A Preliminary Study in the Design of a Stress Inventory for Gifted Students: A Factor Analysis of Potential Items

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A Preliminary Study in the Design of a Stress Inventory
for Gifted Students: A Factor Analysis of Potential Items

BY

David Kinkade

THESIS

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DEPARTMENT HEAD
Abstract

Items were designed for potential utilization in a stress inventory for gifted students. Two types of items were written; the first assessing stressful life events and situations, the second assessing coping ability. Both sets of items were administered to gifted students (N = 162) currently enrolled in the seventh and eighth grades. A principle components factor analysis with a varimax rotation was performed on both sets of items separately. The first set produced a four factor solution. The factors which emerged were identified as self-concept of giftedness, positive gifted programming, negative aspects of the gifted label, and performance pressure. The second set of data produced a four factor solution. The factors which emerged were identified as social support, coping behaviors, problem-solving, and positive self-statements. These factors reflect many of the constructs mentioned in the review of the literature.
Introduction

A Preliminary Study in the Design of a Stress Inventory for Gifted Students: A Factor Analysis of Potential Items

There is a popular myth that students who have been identified as gifted do not feel the effects of stress, or if a gifted student is faced with stress he or she has the resources and the knowledge to deal with it. Actually, gifted students are subject to the same stresses and anxieties that all people face, as well as some stressors that are unique to carrying the gifted label. Another pervasive myth depicts the gifted student as wrought with emotional difficulties. Not all gifted students have emotional problems. In fact, the literature portrays the gifted student as well-adjusted (Luthar, Zigler, & Goidstein, 1992; Pearson & Beer, 1990; Schmitz & Galbraith, 1985). In addition, they are not over-represented in problem populations (Lajoie & Shore, 1981) such as suicide, delinquency, or drop-outs.

Despite being portrayed as well-adjusted, gifted students must face stress just the same as any other student, along with the stress that accompanies their special abilities. Intervention strategies have been developed to help these students deal with stress (Betts, 1986; Edwards & Kleine, 1986; Hipp, 1985; Schmitz et al., 1985), but before these interventions can be implemented there have to be instruments to assess the stress that is being experienced by the gifted student. The stressors that are prevalent with gifted students have not
been well researched. There is a need for more empirical studies so that these stressors can be identified and incorporated into a psychometrically sound stress inventory for gifted students.

The purpose of this study is to begin the process of developing an instrument for identifying stressful factors and coping resources in the lives of gifted students. After items have been developed, it will be administered to gifted students. A factor analysis of the items on the stress measure will be conducted to determine factor loadings. If this study provides evidence of a stable factor structure reflecting the constructs in the literature review, then it can be eventually developed into a useable instrument, utilized by counselors or teachers to help determine whether a gifted student is experiencing stress. This could lead to effective counseling or intervention.

Theories of Stress

The term stress as it applies to human psychology is a relatively recent addition to the professional literature, with its roots closely tied to the works of Cannon (1929), and Seyle (1952). The term stress was borrowed from the science of physics. Humans, it is thought, are in some ways analogous to physical objects such as metals that resist moderate outside forces but that lose their resiliency at some point of greater pressure. The analogy to humans is obvious, albeit inexact (Hobfoll, 1989). The conceptualization of stress has been debated and has evolved. With the idea that there is such a phenomenon as stress, researchers have attempted to describe it by designing a conceptual
model. This has proven to be difficult mainly because of the disagreement among the stress researchers. Many believe that stress does exist but there is controversy concerning its exact nature and how it effects the human body. Stress as a psychological phenomenon seems to have been accepted with open arms by society. The popular media has capitalized and promoted stress and how to combat it, with a barrage of self-help books, magazine articles, and television talk show sound bytes. This popularity is reflected in the area of research, with an increasing amount of time and resources being spent studying stress.

Walter Cannon (1929) was one of the first researchers of the modern era to use the term stress in the context of human physiology. He focused on the effect of various environmental factors such as cold, or lack of oxygen, on organisms. Cannon proposed that milder stressors could be resisted, but prolonged or severe stressors would eventually result in a shutdown of biological processes. Cannon described this phenomena as the stress response system. The work of Cannon was similar to that of another researcher, Hans Selye, whose work also concerned the stress response system. Selye (1952) experimented with more diverse stressors such as electrical shock and immobilizing restraint. He noticed that all of these stressors were producing the same type of response pattern in every case. Selye labeled this pattern the General Adaptation Syndrome (GAS). There are three distinct stages to the GAS. The first is the alarm stage where the stressor is perceived and resources are mobilized. The second stage is called
the resistance phase; at this time the organism is trying to cope with the stressor. The third stage only occurs if the organism has been depleted of resources or energy to cope with the stressor. This stage is exhaustion, and can result in illness or at the extreme even death.

According to Hobfoll (1989), Selye has been criticized on two levels. First, not all humans will react to stress in the same manner. Second, Selye is accused of employing illogical deductive reasoning. He described stress in terms of its outcome, stating that stress can only be identified when a stage of the GAS was occurring. This would make the identification of the causes of stress almost impossible because researchers would have to wait for the outcome of stress to know when it occurred. Despite this criticism, the work of both Cannon and Selye were forerunners of modern stress research. They have provided a simple model of the stress reaction that is a base for some of the more recent conceptualizations.

Five major categories of stress conceptualization will be discussed. There are several models available for the researcher to choose from, but many of them fit into one of the five categories. These are the stimulus-based models, homeostatic, transactional, conservation of resources model, and the stimulus-perception model.

The stimulus-based models are characterized by defining stress based on the nature of the stimulus, rather than through the reaction. Elliot and Eisdorfer (1982) have focused much of their research on the events that are likely to
cause stress. They outlined four types of stressors: acute, time limited stressors, such as seeing a spider on the chair next to you or getting prepared for an operation; stressor sequences, such as divorce or job loss; chronic intermittent stressors, such as examinations for students or a series of business appointments with a disliked client; and chronic stressors, such as debilitating illness or marital discord. The various life events scales which have become popular measures of the level of stress that a person is experiencing are often products of stimulus-based models. The Schedule of Recent Experience (Amundson, Hart, & Holmes, 1981) is an example of a life events scale that was a product of stimulus-based models.

The stimulus-based models serve the purpose of creating an organized list of the events that people generally find stressful. This provides a good starting point for further research. The main limitation of these models is that they do not take into account the variability among subjects. For example, what one person perceives as being stressful another person might see as a problem that is easily solved. This variability in the subject's perception of the stressor is not taken into consideration. Thus, this model omits the internal, subjective psychology of the subject, personal traits and resources, as well as other variables that will vary from one person to the next.

The next viewpoint is the homeostatic approach. In this perspective stress is defined as a disruption of a balance or homeostasis. This is closely related to the work of Seyle and his General Adaptation System in that the GAS fights to return
the organism to a state of homeostasis that prevailed before the onset of the stressor. A current model of stress proposed by Steinberg and Ritzman (1989) is fundamentally a homeostatic approach. According to Steinberg and Ritzman, stress can be defined as an underload or overload of matter, energy, or information input to or output from a living system. Input underloads which place stress on a system can include lack of nutrients, water, heat, sensory stimulation, or social contact. Input overloads include overloads of nutrients and sensory stimulation as well as input of toxic agents. Output underloads and overloads also include nutrients, water, and information of various types. When any of the above overloads or underloads takes place in a living system then an adjustment process has to take place to return the system to a previous homeostasis, equilibrium, or steady-state range.

Researchers who use this model generally recognize a set of concepts known as demand and coping. Demand is the result of the overloads and underloads and coping is the adjustment process that follows. The concepts are not separately defined and tend to be conceptualized in a circular manner. In the words of Hobfoll (1989), "Demand is that which is offset by coping. Yet, coping capacity is that which is offset by threat or demand." There is no clear separate conceptualization of coping or demand.

Another perspective that is probably the most prevalent in stress research is the transactional model; one of the major proponents of this model is R. S. Lazarus. In a paper written for a debate on how to best research stress, Lazarus
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(1985) outlined the specifics of the transactional perspective using six major theses:

(a) stress is best regarded as a rubric or system of independent variables.

(b) The stress process refers to a relationship between a particular person with certain characteristics and an environment with certain characteristics. Four subpoints come from this statement: first, stress reactions depend on how the person appraises the significance of any encounter for that person's well-being and for managing the outcome of the encounter. Second, coping processes influence short-term reactions and adaptational outcomes. Third, the person affects and to some degree chooses the environment while at the same time the environment affects the person. Fourth, reference to an environmental agent is never enough to determine the strength of the stress reaction. (c) The system is recursive in that every variable can possibly affect every other. (d) Emotion and stress are overlapping concepts. (e) Stress and emotions are best understood as processes, rather than static events. (f) Not all stressful encounters, severity notwithstanding, have the same significance for mental and physical health.

With the points made by Lazarus in mind, the transactional model would define stress as a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being (Lazarus and Folkman, 1984). The model takes into account not only the event or stressor, but also the person's
perception or appraisal of the event. Lazarus also admits that stress is a complex system that cannot be explained with a few simple variables.

There are some researchers who see a flaw in this model, however. Hobfoll (1989) claims Lazarus puts too much emphasis on the person's perception and appraisal. This means that the person's environment is simply what he perceives it to be, and the reasoning is therefore circular. Also, the stressors perceived in the environment are based on appraisal. So they too are defined in a circular manner: stressors are what the person perceives as stressful.

Lazarus and Folkman (1985) have responded to this type of argument against the transactional model. They claim that appraisal is a cognitive task while stress or distress is an emotional reaction that includes cognitions. This is a part-whole relationship. What must be avoided are whole-whole relationships where the independent variable and the dependent variable are totally inclusive. Part-whole relationships include some redundancy, yet leave some room for new knowledge. Cognitions and emotions are not the same, so the reasoning is not entirely circular.

