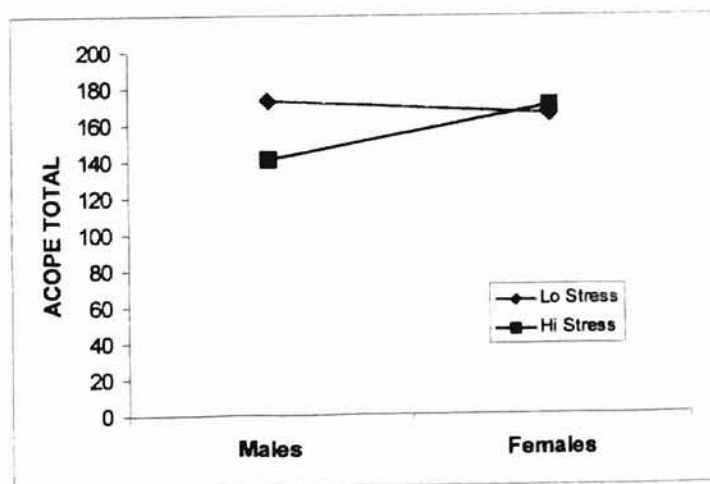


Figure 1 illustrates the two-way interaction of stress level and gender. Females were found to have higher levels of stress than the males, but managed their stress with a corresponding higher level of coping responses. Males used fewer coping strategies when their stress level increased.

No significance was found between the two-way interaction of group and gender, which illustrates that it made no difference whether students were males or females or whether they were identified as gifted or non-gifted. They both employed similar amounts of coping responses. Also, no significance was found between the two-way interaction of group on stress level. This means that coping responses were similarly employed for both gifted and non-gifted students who had both high or low stress levels. Of the three independent variables, stress level was the only variable that produced significance, and it has already been discussed as significant through its two-way interaction with gender.

Descriptive Statistics for Research Question 2 are shown in Table 3.

Table 3

Descriptive Statistics by Group (Gifted/Non-Gifted)

A-COPE Sub scales	Group	n	Mean Rating	Standard Deviation
Ventilates Feelings	Non-Gifted	36	15.26	4.11
	Gifted	37	16.32	4.18
Seeks Diversions	Non-Gifted	38	23.18	4.93
	Gifted	36	22.08	4.06
Develops Self-Reliance and Optimism	Non-Gifted	39	18.87	3.72
	Gifted	37	18.68	4.24
Develops Social Support	Non-Gifted	38	21.47	3.44
	Gifted	37	19.38	4.06
Solves Family Problems	Non-Gifted	39	17.39	4.43
	Gifted	37	16.16	4.49
Avoids Problems	Non-Gifted	36	10.33	3.41
	Gifted	37	9.78	4.35
Seeks Spiritual Support	Non-Gifted	39	8.64	3.31
	Gifted	37	8.43	3.43
Invests in Close Friends	Non-Gifted	39	5.51	2.05
	Gifted	37	5.73	1.79
Seeks Professional Support	Non-Gifted	40	2.88	1.07
	Gifted	40	2.55	1.01
Engages in Demanding Behavior	Non-Gifted	39	12.97	3.26
	Gifted	36	13.14	4.34
Uses Humor	Non-Gifted	39	7.13	2.12
	Gifted	37	6.72	2.79
Relaxes	Non-Gifted	39	15.44	3.26
	Gifted	37	13.7	2.94

Research Question 2

How does giftedness affect the types of coping strategies employed?

Separate t-tests were performed on each of the twelve sub scales of the A-COPE instrument to see what effect giftedness had on coping strategies. The only significant findings of difference between group (gifted and non-gifted) and types of coping strategies were that non-gifted students sought to develop social support more than gifted students, but non-gifted students tried the coping strategy of relaxing more than their

gifted peers. (See table 4) Developing Social Support test items included: Apologizing to people, crying, saying nice things to others, trying to help other people solve their problems, trying to keep up friendships or making new friends, and talking to a friend about how you feel. Relaxing test items included: Listening to music, eating food, riding around in a car, or daydreaming about how you would like things to be.

Table 4

Summary Table by Group (gifted/non-gifted)

A-COPE Sub scales	t	df	*p
Ventilates Feelings	-1.11	73	0.3
Seeks Diversions	1.05	72	0.3
Develops Self-Reliance and Optimism	0.22	74	0.8
Develops Social Support	2.41	73	.02*
Solves Family Problems	1.19	74	0.2
Avoids Problems	0.60	71	0.6
Seeks Spiritual Support	0.27	74	0.8
Invests in Close Friends	-0.49	74	0.6
Seeks Professional Support	1.40	78	0.2
Engages in Demanding Behavior	-0.19	73	0.9
Uses Humor	0.75	74	0.5
Relaxes	2.43	74	.02*

Note. Significance if * $p < .05$

Descriptive statistics for Research Question 3 are shown in Table 5 and 6.