A more recent conceptualization of stress that is starting to get some exposure (Hobfoll, 1989) is the conservation of resources model. This model was first developed by Hobfoll (1989) in response to what he saw as a need for comprehensive stress theory. Hobfoll saw an excess of tautology, circular reasoning, inconsistencies, and theories not given to rejection. According to the conservation of resources position, stress is defined as a reaction to the
environment in which there is the threat of net loss of resources, the net loss of resources, or the threat of not gaining any resources after the investment of resources. The losses or lack of gain do not have to be actual, they can be perceived. Hobfoll describes the resources in the following way: object resources are resources valued because of their physical nature or secondary status inherent in possessing them. Conditions are resources in that they are sought after, such as marriage. Personal characteristics are resources in the fact that they can aid stress resistance. Energies are resources that include money, time, and knowledge.

The face validity of this model seems intact, but the theory has one fundamental problem. One of the basic tenants of empirical research is that a theory or model must be deniable, or have some way of being disproven. The conservation of resources model claims that people will always be striving to either stop resource losses or to gather resources in order to cope with future loss. It would also be very difficult to prove this false. Any action that the person takes can be construed to look as if he or she was simply trying to build or save resources. There can be no situation contrived where no such view can be applied, thus there is no condition that can disprove the conservation of resources model. If this is true then it cannot be empirically studied.

Another perspective is the stimulus-perception viewpoint. It is characterized by the emphasis on both the stressor and the different perceptions that individuals
experience when presented with the stressor. The focus is on both the event and
the person's perception of the event. The work of Spielberger (1966) is based on
this type of approach. In his research with anxiety, Spielberger hypothesized that
people would see different types of situations as dangerous and respond to them
with an anxiety state. This implies that there is an interaction between the
situation and the perception of the person. While Spielberger emphasizes
perception in his model, which is difficult to quantify in an experiment, he does
add the important variables of the individual's characteristics and the event itself.
In total, Spielberger's model is a system that includes interactions between
appraisal, the event, and individual characteristics.

The only concern with Spielberger's work is that he may have focused too
much on the appraisal side of the system (Hobfoll, 1989). This is the most
subjective of the three components of the model and of course the most difficult
to measure. If this type of model were used with equal emphasis on the event
and the personal characteristics as well as appraisal, then it would escape many
of the pitfalls of the perspectives discussed previously.

While appraisal may be difficult to measure, Spielberger (1966) attempts to
operationalize it. He describes a variable in stress called threat, which is a state
in which the individual anticipates harm. The cues that result in threat are
evaluated by a cognitive process called appraisal. In Spielberger's explanation
appraisal depends on two different classes of antecedents. One consists of
factors in the stimulus configuration such as the power of the harm-producing
condition as compared to the individual's counterharm resources. The second class of factors are within the psychological structure of the individual. These would include intellectual resources, education, coping skills, and knowledge. Spielberger has taken personal characteristics into account as a variable. In his version, however, it has been incorporated into the concept of appraisal. Spielberger has combined the two concepts of personal characteristics and appraisal.

A workable conceptualization and definition of stress can be produced by combining some of the key elements provided in the above described models. From the stimulus-based models there is the organized list of the events that people generally consider to be stressors. Although these lists do not take into account the variability among subjects, the average ranking system does aid in controlling for this. The list of stressful events is a good starting point, but to help control for the variability that still remains Spielberger's threat component should be integrated. This will allow for the individual's appraisal of the stressor as well as the individual's personal characteristics. With these three components included in the conceptualization, the stressor or event, appraisal, and personal characteristics, what has been created is basically a stimulus-perception model.

Stress is defined according to three variables. First, it is based on a list of events that the average person finds stressful, with each event having a different value as a stressor. The person reports whether or not they have experienced the event within a certain time period. Second, the person must appraise the
event according to the amount of discomfort that they perceive and then report this accurately. Third, the individual's personal characteristics for dealing with the stressor should be reported. This can be accomplished by asking the person to report how well they believed that they could deal with the stressful event.

**Children and Stress**

The literature supports the notion that children and adults, for the most part, perceive stress and deal with stress in the same manner. For example, Elkind (1988) reports that children experience free floating anxiety just as adults do. Elkind also states that type A behavior, which seems to make the subject more susceptible to stress, is observable in children as well as adults. The research points to the conclusion that children and adults perceive and handle stress much the same.

There are, however, a few differences which have been noted in the literature. These differences between adults and children center around the perceived causes of stress and the reactions produced by stress. The causes of stress for children can depend on their developmental level. Humphrey (1993) states that toddlers who are 15 months to 3 years of age face toilet training as a major stressor, while an average child six years of age will not see the same event as stressful. The type of stimuli that a child will perceive as stressful changes according to his or her developmental level.

Certain types of stress are more likely to be perceived and cause specific reactions at different developmental levels. School burnout is a reaction more
common to children than adults simply because children are more likely to be in school than are adults. Of course school burnout in children is probably comparable to work burnout in adults, so the differences are not in the response or perception of stress, but in the setting. Premature structuring can also occur. This is when a child concentrates on one area early in life and becomes over-specialized. This can cause a personality constriction. An example would be a tennis player who is trained from an early age to do almost nothing but play tennis. The child might feel that he or she has few options in life except to play tennis (Elkind, 1988). This sense of restriction can be a major source of stress for some children.

Children have fewer choices than adults, especially when it comes to dealing with stress. Children also have less knowledge about stress. Learned helplessness is a condition that can arise from a lack of environmental control and knowledge. The passive reactions caused by learned helplessness are more common in children, causing a decrease in performance (Elkind, 1988).

Humphrey (1988) also notes that children do not have the same range of options that adults have when dealing with stress, therefore children are not likely to cope with stress as well as adults. There are some marked differences in the acceptable coping behaviors of children and adults. Children are usually not permitted open displays of anger. For example a teacher can display anger at a child but a display of anger from the child toward the teacher would be unacceptable. Adults usually have the option of walking out of a stressful
situation while children often do not. Some researchers believe that daydreaming can be therapeutic for children, but they are often reprimanded for this. Adults can ask for medication which is an option not open for children (Holland, 1980).

**Gifted Identification**

A definition for gifted identification is necessary because it operationalizes the process. There is no standard that is followed by a majority of school districts. However, there are some prevailing practices which contain merit. By assimilating these practices into an operational definition of gifted identification, the process is put into concrete terms which can be understood and replicated.

According to Colangelo and Davis (1991), the contemporary history of gifted education does not require a long account. It is the story of four men and a satellite. Francis Galton (1822-1911) attempted to measure intelligence by measuring the acuity of the subject’s senses. Although his intelligence tests were not a success, Galton did hypothesize in his book Hereditary Genius (Galton, 1869) that there was a prominent hereditary component to intelligence. This is a view shared by many modern psychologists.

Alfred Binet along with his colleague T. Simon devised a test to distinguish which dull children would require special classes in order to learn. Binet found that tests of memory, judgment, reasoning, comprehension, and the ability to pay attention tended to agree with teacher judgments of intelligence. In 1911, Henry Goddard finished his evaluation of 2000 normal children. Goddard's use
of the Binet scales of intelligence was a transition from assessing below-average children to assessing normal and above-average children.

Lewis Terman made two contributions to gifted education. First, he supervised the Americanization and revision of the Binet-Simon scales in 1916. This produced the Stanford-Binet Intelligence Scale, which is now in its fourth edition. Terman's second contribution was his longitudinal study of 1,528 gifted children. After using the Stanford-Binet to identify these children in the 1920s, Terman followed the personal and professional lives of the subjects.

The launching of the Russian satellite Sputnik in 1957 provided the United States with a sense of technological defeat. The Soviet scientists had out performed ours, which brought considerable criticism to the educational system of the United States. These criticisms centered around the lack of attention given to gifted students.

All of the events mentioned above have contributed to the modern conceptualizations of gifted education. Galton and Binet developed the methods of measuring the construct of intelligence. Goddard and Terman refined these methods and applied them to normal and above-average children. These four men were the pioneers of gifted identification.

There are several definitions for the term gifted. All of these definitions are located somewhere on two separate continuum. The first is the implicit, explicit continuum. An implicit definition is one that cannot be empirically tested, while an explicit definition can be empirically tested. The second continuum runs between
liberal and conservative definitions. A definition is liberal if the type of performance and the level of performance are not strictly defined. A definition is conservative if the type of performance and the level of performance are strictly defined.

These separate continuum are demonstrated in a few definitions of giftedness that appear in the literature. The first definition is an example of a conservative approach. It is from Terman (cited in Reis, 1989): The top one percent in general intellectual ability, as measured by the Stanford-Binet Intelligence Scale, or a comparable instrument. This definition is conservative because it not only states the type of performance, the Stanford-Binet Intelligence Scale, it also states exactly what level the performance should be at, the top one percent. This definition is also explicit in nature because it would not be difficult to test it empirically.

The second definition is an example of a liberal approach. It is from Witty (cited in Reis, 1989): We consider any child gifted whose performance, in a potentially valuable line of human activity, is consistently remarkable. This definition is liberal because it does not state how the giftedness should be measured nor at what level the subject has to perform on this measure.

There are some advantages and disadvantages on both ends of the liberal, conservative continuum. A conservative approach gives a good operational definition of the term giftedness. Any trained psychologist who read a conservative definition such as Terman's would be able to assess a child for
giftedness. The definition is easy to understand and is concise. The only problem with it is that there could be other areas of giftedness that are not represented by a score on the Stanford-Binet. Perhaps the definition is too narrow. This is where the liberal definition has the advantage. A definition such as Witty's gives a broader scope to the term gifted, so that no gifted student of any type is left out. The only problem with this is that such a broad definition leads to different interpretations between testers (who is to say what a valuable line of human activity is?). Also, it does not prescribe a method for testing.

Another definition is an example of an implicit approach. The Three Ring Concept from Renzulli (1978) is based on three clusters of traits that gifted students should possess. These traits are above average ability, task commitment, and creativity. A gifted student should have all of these traits at a level that is above average but if one is lower, then the other two could make up for it if they are high enough. According to Renzulli, a gifted person is one that has the three traits. This definition is implicit because there are no methods available to validate it. The definition could also be called liberal based on the fact that it does not state the type of performance nor the level of performance necessary to qualify. It does however, give specific guidelines about what traits to measure, so it is not as liberal as Witty's definition.