Table 5

Descriptive Statistics by Gender

A-COPE Sub scales	Group	N	Mean Rating	Standard Deviation
Seeks Diversions	Males	26	23.15	5.21
	Females	48	22.38	4.14
Develops Self-Reliance and Optimism	Males	27	19.41	3.93
	Females	49	18.43	3.97
Solves Family Problems	Males	27	15.93	4.84
	Females	49	17.27	4.23
Aids Problems	Males	27	9.88	4.77
	Females	46	10.22	3.33
Seeks Spiritual Support	Males	27	8.00	2.86
	Females	49	8.84	3.58
Invests in Close Friends	Males	27	5.41	1.80
	Females	49	5.74	1.99
Seeks Professional Support	Males	30	2.47	0.86
	Females	50	2.86	1.13
Engages in Demanding Behavior	Males	27	12.96	4.67
	Females	48	13.10	3.25
Relaxes	Males	27	13.89	3.75
	Females	49	14.98	2.84

Table 6

Descriptive Statistics by Gender

A-COPE Sub scales	Group	N	Mean	Standard Deviation
Ventilates Feelings	Males	26	14.62	4.14
	Females	49	16.41	4.06
Develops Social Support	Males	27	17.56	3.47
	Females	48	22.06	3.10
Uses Humor	Males	27	7.56	2.42
	Females	49	6.57	2.43

Research Question 3

How does gender affect the types of coping strategies employed?

Separate t-tests were performed on each of the twelve sub scales of the A-COPE to see what effect gender had on coping strategies. One-tailed t-tests were performed on three of the sub scales because the researcher believed there would be a difference between gender. (See Table 7 and 8)

Table 7

Summary Table for two tailed t-test by Gender

A-COPE Sub scales	t	df	*p
Seeks Diversions	0.7	72	0.48
Develops Self-Reliance and Optimism	-1.26	74	0.31
Solves Family Problems	-1.25	74	0.21
Avoids Problems	-0.46	71	0.65
Seeks Spiritual Support	-1.04	74	0.3
Invests in Close Friends	-0.71	74	0.48
Seeks Professional Support	-1.65	78	0.10
Engages in Demanding Behavior	-0.15	73	0.88
Relaxes	-1.43	74	0.16

Note. Significance if *p < .05

Table 8

Summary table for one-tailed t-test by Gender

A-COPE Sub scales	t	df	*p
Ventilates Feelings	-1.81	73	0.04*
Develops Social Support	-5.79	73	0.00*
Uses Humor	1.69	74	0.047*

Note. Significant if *p<.05

The researcher found significance for three of the sub scales when coping strategy was compared by gender. Adolescent females ventilated feelings and developed social support more often than males. Females also developed relationships with others more easily than males. Males differed from females, though in another area. They used humor to manage stress more often than females did. Ventilating Feelings test items included: getting angry and yelling at people, letting off steam by complaining to family members, swearing, blaming others for what's going wrong, saying mean things to people or being sarcastic, and letting off steam by complaining to your friends. Using Humor test items included: Trying to be funny and make light of things, and joking and keeping a sense of humor.

Descriptive Statistics for Research Question 4 are shown in Table 9.

Table 9

Descriptive Statistics by Stress Level

A-COPE Sub Scale	Stress Level	N	Mean	Standard Deviation
Ventilates Feelings	Low Stress	35	15.23	3.74
	High Stress	40	16.28	4.46
Seeks Diversions	Low Stress	36	22.27	4.57
	High Stress	38	23.00	4.52
Develops Self-Reliance and Optimism	Low Stress	36	19.05	4.05
	High Stress	40	18.53	3.90
Develops Social Support	Low Stress	36	19.86	2.64
	High Stress	39	20.97	4.72
Solves Family Problems	Low Stress	36	17.39	4.29
	High Stress	40	16.25	4.62
Avoids Problems	Low Stress	34	8.79	3.39
	High Stress	39	11.15	4.02
Seeks Spiritual Support	Low Stress	36	8.69	3.31
	High Stress	40	8.40	3.42
Invests in Close Friends	Low Stress	36	5.36	2.06
	High Stress	40	5.85	1.78
Seeks Professional Support	Low Stress	36	2.55	0.91
	High Stress	44	2.84	1.12
Engages in Demanding Behavior	Low Stress	36	13.42	3.42
	High Stress	39	12.72	4.14
Uses Humor	Low Stress	36	6.72	2.54
	High Stress	40	7.10	2.41
Relaxes	Low Stress	36	14.61	3.64
	High Stress	40	14.58	2.82

Research Question Four

How does stress levels affect the types of coping strategies employed?

Separate t-tests were performed on each of the twelve sub scales of the A-COPE to see what effect stress levels had on coping strategies. Descriptive statistics for coping strategies by stress level is illustrated in Table 10.

Table 10

Summary Table by Stress Level

<u>A-COPE Sub Scales</u>	<u>t</u>	<u>df</u>	<u>*p</u>
Ventilates Feelings	-1.09	73	0.28
Seeks Diversions	-0.68	72	0.5
Develops Self-Reliance and Optimism	0.581	74	0.56
Develops Social Support	-1.25	73	0.22
Solves Family Problems	1.11	74	0.27
Avoids Problems	-2.69	71	0.01*
Seeks Spiritual Support	0.381	74	0.71
Invests in Close Friends	-1.11	74	0.27
Seeks Professional Support	-1.22	78	0.23
Engages in Demanding Behavior	0.795	73	0.43
Uses Humor	-0.66	74	0.51
Relaxes	0.05	74	0.96

Note. Significance if *p < .05

There was only one significant difference between stress levels on types of coping responses. Those who had a lower level of stress (470 or less) avoided problems more than those with higher stress levels. A person with low stress levels avoided problems, thus reducing his/her stress level. The opposite is also true. A person with a high stress level experienced more stressful encounters or problems, and in turn had a higher level of

stress (See Table 10). Avoiding Problem test items included: Trying to stay away from home as much as possible, using drugs not prescribed by a doctor, telling themselves the problem is not important, smoking, drinking beer, wine or liquor.