In school systems, the definition most widely used is from the Marland Report published in 1972 (cited in Reis, 1989).

Gifted and talented children are those, identified by professionally qualified
persons, who by virtue of outstanding abilities are capable of high performance. These children who require differentiated programs and or services beyond those normally provided by the regular school program in order to realize their contribution to self and society. Children capable of high performance include those with demonstrated high achievement and or potential ability in any of the following areas, singly or in combination; general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts, and or psychomotor ability.

(p. 2)

This definition stresses five areas of achievement which could be labeled as gifted. It is not specific about how the areas should be measured, but it does give a good idea of what should be measured. The definition is fairly broad so as not to leave out any areas of giftedness. It is not overly explicit nor implicit. The definition from the Marland Report seems to be somewhere in the middle of both continuum. This compromise could be why so many psychologists and educators like it.

The Marland definition is used in many school districts. It has been promoted in the literature as an appropriate definition of giftedness in the United States (Richert, 1985). This definition is comprehensive, including variables such as general intellectual ability, specific academic aptitude, creative or productive thinking, leadership and psychomotor ability. These variables are echoed in other models of gifted identification (Sternberg and Davidson, 1985). Of these
variables, the identification of gifted students primarily evolves around the assessment of general intelligence, academic achievement, creativity, and critical thinking (Clark, 1983, Stanley, 1984).

In all of the above models the construct of general intelligence is central. It has been described or named in different ways but in almost all of the models that attempt an operational definition of giftedness that is measurable, the intelligence component is mentioned as a key variable. The earlier theorists such as Terman (1922) considered high intelligence, estimated by an IQ score, to be sufficient for labeling a student gifted. More recent theorists such as Sternberg and Davis (1985) have expanded the notion of intelligence to include almost any intellectual skill. These theorists have also downplayed the importance of the intelligence score in the identification of gifted students.

Regardless of this, the IQ score is still the single most important factor in gifted identification. Rimm (1988) stated that the individual intelligence test is a highly recommended first assessment instrument, and that the IQ number has the potential to communicate important expectations related to the child's abilities. In a survey of school psychologists Klausmeier, Mishra, and Maker (1987) found that school psychologists considered the Wechsler Scales of Intelligence, and the Stanford-Binet to be the best identifiers of gifted students. Many times in practice, the operational definition of gifted is based on a score on a standardized intelligence test.
There are disadvantages in utilizing standardized intelligence tests to make identification decisions. There are concerns about inequities in the standardized tests that effect certain minority and disadvantaged groups (Jensen, 1968, 1972; Masten, 1985; Richert, 1987). Minority groups such as Blacks, Hispanics, and Native Americans are underrepresented by 30-70% in the gifted programs. Another group that cuts across all ethnic and racial subpopulations and is typically excluded through typical identification procedures is the poor (Richert, 1986). Several authors outline steps to alleviate these disadvantages. Richert (1986, 1987) has suggested that a district could norm the tests for specific subpopulations in their schools and has published an alphabetical list of certain standardized tests, including intelligence tests, that are more appropriate for disadvantaged populations. Richert also suggests using methods other than standardized tests such as checklists or teacher nominations to help identify gifted students.

Academic achievement is another variable important in the identification of gifted students. It can be estimated through grades or by a standardized test of academic achievement. An individual achievement test should follow an intelligence test to clearly assess strengths and deficits in basic skills, particularly reading and math (Rimm, 1988). Grades alone are not usually a good source for assessing academic achievement because of the large number of extraneous variables that effect grades. A standardized test of achievement can run into the same problems as intelligence tests when it is used to assess a student from a
disadvantaged population. Richert (1986) listed tests of achievement that are appropriate for the disadvantaged populations.

An appropriate definition of giftedness is represented by the Marland definition. The two key variables that are a part of the Marland definition are "demonstrated and/or potential high performance in general intellectual ability and specific academic aptitude." General intellectual ability is best assessed with a standardized intelligence test, and specific academic aptitude is best assessed by a standardized test of academic achievement. Using these tests as part of the criteria for identification of gifted students is a common practice. Klausmeier, et al. (1987) state that the four most common tests used by school psychologists to identify gifted students are intelligence tests and achievement tests, with intelligence tests taking the top two spots.

These two variables are the focus of most gifted identification programs. These are usually combined with other assessment information such as interviews, checklists, teacher nominations, grades, and other standardized tests that can assess creativity, leadership, or psychomotor ability. These other assessment procedures can add valuable information and should be included, but a standardized test of intelligence (group or individually administered) and a standardized test of achievement provide the foundation on which solid identification decisions are made.
With this in mind, a popular and workable process for identifying gifted students would include a test of intelligence and academic achievement. This would preferably be combined with other information from multiple sources.

**Gifted Students and Stress**

There is an abundance of research that supports the concept that students who are labeled gifted are more susceptible to certain stressors than are the rest of the student population. Gifted students react to stress in the same manner as other students, but recent research points to stressors that could have more of an effect on students in gifted programs (Blackburn & Erickson, 1986; Fimian & Cross, 1987; Ford, 1989; Karnes & Oehler-Stinnet, 1986). Researchers are not claiming that gifted students have more emotional problems than average students, in fact there is much evidence to the contrary (Ford, 1989; Luthar, Zigler & Goldstein, 1992; Pearson & Beer, 1990). Researchers are also not claiming that gifted students are immune to the stressors that effect their fellow students. Most articles on the subject of gifted students and stress reflect the sentiment stated by Lajoie and Shore (1981), which is the notion that gifted students can make it on their own and need no special help should be dispelled. Gifted students are a population with special needs. Among these needs are the necessity of studying and understanding the stress that the student perceives in conjunction with the gifted label, so that students who are experiencing stress can be helped.
A review of the literature reveals that the sources of stress that are associated with being labeled gifted can be grouped into three categories. The first category, stressful issues that are a direct result of the gifted label, is very prominent in the literature. The other categories are educational, and social issues that are stressful in nature. The final two categories are related to the first because the gifted label is present in all situations and can cross the boundaries into the other categories. The issues of perfectionism and multipotentiality will also be discussed. Finally, a comprehensive study by Fimian & Cross (1987) will be reviewed.

There has been much concern over the effects of labeling exceptional children in the school setting. The entire issue of labels is complicated. Hobbs (1975) and Cornell (1983) claimed that the problem with labels is that they are necessary for classifying students according to their educational needs, but the child often becomes identified with the label. Stereotypical beliefs and attitudes associated with the label can be falsely attributed to each labeled student. This is true not only for students with disabilities, it is also true for those at the gifted end of the continuum. Despite this, there is ample evidence that having a gifted label is not stigmatizing and traumatic as are other labels and even has a positive impact on the student's life (Hershey & Oliver, 1988; Hickey & Toth, 1990).

In some articles the gifted label has been described as both positive and negative. The label is positive in its confirmation of special gifts and talents, but negative if it is associated with depersonalized expectations (Robinson, 1989).
This statement depicts the gifted label as a two-edged sword. Kerr (1988) agrees with Robinson's view that the gifted label can be both positive and negative, but Kerr focuses on a different issue. Kerr administered a five-item Attitude Toward Giftedness (ATG) questionnaire to gifted students. One of the items concerned the effects of the gifted label on self and on others. It was evident from the results that that giftedness is a positive quality in one's own life but that the perceived impact on others is negative or ambiguous.

The gifted label can have an adverse effect on the student who is given the label. Robinson (1990) examined some of the issues that a student faces when given the gifted label by surveying 396 gifted students attending the Arkansas Governor's School. This survey elicited the students' perceptions of and their reactions to the gifted label. The results of the survey showed that 15.7% of the students reported feeling extremely uncomfortable with the label. This group of students tended to have less acceptance of the label than their peers who were comfortable with it. Most of the uncomfortable students reported neutrality to moderate disagreement with their gifted label.

Robinson goes on in the article to claim that the reported rejection of the label could be called denial. Students who overtly express rejection of the gifted label may have internalized it to such a degree that it continues to affect them. That some students report their rejection of the label with anger seems to support this interpretation. Those students who were uncomfortable were more
likely than those who reported being comfortable with the label to reject and feel angry about having the gifted label.

Another factor that Robinson (1990) examined in the survey was the issue of whether or not the students felt different after having been labeled gifted. There were two items that explored this. The first asked if the student felt different from the rest of the student population. Those who reported being comfortable with their gifted label tended to moderately agree with this question, while those who were uncomfortable with the gifted label tended to report neutrality, or they were not sure if they felt any different. The second item asked if the student liked feeling different. The uncomfortables were close to neutral and the comfortables were in moderate agreement. The differences between the responses of the comfortables and the uncomfortables were significant in both cases.

Robinson's results support that there is a large minority of gifted students who do not feel comfortable with the label that they have been given. Robinson also claims that this could cause the student to reject the label to the degree that it continues to affect them. Thus the label can be looked upon as a potential source of stress with which the rest of the school population does not have to contend.

Cornell (1983) used three different levels of analysis to study the effect of the gifted label in the family and to the individual student. These levels were: parent perceptions of the child, self perceptions of the child, and family interaction. Based on the self perception ratings of the child, Cornell claimed that the
idealized perception of the gifted child may be the result of a positive stereotype. These self perceptions were gathered by having the gifted students complete the Children's Personality Questionnaire (CPQ). The results of the CPQ generally fail to support the widely accepted characterization of the gifted child as being especially well adjusted.

When a student is labeled as gifted there can be serious ramifications within the student's family. These ramifications can manifest in the parents. Robinson (1989) found that parents can consider the label to be a nuisance, especially if one parent disagrees with the other about its appropriateness. Children who are labeled gifted can feel pressure from parents to perform academically (Karnes & Oehler-Stinnet, 1986).

Parent use of the term gifted can have an effect on the family environment and the adjustment of the gifted child. Cornell (Cornell, 1989; Cornell & Grossberg, 1989) found that approximately 74.3% of the mothers and 69.4% of the fathers in Virginia and a total of 72% of parents in Michigan reported using the term gifted. Use of the term gifted was negatively associated with several indices of adjustment. Children whose mothers used the term reported relatively lower self-concept regarding their physical appearance, and also reported higher levels of anxiety related to their ability to concentrate and maintain attention. They were also ranked lower by their classmates on a peer sociogram. Paternal use of the term was not related to any of the child-report measures. Cornell warned that this is only a correctional study and that a causal relationship
between parent use of the term gifted and child adjustment has not been established.

In later articles, Cornell disputed some of the information that he put forth in previous articles (1983). Cornell claimed that the impact of the gifted label upon the family was positive with regards to the parents and the child who has the label. Cornell stated that parents who perceive their children as gifted seem more proud of these children and describe a closer parent-child relationship.

The research that has been done concerning the effects of the gifted label on the parents of the student, and the impact on the parent-child relationship is inconclusive. However, there is some evidence that the gifted label can be positive, it can also create problems within the parent-child relationship. This could be seen as an additional source of stress for the gifted child.

When a child is given the gifted label there can be adverse effects on the student's siblings. This is important because the interaction between the siblings within the family can be a source of support or stress for the student, depending on the nature of the relationship. The research on the effects on the unlabeled sibling are less contradictory than the research on the parents. The studies that have investigated these siblings (Colangelo, 1988; Colangelo & Brower, 1987; Cornell, 1983) indicate that these children may be less well adjusted and somewhat withdrawn.

Colangelo (1988) illustrates how the negative effects on siblings could be stressful for the student who has been labeled. Colangelo described a
hypothetical situation in which the younger child is identified while the older one(s) is not. This can lead to the older child becoming embarrassed or angry. For example, it may be humiliating and angering for a sixth grade boy to have a sister in third grade who reads faster, can do arithmetic better, and has a larger vocabulary than he. In some of these cases the older child will be cutting and abusive to the younger child. This would obviously create a more stressful environment for the gifted youngster.

In relation to the effects on the parents and the siblings, Colangelo and Brower (1987) conducted a study that adds a slightly different perspective to the issue. This study indicated that over time it is the gifted youngster who has uneasiness regarding the family. They did not perceive their siblings as being very positive about the label nor did they perceive the family openly discussing the issue. The actual effects on the parents and siblings are downplayed while the perceptions of the gifted child appear to be problematic.

There are also some potential stressors in the academic environment that are specific to gifted education, although most research indicates that the academic world is easy on the gifted student. Teachers' perceptions of the gifted student and the gifted program can be a factor. Karnes and Oehler-Stinnet (1986) added items that pertained to giftedness to two stress inventories and found that pressure to perform academically from teachers was ranked as a moderately stressful event, by gifted students, somewhat less stressful than receiving pressure from parents.
Ford (1978) distributed a questionnaire entitled the Special Program Attitude Survey to students in special programs. From this survey Ford found that most gifted students have noted indifferent attitudes on the part of teachers, in regards to students' work in special programs. Also, most students appreciate their inclusion in the special programs as long as it does not cause a conflict with their regular education teacher (this conflict was reported as occurring infrequently). The final question on the survey asked students to indicate whether their regular classroom teacher ever became upset as a result of their leaving class to go to the special programming; 13% of the students reported that their teachers did.

Ford (1978) found that 96% of the gifted students that were surveyed wanted to be in special programming, and that 93% of them liked the program with which they were involved. According to a teacher survey conducted by Smidchens (1989), teachers have a positive view of gifted students. Teachers in Smidchens' survey indicated that they believed gifted students were desirable to teach. However, these same teachers also reported that gifted students did not need special services. This is contrary to what gifted students seem to want from their education system.

Overall, gifted programs appear to be positive for the gifted student, as is the academic experience. Even acceleration is now seen as positive for most students (Colangelo, 1988). Early entry into kindergarten or first grade is generally not seen as a positive or negative experience for the gifted child. It
seems that the gifted child or the child who is later labeled as gifted did well in school whether they started early or not (Colangelo and Fleuridas, 1986).

Ford (1989) described the responses of 57 fifth and sixth grade students who had been identified as gifted and were participating in a resource program for gifted and talented children. Ford conducted a series of interviews with the students in small groups of three to five, where they discussed issues that were related to stress, and other affective issues.

When asked about their school programs, many of the students had negative comments. A large number of the students who recognized their abilities claimed that they were not good students. They admitted to being bored, being distracted, and being less enthusiastic about the class assignments. Some reported that their minds were on something else or that they would finish their work early and then have nothing to do. They stated that many of their assignments are repetitive tasks designed solely to take up their time. Ford claims that these students need to develop a personal source of motivation to break free from what they perceive as limitations.

Many of the students did not want to admit that they had special abilities or talents for fear of being teased. Some are truly confused about their abilities, while others feel guilt for having achieved recognition or rewards, or having succeeded without putting much effort into it. Some of the students describe empathetic feelings for other students who try but never succeed.
The students also talked about trying to live up to the expectations of their parents, siblings, and teachers. They expressed guilt at having not lived up to the perceived expectations of others. There was also annoyance at having these expectations placed upon them. Some of the students did not like to perform extra duties such as hall monitor or peer tutor.

As an abstract concept, the students agreed that competition was beneficial. However, they did not like competition within the classroom, especially in a heterogeneous room. Most children saw this as either boring, because they had an unfair advantage, or as a set-up. One child claimed that his peers were just waiting for him to make a mistake. He stated that if he lost they would tease him and if he won they would become angry. Overall the students wanted competition removed from the classroom.

The students also commented on the special programming that they were involved with. Most of them expressed positive feelings about the programs, although they did not like the negative ramifications. Some students felt that they missed out on some of the more fun activities in the regular classroom that the teachers would schedule while they were in the resource room. Sometimes the students felt as if the special programs separated them from their classmates. Another complaint was that some of the students believed that they had to perform at higher levels and had to push themselves. Often they would receive constructive feedback on how to improve instead of praise that was heaped on their less-able classmates.
There are some entrenched stereotypes concerning the social functioning and social status of gifted persons. According to Luftig and Nichols (1990) there are three prevailing stereotypes. The first suggests that gifted students are unpopular with peers because they engage in a variety of social behaviors, such as verbal aggression, impatience and bossiness, which result in the child becoming actively rejected by peers. The opposite of this is the stereotype that the gifted person is somehow more popular with his or her peers. The final stereotype depicts the gifted child as a shy, socially inactive person who is ignored by peers.

Although there is some disparity in the literature, there is little evidence that any one of these three stereotypes is representative of the social situation of a majority of the gifted population. There is some evidence that the student with the gifted label will receive some negative responses from his or her peers. There is also evidence that the responses from peers can be either positive or neutral.

Kerr, Colangelo and Gaeth (1988) found, as part of their survey of 184 gifted students, that 90% of the students indicated that the worst aspect of being gifted was social in nature. Social issues were of the most concern to the students. In addition, females viewed the social aspect as negative more often than males. Kerr et al. (1988) also had the students rate their attitudes regarding the effects of his or her giftedness on others and found that 5% viewed them to be positive, 43% negative and 52% neutral. These results indicate that the students
perceived their giftedness as having a negative or ambiguous effect on their peers.

Another survey of gifted students by Ford (1978) elicited similar results. One of the questions asked students to evaluate the feelings of other students in the school toward the special program for gifted students. The largest number of respondents asserted that the non-participating students exhibited envious attitudes toward program participants.

The surveys by Kerr et al. (1988) and Ford (1978) did not actually ask the non-participating students for their feelings or opinions about the programs or the students who had been labeled as gifted. They only asked the perceptions of the gifted students themselves. These perceptions could be accurate representations of how gifted students' peers view them, or they could be misperceptions of the attitudes of the gifted students' peers. These two studies reflect how some gifted students see their social environment and how it is tainted by the fact that they have a gifted label. The next few studies center around the non-gifted peers, rather than the perceptions of the gifted students.

In a review of the literature, Hershey and Oliver (1988) indicated that peers of gifted students are influenced by the gifted label, but only a small percentage of gifted students are bothered by the negative attitudes of their peers. This statement addresses the actual attitudes of the non-gifted peers, but its findings are contrary to Kerr et al. (1988) in that Hershey et al. claims that only a small percentage of gifted students care about the perceptions of their peers, while
Kerr claims that this is not the case. Hershey et al. does not state to what degree or in which direction the peers of gifted students are influenced by the label.

Luftig et al. (1990) investigated the social status of gifted students who were enrolled in a pull-out program with same-age peers who were not identified as gifted. Both groups completed a sociometric nomination instrument to gauge popularity. The results were that the gifted students were less likely to be rejected than non-gifted peers, and were no more likely to be ignored by peers. It was found that there was an interaction between giftedness and gender on the variable of popularity. While gifted boys were the most popular group, gifted girls were the least popular. This finding could indicate that gifted girls may be particularly at risk socially.

Ford (1978) had other questions on the survey that cast the social status of the gifted students in a more positive light. On one of the questions the respondents were asked if their friends who were not in the program treated them any differently since they had been selected for the special group; 86% of the students responded "no." Another question asked if other students teased them or called them names; 88% responded that no teasing had occurred. Another question inquired as to the gifted students' pleasure in telling other students about the special programs. This question produced an even split, with only about 55% of the students saying that they liked to talk about their work in the special programs.
It was mentioned previously that acceleration was now seen as a positive experience. Colangelo (1988) states that acceleration is good for gifted students because it will probably have a positive impact on social development. Colangelo (1988) also expresses that students who are identified as gifted will not be more prone to elitist thinking, which could isolate them from their non-gifted peers.

Another study by Guskin, Zimmerman, Okolo, and Peng (1986) provides further support that gifted students are socially well-adjusted. Questionnaires were given to 295 students in summer programs for gifted and talented. Eighty six percent of the students thought that they made friends easily, while more than 69% considered themselves to be popular. More than a third of the students reported that they were not treated differently as a result of their special talents. Only a little over 9% reported negative reactions by peers.

A study by Cornell (1990) investigated the characteristics of the high-ability student who is unpopular with his or her peers and found three factors on which unpopular students differed from average and popular students: family social status (occupational status of the father), social self-concept (based on questionnaire), and academic self-esteem (teacher report). The final factor, academic self-esteem had the most consistent group differences.