Secondary Analysis

An important finding was discovered while conducting a secondary analysis of the data. This finding dealt with the stress levels of the adolescents tested. The total score of the LES-A instrument was used to divide the participants into high and low stress groups. The scoring guide suggested that for the adolescent ranging in age from 14-16 years of age, a total of 470 or lower, over a nine month period, would be the approximate upper limit for seventy-five percent of a young population, meaning that only twenty-five percent would score over that number. The researcher found that over half of the subjects obtained this score, with six students scoring from 30-60 points over this amount placing them in the 500 plus range. Another student scored over six hundred points and three students scored over seven hundred points.

Another finding was also discovered, although it did not relate specifically to the research questions. Significance was found between each of the three-month intervals of six, nine and twelve month periods since the stress encounter (See Table 11 and 12). The further away from the stress-related event, the less stress the participant experienced. This supports the theory upon which the instrument was constructed.

Table 11

Descriptive Statistics for LES-A Instrument

	Group	Mean	Standard Deviation	N
6 Months	Non-Gifted	155.625	128.38	40
	Gifted	140.475	90.283	40
	Total Group	148.05	110.54	80
9 Months	Non-Gifted	190.95	140.71	40
	Gifted	180.98	100.74	40
	Total Group	185.96	121.7	80
12 Months	Non-Gifted	204.58	146.57	40
	Gifted	188.33	103.85	40
	Total Group	196.45	126.47	80

Tukey's Post Hoc test revealed the level of significance between time encounters.

(See table 12) The difference for (LES-A total 6 months – LES-A total 9 months is 37.91). The difference for LES-A total shown was found at the .05 and .01 levels.

Table 12

Mean Difference and Tukey's Post Hoc

	LE6	LES9	LES12
	148.05	185.96	196.45
148.05	X		
185.96	37.91**	X	
196.45	48.40**	10.49*	X

* significant at the .05 level

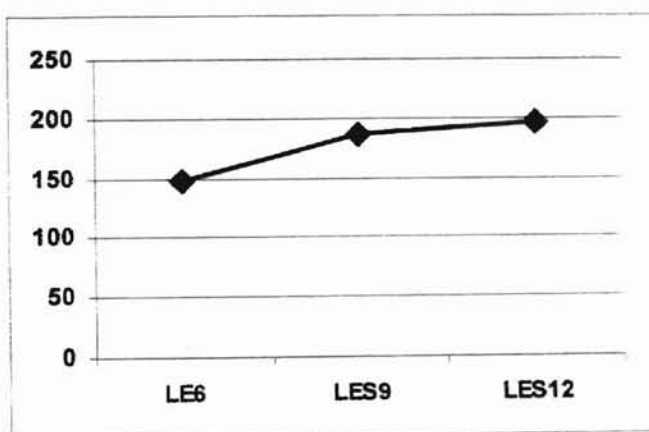
** significant at the .01 level

The mean number of stressful life events (LES-A) total for the non-gifted students at the six month period was a 155.63 while the mean score for the gifted students at the sixth month period was 140.48 providing an average 6 month score of 148.05 life event

impact points. The LES-A mean total for the non-gifted students at the 9 month period was 190.95 while the gifted students' mean total was 180.98 providing an average of 185.96 life event impact points. At the 12 month mark the non-gifted students had a mean total of 204.58 points while the gifted students' mean was 188.33 producing an average of 196.45 life event impact points. (See Figure 2)

Figure 2

LES-A Totals at 3 Month Intervals



In conclusion, the findings did not show any difference between group, gender or stress level on coping strategies. It did reveal that gender, giftedness and stress level have some effect on types of coping strategies used, though. The study found that over half of the students were highly stressed and that the level of stress decreased as time since the stress encounter occurred.

CHAPTER 5

SUMMARY, CONCLUSIONS AND IMPLICATIONS

The purpose of this study was to determine the effects of gender, stress and giftedness on coping responses. Understanding the nature of stress and dealing with it in an appropriate way is vital for the mental and physical well being of all people because it is such an inevitable part of life in the twenty-first century. This chapter summarizes the findings of this research study as well as presents the conclusions and implications that it has for practice, theory and further research in the field of education and adolescent development.

Summary of Findings

No significant differences were found between the three independent variables: gender, stress level and giftedness on the dependent variable of coping responses. Gender was found to be significant when related to stress level on coping responses, though. There were two significant findings of difference between group (gifted and non-gifted) and types of coping strategies. Non-gifted students sought to develop social support more than gifted students. Non-gifted students also employed the coping strategy of relaxing more than their gifted peers. Significance was found for three of the subscales of the Adolescent Coping Orientation for Problem Experiences (A-COPE), when coping responses were compared by gender. Adolescent females ventilated feelings and developed social support more often than males. Females developed relationships with others more easily than males. Males differed from females, though by using humor to manage stress more often than females do. There was only one significant difference

between stress levels on types of coping responses. Those who had a lower level of stress avoided problems more than those with higher stress levels. In the course of analyzing the data, another finding was discovered. Significance was found between each of the three-month intervals of six, nine and twelve month periods since the stress encounter. The further away from the stress-related event, the less stress the participant experienced. Another important finding dealt with the stress levels of the adolescents tested. The researcher found that over half of the subjects obtained scores representing high levels of stress.

Discussion

Research Question 1

How does giftedness, gender and stress level affect coping responses?