Based on lower academic self-esteem, Cornell (1990) states that unpopular students can be characterized as lacking in initiative, especially when it comes to working independently, making decisions, and undertaking new tasks or challenges. They may have excessive needs for social attention, so they are not
quiet in class and do not cooperate well with others. They may not tolerate failure easily and overreact to criticism. Finally, they do not assume leadership roles, and do not refer to themselves positively.

Perfectionism is common among gifted students.

Perfectionism is a personality characteristic that is not uncommon in the intellectually gifted and talented. In the face of stronger competition and tougher goals, success becomes more expensive. The experience of being average or even failing is incomprehensible to the gifted student. Having had only the self-image of perfection, they are often devastated by not performing at the top. They become "paralyzed perfectionists," unwilling to pursue any new experience unless success can be guaranteed (Whitmore, 1980).

Some gifted students do not react to crises or failure very well, because many of the tasks that they have had to conquer in the school environment have been relatively easy for them. Therefore, they expect success on every occasion. When perfectionistic gifted students are confronted with more difficult tasks, possibly as some part of a gifted program, they might balk because of fear of failure. This could cause the perfectionistic gifted student to sabotage his or her efforts so that they can fall back on the excuse of "I could have done it if I had tried."

The root of perfectionism can be internal to the gifted student, arising from the propensity to expect more from talents or abilities than is actually warranted (Colangelo et al., 1991). Perfectionism could also come from a sensitive
awareness of quality or excellence. The gifted person is able to discern the mediocre from the superior. The person who knows quality or has become used to success can drive himself or herself crazy trying to achieve it (Schmitz et al., 1985). Perfectionism can also be reinforced by factors in the environment (Colangelo et al., 1991; Schmitz et al., 1985). Teachers, parents, and peers can unknowingly reward perfectionistic behavior by admiring, praising, and even modeling it.

Colangelo et al. (1991) notes that while the phenomenon of perfectionism can be seen in all age groups of gifted students, it is most dangerous to the development of adolescents. As perfectionism progresses, gifted adolescents can sense a growing gap between talent and performance. This can cause damage to the person's self-image or self-esteem and in some severe cases can cause the students to give up on further development of their unique abilities.

One of the "eight great gripes" of gifted students, according to Schmitz et al. (1985) is that many gifted students feel overwhelmed by the number of things that they can do in life. This characteristic has been called multipotentiality. The gifted student usually feels the pressure of multipotentiality sometime during early adolescence when there are decisions to make about what to do with life. Making career and personal choices can be difficult for a gifted student who has multiple interests and abilities (Blackburn & Erikson, 1986). Gifted students often have the potential to succeed in a variety of promising careers. This choice of career can become a dilemma.
Gifted students might attempt to realize their potential in too many areas. This causes the student to perform at less than their potential in all areas because their energies are too diffused. Some do not make choices because they are afraid of disappointing a mentor in a field that they do not select. Other gifted students do choose a particular area of interest to concentrate on, but worry about what they are missing in all of the other areas and are too distracted to perform at their best.

Fimian (1988) designed and implemented a comprehensive study to determine the predictors of classroom stress and burnout among gifted students. The sample consisted of 121 gifted students, 65 males and 56 females, enrolled in grades 5-9. Of the sample, 44% reported experiencing little or no stress at school, while 56% reported experiencing moderate to severe stress. Eleven inventories and one cover sheet were used to collect data related to a number of background, personal, general, anxiety-stress, organizational, and stress and burnout variables.

From the results, Fimian found that six variables were significant predictors of stress for the entire sample. These included background variables, which were: grade equivalent, number of teachers, birth order, hours of homework per week, sex, grade levels, and IQ. The other five variables were low self-esteem, externalized locus of control, high state and trait anxiety, low quality of school life, and classroom tedium. Males reported a greater number of sources of stress than did females. For males alone the significant predictors of stress were low
self-esteem, high trait anxiety, low quality of school life, and tedium. For females, the best predictors of stress were low self-esteem, and high state anxiety. This is indicative of differing sex-related problems with classroom stress.

In summary, the impact that labeling has on gifted students varies. Labeling does have positive aspects, but there is a large minority of gifted students who experience negative effects. In the academic world, gifted students voice complaints about the curriculum that is offered. They also feel the pressure of teacher expectations, and the perceptions of their peers. Gifted students do like special programming when it is offered. Socially, gifted students appear to function at the same level as regular education students, with the exception of gifted girls, who are at risk. Gifted students are also concerned about envy and other negative emotions in their peers. Perfectionism and multipotentiality are both stressors that are prevalent in the gifted population.
Method

Participants

The students who participated are enrolled in junior high and middle schools in Central and Western Illinois. All of the students have been identified as gifted according to the criteria of the school of attendance. Three hundred thirty-five students returned the instruments after they were administered. One hundred sixty-two complete protocols were used in the data analysis. Many of the remaining instruments were not finished or had been filled-out in a random manner or a pattern. Of the instruments retained for the analysis, 45 were from eighth-grade girls, 45 were from eighth-grade boys, 45 were from seventh-grade girls, and 27 were from seventh-grade boys. There were very few forms returned by both seventh-grade boys and girls. All of the useable forms for these two groups were retained. There were many more forms returned by eighth-grade boys and girls, approximately 60 for each group. Many of these were not used in the analysis because it is important to keep the numbers for the four sex\grade groups as even as possible. The instruments that were not included were removed randomly from the sample.

Materials

The students were administered the 228 items that have been developed based on the constructs identified in the review of the literature. The items are simple statements followed by a likert-type response format. There are two different instruments under development. The first 98 items pertain to stressful
life-events or are statements that reflect possible sources of stress as indicated in the literature review. Items 99-228 are related to coping ability. Both instruments are essential because events and coping ability are both related to stress. Each section was analyzed separately.

**Design and Procedure**

Data was collected in April, 1995. The students were participating in a one-day "Gifted Olympiad" program. Each student completed all 228 items on the instrument. Only those instruments which were fully completed were used in the data analysis. Both sets of data were analyzed by a principle components factor analysis with a varimax rotation. It was hypothesized that factors would emerge which closely resemble the constructs mentioned in the review of the literature.
Results

A principle components factor analysis with a varimax rotation was performed on the first set of data resulting from the responses to items 1-98. The factor analysis was attempted several times with four to ten factors specified. The best solution appears to be a four factor solution for the first set.

Insert Table 1 here

A principle components factor analysis with a varimax rotation was performed on the second set of data resulting from the responses to items 99-228. The factor analysis was also attempted several times with four to ten factors specified. The best solution also appears to be a four factor solution.

Insert Table 2 here

For both sets of data, the cutoff criteria for weaker loading items was established on a statistical and theoretical basis. Items with a loading of below .50 would not be retained. In addition, items which loaded on more than one factor would be retained only if the difference between the primary and secondary loadings was greater than .20. These statistical criteria could be overruled for theoretical reasons. For example if the item was unique compared to the remaining items and would add information not provided elsewhere on the
instrument it would be retained. Some items which seemed important to the integrity of the factors on which they loaded were retained although they were slightly deficient according to the statistical criteria.

For the first set of data, The four factors which emerged were fairly easy to identify based on the nature of the items which loaded on them. The first factor contains nine items with factor loadings ranging from .44350 to .81399. The items which loaded on the first factor represent a self-concept of the student's giftedness. The second factor contains nine items with factor loadings ranging from .41763 to .81847. Items which loaded on this factor reflect positive attributes concerning gifted programming. The third factor contains seven items with factor loadings ranging from .60855 to .75278. Items which loaded on the third factor represent negative aspects of the gifted label. The fourth factor contains five items with factor loadings ranging from .47768 to .75438. Items which loaded on the fourth factor represent performance pressure felt by the student.

The factors which emerged in the second set of data were more difficult to identify because the first factor contains items from what appears to be two separate constructs, and the final factor has very few items which at first do not seem related. The first factor contains 26 items with factor loadings ranging from .47725 to .79271. Most of the higher loading items on the first factor appear to reflect social support as a means of coping, while some lower loading items represent physiological aspects of stress and coping ability. The second factor
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has nine items with factor loadings ranging from .51673 to .62920. The items which loaded on the second factor represent coping behaviors and habits. The third factor contains eight items with factor loadings ranging from .51239 to .64136. The items which loaded on the third factor represent problem-solving ability. The final factor contains five items with factor loadings ranging from .46868 to .65460. The items which loaded on this factor appear to reflect positive self-statements, and how they relate to coping.
Discussion

The first set of data analyzed includes the responses for items 1-98. Following the factor analysis, four factors emerged. These factors were similar to many of the constructs that were mentioned in the review of the literature, but there were some constructs that did not load on any of the four factors. During data collection, several students offered comments that added to the information provided by their responses to the items. Some of these comments have been included in the discussion section.

The first factor included strong loadings for items such as "my parents have told me that I am very smart or gifted," "My teachers have told me that I am very smart or gifted," and "It was very important to me to get into the gifted program." The items which loaded on the first factor followed the same theme. They all seem to pertain to the student's self-concept of his or her own giftedness. This factor is related to issues that were discussed in the literature review. Some research indicates that a student will feel more comfortable or uncomfortable being in a gifted program, depending on how he or she perceives his or her own giftedness (Robinson, 1989, 1990). If the student perceives himself or herself as being intelligent and capable and desires to expand educationally, then he or she will feel more comfortable in the gifted program. Conversely, it seems that such a student would feel uncomfortable in a setting where he or she was not allowed to be intellectually challenged.
During the data collection, all of the students were aware that they were considered gifted. Many made comments such as "I was allowed to get out of school today and compete at the gifted olympics because I am smart," or "we are four of the brightest kids in my class." Comments such as these reflect the student's perception of his or her own level of giftedness. All of the comments overheard during the Gifted Olympiad while data was being collected reflected the positive side of the students' self-awareness. In the past, students have said "I don't know why I am in special programming." Another student mentioned that she did not believe that she was smart, and did not know why she was constantly being "whisked away" from her friends in the regular classroom to take part in enrichment activities. This reflects negative feelings about the gifted program due to the students' lack of understanding or self-awareness of their giftedness. It seems that a student must have an understanding of his or her potential before feeling comfortable in a gifted-education setting.