No significant difference was found between gender, stress level and giftedness. This finding explains that a student's gender, identification as being gifted or non-gifted, and level of stress did not influence the amount of coping strategies used by the respondent. In many ways, this finding makes it easier for educators because the same information can be disseminated to all of their students regardless of gender or type of student (gifted/non-gifted). Since all students can and did employ some coping strategies, the emphasis for educators must now be placed on what resources and information they can create, that will teach adolescents about the types of strategies available and the differences among them. Although it is positive that students are trying to manage the stress they encounter, they often use means that are detrimental to their physical and emotional selves. Educators can play a vital role in the lives of the adolescents they serve if they can help adolescents learn more about how stress affects

them and the numerous options that they have at their disposal. Students who vary their approaches to handling stress and use positive means that actually aide their bodies in coping with stress can eventually lead to healthier and more well adjusted youth which would in turn help decrease suicide levels, disease and violence among today's adolescents.

Significance was found in an interaction between stress level and gender. It was revealed that females experienced a higher stress level than males, but also employed more coping strategies to manage that stress. This would be interpreted to mean that, although females experienced a higher level of stress than males, they were also able to handle it better because of the use of more coping strategies. This is an important finding because it explains some of the differences behind how males and females cope with their problems. It also illustrates the need for more awareness among males about the various means available to them to help manage their stress.

Research Question 2

How does giftedness affect the types of coping strategies employed when faced with stress?

There were two significant findings of difference between group (gifted and non-gifted) and types of coping strategies in that non-gifted students sought to develop more social support from friends and other peers more than gifted students. The non-gifted students engaged in behaviors that helped them get along better with others. Social support test items included: crying, apologizing to someone, saying nice things to people, helping other people with their problems, trying to keep up friendships or make new friends, and talking to a friend about their feelings. Although it would appear that some

of these behaviors are manipulative, they still serve the same purpose of allowing a student to connect with others as a means of dealing with the stressors they have experienced. This finding is supported in literature. Often gifted students feel isolated from others and desire to be left alone. Gifted students may find it more difficult to disclose their feelings and instead desire to be silent.

Non-gifted students also try the coping strategy of relaxing more than their gifted peers. This means they engage in behaviors that help them calm down. Relaxation test items included: listening to music, riding around in a car, eating, and daydreaming about how they would like things to be. Highly gifted students may view these behaviors as a waste of time and desire instead to spend their time fixing the problem or finding a solution.

Research Question 3

How does gender affect the types of coping strategies employed?

The researcher found significance for three of the sub scales of the A-COPE instrument when coping strategy was compared by gender. Adolescent females ventilated feelings and developed social support more often than males. This indicates that females were found to be able to communicate their feelings more easily than males. Test items that revealed ventilating feelings were: getting angry and yelling at people, letting off steam by complaining to family members, swearing, blaming others for what is going wrong, saying mean things to people or being sarcastic and letting off steam by complaining to their friends. Although the forms of communication were negative and considered to be counter coping they would still be appropriate and would certainly be favored over not using any type of venting strategy.

Females were also found to have developed relationships with others more easily than males. Again, the test items for Develops Social Support are: crying, apologizing to someone, saying nice things to people, helping other people with their problems, trying to keep up friendships or make new friends, and talking to a friend about your feelings. Females, then, are able to handle their stress by displaying their feelings through demonstrative means such as outbursts. These outward "signs" for help would certainly be attention getting and possibly help the adolescent by providing an audience for which to vent upon.

Males differed from females, though in one other area. They used humor to manage stress more often than females did. Humor test items included: trying to be funny, making light of everything, joking and keeping a sense of humor. Males may see these means as a way of avoiding the problem or giving the perception that they are not concerned or bothered by the stressor.

Research Question 4

How does stress level affect coping strategies employed?

There was only one significant difference between stress level on types of coping responses employed. Those who had a lower level of stress (470 or less) avoided problems more than those with higher stress levels. This indicates that a person with low stress levels avoids problems, thus reducing his/her stress level. The opposite is also true. A person with a high stress level experiences more stressful encounters or problems, and in turn has a higher level of stress. The Avoiding Problems items included: Trying to stay away from home as much as possible, using drugs not prescribed by a doctor, telling themselves the problem is not important, smoking, and drinking beer, wine or liquor. It

is clear that these behaviors are counter coping and would produce even more stress for an adolescent who is engaging in them. These are also the types of responses that do nothing, but hide the problems for a short time, thus delaying the time when the adolescent must eventually face them. These types of behaviors illustrate that teenagers do not recognize the most appropriate and beneficial ways to handle their problems.

Secondary Analysis

In the course of analyzing the data, another finding was discovered, although it did not relate specifically to the research questions. Significance was found between each of the three-month intervals of six, nine and twelve month periods from the time when the stress was encounter. The further away from the stress-related event, the less stress the participant experienced. This explains that time can help an adolescent relieve some of the physical and psychological effects of stress, by reducing its affects.

Another important secondary finding was also discovered when analyzing the data. The total score of the LES-A instrument was used to divide the participants into high and low stress groups. The scoring guide suggested that for the adolescent ranging in age from 14-16 years of age a total of 470 over a nine month period would be the approximate upper limit for seventy-five percent of a young population, meaning that only twenty-five percent would score over that number. The researcher found that over half of the subjects tested obtained this score, with six students scoring from 30- 60 points over this amount, placing them in the 500 plus range. Another student scored over six hundred points and three scored over seven hundred points.

If 470 was supposed to be the “high end” of the stress level, then the researcher found an alarming portion of students who were extremely stressed out. At this point two

other considerations need to be discussed. First, the test measured the stress level only for the previous year, so this would indicate that the adolescent years are, indeed, full of stressors. Second, the test was based on the adolescent events of a teenager in 1981. This is critical to understand and further analyze because this score does not take into account any of the issues previously presented as problems faced by today's adolescent. Instead, it compares them to their early eighties peers. If present day stressors were introduced or added to the test it would produce an even higher number of students at high levels of stress.

Recommendations for Conducting the Study

Although precautions were taken to help ensure that no errors were made that would influence the study, the researcher recognizes that some limitations are possible. First, the study was conducted at the public school where the researcher taught. Appropriate subjects were located at the work site and they met the required age that the researcher wanted to test. Because the researcher was not allowed to leave the work site during the school day, it was not feasible to use other participants at a different school site. Because the researcher is a classroom teacher, she chose to use subjects within her classes that she had direct access to. To gather an appropriate number of subjects, several other classes were needed, too, though.

Two other teachers volunteered to allow their classes the opportunity to participate. This method of gathering participants could have influenced the study for several reasons. Although each of the teachers were counseled as to how to present the information and then eventually how to administer the instruments, they may not have followed the exact format that the researcher requested, thus skewing the results. A script

(Appendix C) was provided for them to read when they solicited for participation and when administering the instruments, though.

Confidentiality and anonymity was important for this study, so the respondents were asked to identify themselves by using the teacher's name of the classes they were in, instead of their own. It is possible, though, that even though the students did not sign any part of the test instrument, some of them may have been concerned that their responses would identify them, and in some way damage their relationship with their particular teacher. Similarly, it is possible that respondents could have misrepresented themselves intentionally, altering their responses, so as to skew the results in some way.

Although there are a number of psychometric scales that claim to measure the mean number of life events in a person's life, there are very few that are aimed at children or adolescents specifically. There is a substantial difference between the types of life events experienced by adults and those encountered by adolescents and children, though. The significance of an event in a person's life is also influenced by the maturity level of that individual, so even the same life event presented to both an adult and an adolescent could be perceived differently. For this reason, it was important to use an instrument that was geared toward a specific age group, with test items that would accurately reflect their unique experiences. Problems arose; however, because of the lack of availability of appropriately designed instruments for this age group.

The LES-A produced adequate reliability data, proving that it was an appropriate instrument to use; however, it was last revised in 1981, a period of almost twenty years. The A-COPE presented similar problems because it also was developed in 1981. At the time of selection and eventually the administration of these test instruments, it did not

appear that this would substantially influence the results. Although they accurately measured what they were designed to do (assess stress level and amount of coping responses), basically it assessed adolescents by comparing them to the responses used by a teenager twenty years ago. Because the A-COPE and LES-A did not identify all of the coping responses or stress events encountered by teenagers today, they may have presented an inaccurate measure of teenagers in 2000. This does not mean that the results are incorrect, but rather that the significance of the findings could be even greater.

One other limitation of the LES-A instrument is that it basically only assessed stressors that occur externally. This is a valid point because stressors can occur both externally and/or internally. As noted in the review of literature, gifted students especially, internalize many problems and experiences. Although, the researcher was able to determine the stress level of external stressors, a scale that included internal stress components as well, might have found that indeed, gifted students faced a higher level of stress because of the compounded effect of two types of pressures within the individual. Again, the results are still valid, but might have been even more significant if an internal assessment had been attached as a part of the study. This would have helped to provide a more well rounded illustration of the student's total stress level.

Implications for Practice

As educators gain information concerning the effect of life events on adolescents it becomes important to consider ways in which individuals can be taught to cope more effectively with such stressors. The development of programs to teach children and youth to cope with life stress is important from at least two perspectives: 1) to help those who have already been exposed to high levels of life change deal with these stressors so

as to minimize their effects on health and adjustment, and 2) to help individuals develop adequate stress management skills for coping with future life changes in a preventative way.

Although efforts have been made that are designed to help children cope with specific anxiety-based problems and other stressors such as phobias, dental fears, hospitalization, and stressful medical procedures (Morris & Kratochwill, 1983; Siegel, 1983), relatively little attention has been given to treatments designed to help children and adolescents cope with cumulative stressors and high stress levels (Johnson, 1986). There are documented increases in rates of both suicide (Murphy & Wetzel, 1980; USDHHS, 1986) and depression (Klerman & Weissman, 1989) among adolescents and young adults. The high rates of substance use and abuse in junior high and high school aged youth (Wetzel, 1987; Johnston, O'Malley & Bachman, 1987) as well as other risk-taking behaviors are negative health outcomes in and of themselves and reflect the dysfunctional strategies many youths use (Huba, Winegard, & Bentler, 1980) to cope with stressful life conditions and emotional distress (Gore, Colten 1991). This rise in teenage problems will produce more emotional and physiological problems that must be dealt with if educators are to help adolescents transition into healthy and well adjusted adults, capable of handling life's demands.

Implications for Theory

Far from being a time that is free from stress, being young is probably one of the most stressful time periods in a person's life (Cohen & Cohen, 1984). Developmental transitions can be stressful, not only for the developing child, but for parents as well. The transition to adolescence is characterized by more rapid changes than any other period of

the life cycle with the exception of infancy. The physical changes associated with puberty (Hill, 1988), the development of formal logic (Inhelder & Piaget, 1958), and the emergence of new social-cognitive abilities (Shantz, 1983) all may occur at the same time that relationships with peers, parents, siblings and society are changing.