The second factor is comprised mostly of items such as "I find my gifted program fun and rewarding," "I enjoy going to the gifted classroom," and "My gifted program is geared toward my strengths and weaknesses." These items seem to be related to the positive aspects of gifted programming in the school. This factor is reflected in the literature review (Colangelo, 1988; Ford, 1989; Smidchens, 1989). Again, many students provided valuable feedback during the data collection process. Most students mentioned that they liked special programming but there was not enough available to them. Many students
complained that they received little or no programming. Often the programs were enrichment with emphasis on reading or math, or limited one-class acceleration, typically in math. Gifted students seem to crave different activities in a variety of subjects to peak their interests.

Public Law 94-142 states that each student has the right to a "free, appropriate, public education." For students who are having learning difficulties, this law has provided for them. But gifted students, whose needs are not being met in the regular education classroom alone, are practically forgotten. The needs of many gifted students are not met in the regular classroom. What some of these students are being taught is not challenging or appropriate. This is why gifted programming is important.

The third factor contains items which reflect the negative aspects pertaining to the gifted label, many of which are social in nature. Some of the items which loaded on this factor include "Other students make fun of me if I volunteer to answer questions too often," "Other students make fun of me because I am gifted," and "I don't really fit in with the other kids at school." Researchers claim that students can feel uncomfortable being recognized as gifted (Ford, 1989; Kerr, 1988; Robinson, 1989, 1990), they might have misgivings concerning participation in special programming (Ford, 1989), teachers' expectations and attitudes toward gifted education can be a source of stress (Ford, 1978, 1988; Karnes & Oehler-Stinnet, 1986), and pressure from family members can effect how a student perceives his or her giftedness, especially parents (Colangelo,
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1988; Colangelo & Brower, 1987; Cornell, 1983; 1989; Cornell & Grossberg, 1989). Negative social aspects of the gifted label are also present in the literature review (Ford, 1989; Kerr, Colangelo & Gaeth, 1988; Luftig et al., 1990).

One high-loading item did not seem to fit with this interpretation: "I would rather take a zero for a grade than get a C." This item was originally written to reflect perfectionism. It does, however, relate to the negative social aspect of the third factor. Many students view their grades as a sort of "social status symbol." Students who receive higher grades are often reinforced by the teacher and looked upon more favorably by their peers.

The final factor that emerged from the factor analysis contains items that relate to academic performance pressure. It contains items such as "I feel a lot of pressure to perform well all of the time," "My peers expect me to do most of the work in a cooperative learning group," and "I feel pressure to perform academically." These items express aspects of academic concerns, (Ford, 1978, 1988; Karnes & Oehler-Stinnet, 1986) as well as perfectionism (Colangelo et al., 1991; Schmitz et al., 1985). Many students commented, during the data collection, that they placed themselves under a lot of pressure to perform well all of the time.

This factor appears to be somewhat weak due to the limited number of items that loaded on it during the factor analysis. Because of the prevalence of the comments concerning excessive academic pressure that gifted students have mentioned during data collection and on previous occasions, this factor
appears to be very relevant to gifted students. Therefore, more items will be written to reflect pressure to perform when the second factor analysis is undertaken, with the expectation that more items will load on the factor.

While social, academic, and labeling issues loaded highly during the factor analysis, perfectionism and multipotentiality did not load highly on any factor. Items written with perfectionism in mind did load, to a limited extent, on factors three and four. But there was not a factor which expressed perfectionism or multipotentiality overall. This could be due to not enough items written to express these two constructs, or possibly there were not enough subjects in the sample. The issue of perfectionism was mentioned several times by gifted students during data collection. It is surprising that a factor reflecting perfectionism did not emerge. Multipotentiality was not mentioned as often, and does not appear to be as important an issue with the students involved in this research.

It was hypothesized that the items developed based on the review of the literature would cluster around factors such as labeling, social and education issues, as well as multipotentiality and perfectionism. Some of these issues manifested themselves in the factors which did emerge, while others did not. Perhaps a greater number of items and a larger sample size would have changed the complexion of the factors which resulted.

The second set of data analyzed was comprised of responses on items 99-228, which were measures of coping affect, behaviors and cognitions. Four factors emerged following the factor analysis. Coping is important to examine
because it is part of the stress model outlined in the review of the literature.

Coping skills can determine the level of stress that a student feels. If the student has the resources to effectively cope with a stressful event that occurs in his or her life, then the perception of stress is likely to be reduced.

The first factor had high loadings with items such as "I am a member of a team, group or club," "I participate in social activities," and "I have friends who I can talk to." This factor seems to contain items which look at the student's social support and external resources that aid in coping. The items with the highest loadings are social in nature, but several other items that loaded on this factor have a different theme. Some examples of these items include "I know how to relax," "I am in good shape," and "I can relax my muscles when I get upset." All of these items loaded on the first factor but are not social in nature. They are more reflective of physiological responses to stress. It is not clear why these different sets of items loaded on the same factor. Perhaps if the factor items were factor analyzed by themselves they would separate into two different factors. The two constructs could be related in that the more physiologically relaxed the student is, the more social resources he or she has available. For example, a person who appears more comfortable or relaxed is generally easier to talk to and socialize with. This could be one of the factors that aids a person in building social support and resources.

When the gifted students who participated in this study mentioned coping strategies, the most common response was to talk with somebody. The general
consensus pointed in the same direction as the factor analysis: when students have a problem, they turn to friends, family, or anybody who will listen or offer assistance.

The second factor contains items that described coping behaviors, actions that students could take to help alleviate a stressful situation. Some of the higher loading items include "I have good school habits," "I am well-organized," and "I am willing to admit when I am wrong." This factor is important because it reflects not just ideas, attitudes or cognitions. It represents the action that a student can take in order to cope with a stressful event that is occurring. Items which load on this factor are mainly observable behaviors which can be adapted more readily than feelings or cognitions.

The third factor contains items that are related to problem solving skills. These include "I believe that I can find a solution to most problems that bother me," "I have confidence in my abilities," and "when things don't go my way I look for a solution." Because this factor pertains to such a cognitive construct, many gifted students have the advantage in this area. Gifted students often possess good problem solving skills.

The final factor is comprised of items which reflect positive self statements that the student makes concerning himself or herself. These include "It is okay to feel good about myself," "I can encourage myself when things are hard," and "I have a sense of humor." This was the weakest factor that was produced with only five items loading strongly enough to keep. One of the items, "I realize that"
other people often think differently than I do," could be construed as being a
positive self statement. It seems more related to a student's ability to
compromise and understand that others might have a different point of view.
During the next factor analysis, more items will be added which will reflect the
construct of positive self-statements.

It is important to keep this factor because it represents the affective side of
coping. Positive statements about one's self gives clues concerning the strength
of the self-concept. Positive self-statements also provide a method for
reinforcing and building the self concept and allowing the person to feel good
about himself or herself.

The four factors together cover a wide range of coping ability. The first factor
looks at external resources and social support. The second factor represents
actions, and is very behavioral. The third is more cognitive in nature and deals
with problem solving skills. With its emphasis on positive self statements, the
fourth factor is more affective in nature. All four factors together examine the
entire spectrum of coping ability.

The limitations of this research are mainly in the area of sample size and
location. To provide adequate numbers of subjects to perform a factor analysis
on the amount of items which were contained on the instrument, a larger sample
size was needed. Some of the items probably did not load onto factors because
there simply were not enough subjects in the study. The sample that was used
was localized in the central and Western sections of Illinois. A more expanded sample would have been more appropriate.

In the development of a stress inventory which looks at factors that are more prevalent to gifted students, this study was useful for several reasons. First, it was essential for the design of test items. All of the items that will eventually be part of the stress inventory were gleaned from the literature review that preceded the study. Through factor analysis, the items which did not load on a factor were excluded. This removed ambiguous items, or items which were not reflective of the main constructs. This also reduced the number of potential items to a more reasonable amount.

The four factors which emerged contained items with high factor loadings and very few items which loaded on more than one factor. Such concise factors for each group of data gives evidence that some of the constructs discussed in the literature review do statistically and theoretically exist. These factors could be eventually used as subtests as part of a stress inventory. Clear and precise factors would aid in test interpretation.

The combination of stressful events and coping ability factors is a valuable aspect of this research. An instrument based on these items could not only identify stressful factors in a student's life, it could also assess coping resources that the child might possess. This information could be used to help design an intervention for a student who is experiencing difficulty with stress.
More research is necessary before the stress inventory for gifted students is ready for use. Another factor analysis needs to be performed with a less-regional sample. This would allow for cross-validation with another sample which would provide evidence for the stability of the factor structure that emerged in this study. Perfectionism, multipotentiality, and other constructs which appeared to be well supported in the literature review were not reflected as factors in the factor analysis. Some of the factors which did not emerge might develop if more items were written for them.
References