Research on adolescent stress, development and mental health has been strongly guided by an emphasis on the person—situation interaction as the key determinant of variation in behavioral and health outcomes. This person-situation dynamic has long been the basis for behavioral science attention to problems of adaptation (Lewin, 1951; Bronfenbrenner, 1979). Adolescents can not be a dependable determinant in their own struggle with problems and stress if they are not given the appropriate keys with which to do that. This will include the opportunity to learn about all aspects of stress and coping responses as well as the theory behind their stress.

Many key stressors play role during adolescence. Conflict seems to be higher in adolescence, (Montemayor & Hanson, 1985). Smetana (1988) found that teenagers and parents disagree as to the legitimacy of parental authority in many situations. Teenagers tend to classify more situations as involving personal choice, and parents categorize more situations as involving social conventions.

Self-definition is a priority during adolescence but is often accompanied by many conflicts in the process. Some self-defining changes are due in part to the pubertal changes occurring, but the underlying mechanism could be based on conflicting feelings being elicited by pubertal change or a reorganization of self-definitions based on bodily changes. For example, although almost all girls learn about pubertal changes, particularly menarche, from their mothers, they then tend not to discuss their feelings with her, instead

turning to girlfriends (Brooks-Gunn & Ruble, 1983). In some cases, girls perceive their mothers and fathers as insensitive to their concerns about body changes. Biological changes can create other types of stress such as increased moodiness.

Implications for Further Research

Further study is needed to present an accurate picture of the adolescent of the twenty-first Century. Today's adolescents are experiencing extremely high levels of stress and need to be given more information and more resources about how to deal with these experiences. Certainly the test instruments themselves need to be updated, but also more research needs to be conducted in order to develop more acceptable coping responses. A growing trend in education encourages teenagers to express themselves in positive ways through art, music poetry, drama and other forms of writing. These methods need to be propagated in the educational community because adolescents definitely need alternatives means of expression of their inner selves which are often the result of dealing with intense pressures or "stressors" throughout their youth.

Both the LES-A and A-COPE instruments need to be updated and revised to allow for the changes that have occurred over the last twenty years in society. Some examples from the LES-A instrument follow:

Social relationships are listed with items such as "going on the first date of your life" and "finding a new dating partner" or "breaking up with a new partner," but there are no items for sexual experiences encountered by teenagers other than "getting pregnant or fathering a pregnancy." If having a first date is considered stressful than this test should also include "having a sexual encounter for the first time" and/or "deciding about

his/her sexual orientation” which could certainly be considered, as or even more stressful than the experience of a first date.

The instrument covers drug use to some degree, but does not cover any other health issues such as sexually transmitted diseases or eating disorders. There are a few items dealing with juvenile delinquency, but no mention of the often more frequent behaviors of being disciplined at school for a negative behavior, being involved in a fight or engaging in some other type of violence.

The A-COPE instrument presents a similar problem. It seeks to identify what kinds of coping responses adolescents employ when faced with stressors. Several of the sub scales are weak because they do not include all of the actual responses teenagers in the year 2000 use. One example comes from the “venting feelings” category. It does not have any responses that relate to violence or fighting, although this is a response or reaction by many teens when faced with adversity.

The school site where this study was conducted has two armed security guards employed for the sole purpose of securing the campus and maintaining some level of order when fights break out. This was a response to the growing number of fights and violent acts that were occurring on a regular basis. This school had also been through six bomb threats in the past school year. This coupled with the impact other violent school acts have made over the last few years, adds extra anxiety to the situation and illustrates that some adolescents do not know how to appropriately handle their stress.

From the researcher’s experience as a high school classroom teacher, daily witnesses of the behavior of today’s youth show that they deal with unbelievable pressures to fit into an ideal image of perfection at all costs. They struggle with issues

ranging from drug and alcohol abuse, to sexually transmitted diseases and suicide, while still facing the adolescent concerns of puberty and social adjustments. The transition into becoming a mature adult is now also plagued by violence and a media maelstrom that heavily influences our youth. They seem to be at constant odds with their parents and guardians and seek social support and comfort from peers or other influences that will help them escape from the pressures of the world. These issues are a part of the life of today's teenager, but many of them are not found as test items on the instrument. This definitely leaves a gap in the true understanding of the level of stress adolescents experience in the year 2000.

In conclusion, the recent outbreak of violence in public schools across the country, as well as the increase in the number of adolescents involved in destructive behaviors such as alcoholism, drug addiction, and promiscuity are evidences that juveniles either lack the education on how to more appropriately cope with stress in positive or beneficial ways; or they are not employing the strategies they do recognize, opting instead, to use methods that are damaging to their minds, bodies and spirits. If educators are to help adolescents become productive adult members of society, they will have to provide the tools for them to learn how to deal with stress, a symptom of the crazy world that is the Twenty-first Century.

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APPENDIX A

PARENTAL CONSENT FORM

Dear Parent:

My name is Traci Kreger. I am an English teacher at this high school and am conducting research in order to complete my master's degree at Oklahoma State University. I will be administering two instruments early next week in your son or daughter's English class, to those students who are willing to participate AND who have their parent's approval.

The first test instrument is the Life Event Scale for Adolescents (LES-A), developed by R. Dean Coddington (1972). It will be used to assess what kinds of environmental stressors adolescents face. The LES-A is a 50-item self-report questionnaire. It measures the impact of a stressful environment and the amount of adjustment required of an adolescent in order to face the stressor. Item weights appear alongside each life event, with months reflecting Summer, Fall, Winter, and Spring seasons respectively, in four columns to the right of each life event. Respondents are requested to write the weight of each life event that occurred in the preceding year in its appropriate column. For example, if the death of a parent occurred in June of the past year, the adolescent would write in the item weight for the parent's death in the column marked summer.