### Table 1

**Factor Loadings for Items Assessing Stress**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>29. My teachers have told me that I am very smart or gifted.</td>
<td>0.81399</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28. My parents have told me that I am very smart or gifted.</td>
<td>0.80574</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I know that I am gifted.</td>
<td>0.80220</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. I feel proud of the fact that I am gifted.</td>
<td>0.76267</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31. It was very important to me to get into the gifted program.</td>
<td>0.75552</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32. It was very important to my parents that I get into the gifted program.</td>
<td>0.67684</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. In my school, intelligence and learning are valued and rewarded.</td>
<td>0.64441</td>
<td>0.35934</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35. I am not as smart as my parents and teachers think I am.</td>
<td>0.52239</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. It is hard to live up to the expectations of my teachers.</td>
<td>0.44350</td>
<td>0.41173</td>
<td>0.35961</td>
<td></td>
</tr>
<tr>
<td>76. I get to work on things that I enjoy in the gifted program.</td>
<td></td>
<td>0.81847</td>
<td></td>
<td></td>
</tr>
<tr>
<td>77. I get to work on academic skills at my level in the gifted program.</td>
<td></td>
<td>0.81477</td>
<td></td>
<td></td>
</tr>
<tr>
<td>73. I find my gifted program fun and rewarding.</td>
<td>0.79321</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74. I enjoy going to the gifted classroom.</td>
<td>0.77318</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>78. My gifted program is geared toward my strengths and weaknesses.</td>
<td>0.72623</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>75. I like the creative projects in the gifted program.</td>
<td></td>
<td>0.69147</td>
<td></td>
<td></td>
</tr>
<tr>
<td>96. I feel comfortable participating in the gifted program.</td>
<td></td>
<td>0.63076</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The gifted program that is available to me suits my needs and abilities.</td>
<td>0.34289</td>
<td>0.56595</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. My parents understand my strengths and weaknesses.</td>
<td></td>
<td></td>
<td>0.41763</td>
<td></td>
</tr>
<tr>
<td>56. People treat me differently after they find out that I am gifted</td>
<td></td>
<td></td>
<td></td>
<td>0.75278</td>
</tr>
<tr>
<td>54. Other students make fun of me because I am gifted.</td>
<td></td>
<td></td>
<td></td>
<td>0.74660</td>
</tr>
<tr>
<td>71. I would rather take a zero for a grade than get a C.</td>
<td></td>
<td></td>
<td></td>
<td>0.70742</td>
</tr>
<tr>
<td>20. Other students don't like for me to ask too many questions.</td>
<td></td>
<td></td>
<td></td>
<td>0.62690</td>
</tr>
<tr>
<td>23. Other students pick on me when I leave or return from special programming outside of the regular classroom.</td>
<td>0.47416</td>
<td>0.61343</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Other students make fun of me if I volunteer to answer questions too often.</td>
<td></td>
<td></td>
<td></td>
<td>0.61251</td>
</tr>
<tr>
<td>55. I don't really fit in with most of the kids at school.</td>
<td></td>
<td></td>
<td></td>
<td>0.60855</td>
</tr>
<tr>
<td>61. I feel a lot of pressure to perform well all of the time.</td>
<td></td>
<td></td>
<td></td>
<td>0.75438</td>
</tr>
<tr>
<td>62. I put myself under a lot of pressure to perform well all of the time.</td>
<td></td>
<td></td>
<td></td>
<td>0.72874</td>
</tr>
<tr>
<td>1. I feel pressure to perform academically.</td>
<td></td>
<td></td>
<td></td>
<td>0.67534</td>
</tr>
<tr>
<td>Item</td>
<td>Factor 1</td>
<td>Factor 2</td>
<td>Factor 3</td>
<td>Factor 4</td>
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<tr>
<td>----------------------------------------------------------------------</td>
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</tr>
<tr>
<td>206. I have enough friends.</td>
<td>0.79271</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>204. I participate in social activities.</td>
<td>0.78419</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>203. I am a member of a team, group, or club.</td>
<td>0.76748</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>205. I have friends who I can talk to.</td>
<td>0.75271</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>220. I like to get support from others when I need it.</td>
<td>0.73856</td>
<td>0.35090</td>
<td></td>
<td></td>
</tr>
<tr>
<td>221. I have close relationships with others.</td>
<td>0.73648</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>207. I have a best friend.</td>
<td>0.72095</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200. I have hobbies and activities that I enjoy.</td>
<td>0.71710</td>
<td>0.38273</td>
<td></td>
<td></td>
</tr>
<tr>
<td>202. I enjoy participating in sports.</td>
<td>0.70980</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>210. I get a lot of support from home.</td>
<td>0.70709</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>201. I have interests outside of school.</td>
<td>0.68009</td>
<td>0.38618</td>
<td></td>
<td></td>
</tr>
<tr>
<td>209. I have other family members who I can talk to.</td>
<td>0.67638</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>223. I can say positive things to others without being embarrassed.</td>
<td>0.67604</td>
<td>0.32981</td>
<td></td>
<td></td>
</tr>
<tr>
<td>211. My family thinks well of me.</td>
<td>0.67078</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>216. School is important to me.</td>
<td>0.66919</td>
<td>0.30373</td>
<td></td>
<td></td>
</tr>
<tr>
<td>222. I can tell when someone is worthy of my trust.</td>
<td>0.65462</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>208. I can talk to my parents.</td>
<td>0.62869</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>217. Success at school helps me deal with other things.</td>
<td>0.62498</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>227. I can tell when I get tense.</td>
<td>0.59395</td>
<td>0.35752</td>
<td></td>
<td></td>
</tr>
<tr>
<td>228. I can relax my muscles when I get upset.</td>
<td>0.58782</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>215. Church is an important support for me.</td>
<td>0.58686</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>218. Work helps me deal with things.</td>
<td>0.57442</td>
<td>0.31004</td>
<td></td>
<td></td>
</tr>
<tr>
<td>226. I know how to relax.</td>
<td>0.57201</td>
<td>0.32812</td>
<td></td>
<td></td>
</tr>
<tr>
<td>219. I like to focus on the solution to a problem rather than getting upset.</td>
<td>0.56969</td>
<td>0.42735</td>
<td></td>
<td></td>
</tr>
<tr>
<td>185. I am in good shape.</td>
<td>0.56592</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>213. I have a pet who comforts me.</td>
<td>0.47725</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>169. I have good school habits.</td>
<td>0.6292</td>
<td>0.31388</td>
<td></td>
<td></td>
</tr>
<tr>
<td>179. It is important to follow rules and laws.</td>
<td>0.36235</td>
<td>0.62475</td>
<td></td>
<td></td>
</tr>
<tr>
<td>176. I don't mind following my teachers' instructions.</td>
<td>0.61862</td>
<td>0.34621</td>
<td></td>
<td></td>
</tr>
<tr>
<td>170. I am well-organized.</td>
<td>0.6155</td>
<td>0.34847</td>
<td></td>
<td></td>
</tr>
<tr>
<td>178. I don't get upset when I have to listen to someone in authority.</td>
<td>0.61006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>132. I am a good listener.</td>
<td>0.5997</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>134. I am willing to forgive others.</td>
<td>0.53904</td>
<td>0.31097</td>
<td></td>
<td></td>
</tr>
<tr>
<td>147. I like to plan ahead.</td>
<td>0.52926</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>177. I understand why I should listen to my parents.</td>
<td>0.51673</td>
<td>0.31494</td>
<td></td>
<td></td>
</tr>
<tr>
<td>124. When I have a problem, I like to try to work it out.</td>
<td>0.64136</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>109. I have confidence in my abilities.</td>
<td>0.62947</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2 Cont...

<table>
<thead>
<tr>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>108.</td>
<td>I believe that I can find a solution to most problems that bother me.</td>
<td>0.61474</td>
<td></td>
</tr>
<tr>
<td>111.</td>
<td>When things don't go my way, I look for a solution.</td>
<td>0.59820</td>
<td></td>
</tr>
<tr>
<td>128.</td>
<td>I can usually think of several solutions to problems I might have.</td>
<td>0.57336</td>
<td></td>
</tr>
<tr>
<td>123.</td>
<td>I can usually handle frustrating situations.</td>
<td>0.57051</td>
<td></td>
</tr>
<tr>
<td>125.</td>
<td>I can usually reach a compromise with other people.</td>
<td>0.52778</td>
<td></td>
</tr>
<tr>
<td>120.</td>
<td>I can tell whether or not I have control over something.</td>
<td>0.51239</td>
<td></td>
</tr>
<tr>
<td>175.</td>
<td>It is okay to feel good about myself.</td>
<td>0.31241</td>
<td>0.6546</td>
</tr>
<tr>
<td>151.</td>
<td>I realize that other people often think differently about things than I do.</td>
<td></td>
<td>0.52611</td>
</tr>
<tr>
<td>172.</td>
<td>I have a sense of humor.</td>
<td></td>
<td>0.52456</td>
</tr>
<tr>
<td>155.</td>
<td>I can encourage myself when things are hard.</td>
<td>0.36612</td>
<td>0.48079</td>
</tr>
<tr>
<td>174.</td>
<td>I don't feel guilty when things are going my way.</td>
<td></td>
<td>0.46868</td>
</tr>
</tbody>
</table>
Dear Parent or Participant,

I am a graduate student with Eastern Illinois University. I am finishing my final year of study as an intern at Madison County Region II Special Education Cooperative in Edwardsville, IL. One of the requirements that I must fulfill before graduation is the completion of a specialist level thesis. My thesis research deals with the unique stressors that are associated with gifted students.

After looking at many of the stress inventories that are currently available, I realized that none of them dealt with the issues that gifted students often face. Multipotentiality is one issue. This can occur when the student has so many areas of interest he or she has difficulty focusing on just one or two. Perfectionism is another. This is when a student has expectations or standards for himself or herself that are too high or too rigid. Other issues include: programming, labeling, and socialization.

The first step in my research was to look at all of the information that has been published concerning gifted students and stress. Once this was complete, all of the factors that were mentioned in the research were used to develop items which could be included in a stress inventory designed for gifted students. This inventory could be used to help determine the level of stress that a gifted student is experiencing and what specific areas (academic, social, etc.) are of most concern to him or her. The list of items will be administered to gifted students in the area. Finally, a factor analysis will be performed on the resulting data. This will provide a good idea of which items are worth keeping and which items to throw out. It is my goal that these items will eventually be incorporated into a stress inventory for gifted students.

I appreciate your help. If you have any questions or are interested in the results of this research, contact me at the above address.

Sincerely,

David Kinkade  
Intern Psychologist  
(618) 656-7404
INSTRUCTIONS
READ THIS BEFORE BEGINNING!

Answer the questions on the data sheet. If you are not sure of the answer, take your best shot and then move on to the next question.

When you have completed the data sheet, turn to the first item on the next page and begin work there. All that you have to do is circle the number that best represents how you feel about the statement. Remember: 1 always means "Almost Never," while 5 means "Almost Always." Circle only one number per item.

Do not spend a lot of time thinking about your answer. Try to go with your first response.
DATA SHEET

Name: ________________________________

Date of Birth: ________________________________

Grade: ________________________________

School: ________________________________

Teacher's Name: ________________________________

Type of gifted program: (circle one)
- Pull-Out Program
- Enrichment
- Acceleration
- Self-Contained
- Other

When were you identified as gifted?