The second instrument, the Adolescent-Coping Orientation for Problem Experiences (A-COPE), developed by Patterson and McCubbin (1987), is a self-report inventory designed to assess how often adolescents use different behaviors or strategies in situations where they "face difficulties or feel tense." The instrument has the potential to help adolescents better identify the types of coping behaviors and patterns they currently utilize.

Both instruments can be completed in the time frame offered by the block scheduling that this school adheres to. It shall not exceed more than one class period (90 minutes) and will likely only involve 15-30 minutes of the ninety minute class block.

Information about the student's gender, age, race and class placement will be asked; however, NO NAMES will be used and NO RECORDS will be maintained of the students' responses that would hinder or bind them to any placement or other influence in the future. The results will be kept confidential and strictly used for analysis by the experimenter for completing the degree requirement of a research study.

Some students may experience slight discomfort, in that they will be asked to respond honestly to questions about their individual life experiences. Those students who are shy may find it uncomfortable to disclose these experiences on the test instrument.

This study is designed to determine what effect stress and class placements might have on coping responses for teenagers. This study will help school guidance counselors as well as other pertinent professionals in the field of education better understand the levels of stress experienced by the students they serve. It will also help guide them in developing services for students concerning how to deal with the stressors they currently face in today's educational setting. Programs and services need to be developed for all students to help them cope with the stress that is currently an inevitable part of life. If students have a better understanding of how to deal with their specific stressful situations, many problems such as violence and ill health can be avoided.

"This is done as part of a research study entitled: An Investigation of the Effects of Giftedness, Stress and Gender on Adolescent Coping Responses.

The purpose of the procedure is to discover what kind of students experience stress, how much stress they experience, and what means or strategies are employed in order to help them manage and handle the stressors they face.

Voluntary Participation

"I understand that my child's participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent for my child's participation in this project at any time without penalty after notifying the project director."

"I may contact Mrs. Kreger at telephone number 787-1140, or Dr. Diane Montgomery (research advisor) at 744-9441. I may also contact Sharon Bacher, IRB Executive Secretary, 203 Whitehurst, Oklahoma State University, Stillwater, OK 74078; telephone number: (405) 744-5700."

Consent

"I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me."

Date: _____ Time: _____ (a.m./p.m.)

Signed: _____
Signature of Parent or Guardian

Signed: _____
Witness to the signatures above

APPENDIX B

STUDENT ASSENT FORM

Dear Student:

My name is Mrs. Kreger. I am an English teacher at this high school and am conducting research in order to complete my master's degree at Oklahoma State University. I will be administering two psychometric instruments early next week in your English class, to those students who are willing to participate AND who have their parent's approval.

The first test instrument is the Life Event Scale for Adolescents (LES-A), developed by R. Dean Coddington (1972). It will be used to assess what kinds of environmental stressors adolescents face. The LES-A is a 50-item self-report questionnaire. It measures the impact of a stressful environment and the amount of adjustment required of an adolescent in order to face the stressor. Item weights appear alongside each life event, with months reflecting Summer, Fall, Winter, and Spring seasons respectively, in four columns to the right of each life event. Respondents are requested to write the weight of each life event that occurred in the preceding year in its appropriate column. For example, if the death of a parent occurred in June of the past year, the adolescent would write in the item weight for the parent's death in the column marked Summer.

The second instrument, the Adolescent-Coping Orientation for Problem Experiences (A-COPE), developed by Patterson and McCubbin (1987), is a self-report inventory designed to assess how often adolescents use different behaviors or strategies in situations where they "face difficulties or feel tense." The instrument has the potential to help adolescents better identify the types of coping behaviors and patterns they currently utilize.

Both instruments can be completed in the time frame offered by the block scheduling that this school adheres to. It shall not exceed more than one class period (90 minutes) and will likely only involve 15-30 minutes of the ninety minute class block.

Information about your gender, age, race and class placement will be asked; however, NO NAMES will be used and NO RECORDS will be maintained of the students' responses that would hinder or bind them to any placement or other influence in the future. The results will be kept confidential and strictly used for analysis by the experimenter for completing the degree requirement of a research study.

Some students may experience slight discomfort, in that they will be asked to respond honestly to questions about their individual life experiences. Those students who are shy may find it uncomfortable to disclose these experiences on the test instrument.

This study is designed to determine what Effects stress and class placements might have on coping responses for teenagers. This study will help school guidance counselors as well as other pertinent professionals in the field of education better understand the levels of stress experienced by the students they serve. It will also help guide them in developing services for students concerning how to deal with the stressors they currently face in today's educational setting. Programs and services need to be developed for all students to help them cope with the stress that is currently an inevitable part of life. If students have a better understanding of how to deal with their specific "stressful" situations, many problems such as violence and ill health can be avoided.

Voluntary Participation

This is done as part of a research study entitled: An Investigation of the Effects of Giftedness, Stress on and Gender on Adolescent Coping Responses.

The purpose of the procedure is to discover what kind of students experience stress, how much stress they experience, and what means or strategies are employed in order to help adolescents manage and handle the stressors they face.

"I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my participation in this project at any time without penalty after notifying the project director."

"I may contact Mrs. Kreger at telephone number 787-1140, or Dr. Diane Montgomery (research advisor) at 744-9441. I may also contact Sharon Bacher, IRB Executive Secretary, 203 Whitehurst, Oklahoma State University, Stillwater, OK 74078; telephone number: (405) 744-5700."

"I have read and fully understand this assent form. I sign it freely and voluntarily. A copy has been given to me."

Date: _____ Time: _____ (a.m./p.m.)

Signed: _____
Signature of Student

Signed: _____
Witness to the Signature Above

APPENDIX C

SCRIPT FOR SOLICIATION OF PARTICIPANTS

My name is Mrs. Kreger and for those of you who don't know me, I am an English teacher here at this school. I am working on a Masters degree in Applied Behavioral Studies at Oklahoma State University. A portion of my degree requirements include conducting a research study. My particular study involves adolescents and will be conducted in accordance with federal regulations involving the use of human subjects. The study will involve the use of instruments (tests) that measure how much stress adolescent students experience and what they do to manage and handle the stress they encounter. The title for this research study is "An Investigation of the Effects of Giftedness, Stress and Gender on Adolescent Coping Responses."

I believe that programs and services need to be developed for all students to help you cope with the stress that is currently an inevitable part your life. If students have a better understanding of how to deal with their specific "stressful" situations, many problems such as violence and ill health can be avoided.

I hope my findings in this study will help school guidance counselors as well as other professionals in the field of education better understand the levels of stress experienced by the students they serve. It will also help guide them in developing services for students concerning how to deal with the stressors they currently face in today's educational setting.

If you choose to voluntarily participate in this study you will have to gain your parents' consent. Once this is obtained you will be asked to respond to two psychometric instruments. The first one is the Life Event Scale for Adolescents (LES-A), developed by R. Dean Coddington (1972). It will be used to assess environmental stressors faced by adolescents.

The second instrument, the Adolescent-Coping Orientation for Problem Experiences (A-COPE), developed by Patterson and McCubbin (1987), is a self-report inventory designed to assess adolescent coping style and behavior strategies. The test developers have tried to examine how families make transitions and adjust to major life changes and illness. The purpose of the A-COPE is to assess how often adolescents use different behaviors or strategies in situations where they "face difficulties or feel tense."

Both of the tests will be completed in the time frame offered by the block scheduling that this school adheres to. It shall not exceed more than one class period (90 minutes) and will likely only involve 15-30 minutes of the ninety minute class block.

No records will be maintained of your responses that would hinder or bind you to any placement or other influence in the future. The results will be kept confidential and strictly used for analysis by me for completing the degree requirement of a research study.

Some of you may experience slight discomfort, in that you will be asked to respond honestly to questions about your individual life experiences such as whether or not you have experienced divorce or the death of a loved one. Those students who are shy may find it uncomfortable to disclose these experiences on the test instrument.

At this time I will pass out a consent form that will need to be signed by you and an assent form that will need to be signed by your parents or guardians.

YOU MAY NOT PARTICIPATE WITHOUT PARENTAL PERMISSION.

One week from today the forms will be collected and the study will be conducted. If you choose not to participate you will not be penalized in any way. You may bring homework or a book to read quietly, on that day, while the others are completing the test.

**OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD**

Date: March 1, 2000 IRB #: ED-00-197

Proposal Title: "AN INVESTIGATION OF THE EFFECTS OF GIFTEDNESS AND STRESS
ON ADOLESCENT COPING RESPONSES"

Principal Investigator(s): Diane Montgomery
Traci Kreger

Reviewed and
Processed as: Expedited (Special Populations)

Approval Status Recommended by Reviewer(s): Approved

Signature:



Carol Olson, Director of University Research Compliance

March 1, 2000

Date

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval with the advisor's signature. The IRB office MUST be notified in writing when a project is complete. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

VITA

Traci Lyn Kreger

Candidate for the Degree of

Master of Science

Thesis: AN INVESTIGATION OF THE EFFECTSS OF GIFTEDNESS, STRESS AND GENDER ON ADOLESCENT COPING RESPONSES

Major Field: Applied Behavioral Studies

Biographical:

Personal Data: Born in Woodward, Oklahoma, On October 19, 1974, the daughter of Lee and Lyndia Bixler. Married to Joe B. Kreger December 20, 1997. Currently reside in Edmond, Oklahoma.

Education:

Graduated in top 10% of graduating class from Woodward High School, Woodward, Oklahoma, in May, 1993; received Bachelor of Science degree in Secondary Education with a Minor in English from Oklahoma State University, Stillwater, Oklahoma in May 1997; while there served as a member of Mortar Board National Honor Society 1996, an OSU Student Alumni Board Executive Officer 1996; the OSU Homecoming Executive Director for 1996, a member of the OSU Homecoming Steering Committee from 1994 through 1996, was a member of the President's Leadership Class in 1993-94, on the OSU Freshman Representative Board 1993-94, member of various steering committees organizing Spring Sing, and Freshman Follies and as Vice-President of Pi Beta Phi Fraternity in 1996. Completed the requirements for the Master of Science degree with a major in Applied Behavior Studies from Oklahoma State University in May, 2000.

Experience:

Employed by Tonkawa Public Schools as a ninth and tenth grade English teacher as well as Sophomore Class Sponsor and Student Council Sponsor for the 1997-98 school year. Substitute taught gifted education classes for Edmond Public Schools in the Spring 1999 school year. Taught Gifted Summer Enrichment Program for Oklahoma City University in Summer of 1999. Currently employed as a ninth grade English teacher with Putnam City Public Schools.

Professional Memberships:

National Education Association, Oklahoma Education Association, Putnam City Education Association, Oklahoma Association for the Gifted, Creative and Talented.