Do you have any brothers or sisters? If yes, how many and what are their ages?

Mother's educational level: (circle one)
- High School/GED
- Some College Courses
- Undergraduate Degree
- Graduate Degree

Mother's occupation, (Where does she work, what does she do?)

Father's educational level: (circle one)
- High School/GED
- Some College Courses
- Undergraduate Degree
- Graduate Degree

Father's Occupation, (Where does he work, what does he do?)
I feel pressure to perform academically.
Teachers are willing to modify my schedule or curriculum to meet my intellectual and academic needs.
I am given too much boring, repetitive work.
I am asked to tutor peers.
The gifted program that is available to me, suits my needs and abilities.
My teachers encourage creativity.
In a cooperative learning group, I end up doing most of the work.
I feel that the schools are indifferent to my intellectual and academic needs.
My teachers are willing to accept more than one answer or solution to a problem.
My teachers like students to display their knowledge and intelligence.
My peers expect me to do most of the work in a cooperative learning group.
My teachers allow students to come up with their own ideas for projects.
I finish my classwork before everyone else and I am left with nothing to do.
I am expected to make up work in the regular classroom after participating in academic programs outside of class.
I miss getting to participate in activities in the regular classroom while I am in programming outside of class.
At school, I am more likely to hear criticism for my weaknesses instead of praise for my strengths.
My teachers don't mind being corrected if they are wrong.
Competition is encouraged among the students.
Other students make fun of me if I volunteer to answer questions too often.
Other students don't like for me to ask too many questions.
Other students don't mind if I have the right answer all of the time.
In class, other students are interested in issues that I want to discuss.
Other students pick on me when I leave or return from special programming outside of the regular classroom.
In my school, intelligence and learning are valued and rewarded.
There are enough activities and clubs for smart kids at our school.
In our classroom, all students learn the same material at the same time.
In our school, students are put into groups based on ability.
My parents have told me that I am very smart or gifted.
My teachers have told me that I am very smart or gifted.
I know that I am gifted.
It was very important to me to get into the gifted program.
It was very important to my parents that I get into the gifted program.
I feel proud of the fact that I am gifted.
I don't really feel that I am gifted.
I am not as smart as my parents and teachers think I am.
It is hard to live up to the expectations of my parents.
It is hard to live up to the expectations of my teachers.
Appendix A Contd.

My parents understand my strengths and weaknesses.
My teachers understand my strengths and weaknesses.
My parents expect me to be great at everything.
My teachers expect me to be great at everything.
My parents understand when I don't do everything perfectly.
My teachers treat all gifted students as if they should be good at everything.
My teachers know that some gifted students are good at one thing, and some at another.
The work in my class is not too easy or too hard, it is just right.
I am given work at my level.
The classwork at my school is boring.
The work that I am expected to do is so easy I don't want to do it.
Even when I already know something, I am expected to complete all of the work at that level.
I am allowed to work through the schoolwork at my own pace.
I am encouraged to do my work as quickly as I can.
I am allowed to do something that I enjoy if I finish my classwork before the other students.
Other students don't mind that I am gifted.
Other students make fun of me because I am gifted.
I don't really fit in with most of the kids at school.
People treat me differently after they found out that I am gifted.
Being gifted is okay at my school.
My parents and teachers expect me to make all A's.
My brothers and/or sisters don't mind that I am gifted.
My brothers and/or sisters think that I am treated differently because I am gifted.
I feel a lot of pressure to perform well all of the time.
I put myself under a lot of pressure to perform well all of the time.
Grades mean everything to me.
Getting less than an A is okay.
I don't get upset if something is hard for me to do.
I think that I should be good at everything.
Being average at some things is okay.
I want to be perfect at everything I try.
The worst thing that could happen would be to fail a grade in school.
Making a C is acceptable.
I would rather take a zero for a grade than get a C.
I get extra chores to do, like grading papers or helping another student, when I am finished with my classwork.
I find my gifted program fun and rewarding.
I enjoy going to the gifted classroom.
I like the creative projects in the gifted program.
I get to work on things that I enjoy in the gifted program.
I get to work on academic skills at my level in the gifted program.
My gifted program is geared toward my strengths and weaknesses.
I would rather have advanced work in the regular classroom than be pulled out for enrichment activities.
I enjoy doing extra projects at school.
I like to be given harder work that challenges me.
It is up to me to learn more about things that interest me.
I feel that I should find academic materials that challenge me in the library.
I ask for more difficult work if I am bored with what the rest of the class is doing.
I am patient with people who are not as smart as I am.
I do not like working with people who do not think as fast as I do.
I feel guilty when other students have to work much harder than I do.
I sometimes feel guilty when I earn rewards for a project that did not require much effort.
Being smart means that you shouldn't have to work hard at things.
If I have to study hard in a subject, I don't feel that I am gifted in that area.
I enjoy explaining things that I understand to other people.
I understand that the teacher has to meet the needs of a variety of ability levels in the classroom.
It is okay that the teacher has to attend to average and below average students.
It is okay if I miss a couple of days of school if I have a good reason.
My teachers support the gifted program.
I feel comfortable participating in the gifted program.
My teachers say nice things about the gifted program.
My teachers are interested in the work that I do in the gifted program.
I have definite goals for my life.
I know which career I want to pursue.
I feel overwhelmed when I think about the decisions that I will have to make in the future.
I make decisions and stick with them.
There are so many things that I want to do in life, I am afraid that I won't be able to do them all.
I can make positive changes in my environment.
I am able to make decisions concerning my life.
My parents make almost all of my decisions for me.
I have a lot of choices in life.
I believe that I can find a solution to most problems that bother me.
I have confidence in my abilities.
I take responsibility for my mistakes.
When things don't go my way, I look for a solution.
I don't mind studying and working hard even if other kids make fun of me.
Appendix A Contd.

6. I am not affected by peer pressure.
7. I do what I think is right even if my friends don't agree.
8. I am able to recognize when I am sad, mad, frustrated, etc..
9. I am able to express my feelings to others appropriately.
10. I can tell other people how I feel.
11. I can understand other peoples perspective.
12. I can usually tell what other people are thinking.
13. I can tell whether or not I can have control over something.
14. If I don't have control over a situation, I can usually tell.
15. I like to feel that I am in control most of the time.
16. I can usually handle frustrating situations.
17. When I have a problem, I like to try to work it out.
18. I can usually reach a compromise with other people.
19. I can tolerate people who are different from me.
20. I am willing to negotiate when I disagree with someone.
21. I can usually think of several solutions to problems I might have.
22. There is more than one way to solve most problems.
23. I can stick up for myself when I need to.
24. I am willing to admit when I am wrong.
25. I am a good listener.
26. I learn from my mistakes.
27. I am willing to forgive others.
28. I try to treat other people fairly.
29. I don't mind asking for help when I need to.
30. I usually approach things with a positive attitude.
31. I am able to control myself when things don't go my way.
32. I don't get upset easily.
33. I don't let small things bother me.
34. I know when to fight for something and when to let things go.
35. I make sure that I have a lot of information before I make a decision.
36. I think about the consequences before I do something.
37. I think about the future before I decide what to do now.
38. I think before I act.
39. I am good at figuring out what the problem is before I try to decide what to do.
40. I like to plan ahead.
41. I like to figure out how to make things better.
42. I can examine my own thoughts to see if I am thinking right about things.
43. I like to play "what if..." in my mind.
44. I realize that other people often think differently about things than I do.
45. I like to think positively.
46. I can usually talk myself into thinking that things will be alright.
47. When things are tough, I say negative things to myself.

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I can encourage myself when things are hard.
I get so upset about things that I can't see straight.
When things are tough, I like to help those who have it even tougher.
I understand that I am lucky to live in a country with so many opportunities.
Even when things are hard, I know that I have it a lot better than many people in this world.
I can handle frustration pretty well.
I get upset when people criticize me.
I can't handle rejection.
What other people say can make or break my day.
I don't mind being alone.
I like to be by myself to think.
I have a calm philosophy of life.
My spirituality helps me get through things.
Religion is a source of strength for me.
I have good school habits.
I am well-organized.
I can put off fun today for long-term goals.
I have a sense of humor.
I can laugh at myself.
I don't feel guilty when things are going my way.
It is okay to feel good about myself.
I don't mind following my teachers instructions.
I understand why I should listen to my parents.
I don't get upset when I have to listen to someone in authority.
It is important to follow rules and laws.
I can usually figure out how I am supposed to behave in certain situations.
I make sure that I get enough sleep.
Most nights, I don't sleep well.
I have a good diet.
I get plenty of exercise.
I am in good shape.
I don't miss school very often due to illness.
I smoke cigarettes on a regular basis.
I drink on a regular basis.
I have tried illegal drugs.
When things go wrong, I just try not to think about it.
I avoid thinking about things that bother me.
If something is stressful, I will just stop doing it.
avoid doing things that cause me stress.
When something goes wrong, I think about all of the other things that could go wrong.
I don't have unreasonable fears.
When something is scary, I make it seem even worse.

I'm not afraid when it is not a good idea to be afraid.

I get upset when I don't get my way.

I tell the truth even if I will get in trouble for it.

I have hobbies and activities that I enjoy.

I have interests outside of school.

I enjoy participating in sports.

I am a member of a team, group, or club.

I participate in social activities.

I have friends who I can talk to.

I have enough friends.

I have a best friend.

I can talk to my parents.

I have other family members who I can talk to.

I get a lot of support from home.

My family thinks well of me.

I have a teacher or a counselor who I can talk to.

I have a pet who comforts me.

There is someone at my church who I can talk to.

Church is an important support for me.

School is important to me.

Success at school helps me deal with other things.

Work helps me deal with things.

I like to focus on the solution to a problem rather than getting upset.

I like to get support from others when I need it.

I have close relationships with others.

I can tell when someone is worthy of my trust.

I can say positive things to others without being embarrassed.

I feel that I am in control of what happens in my life.

I don't usually blame other people when things go wrong.

I know how to relax.

I can tell when I get tense.

I can relax my muscles when I get upset.