Anxiety in Gifted Female Students in the Kingdom of Saudi Arabia
Abdullah Aljughaiman and Mei Tan

Abstract
This study seeks to identify the extent of anxiety among gifted girls in Saudi Arabia and, further, to determine whether differences in anxiety levels exist according to grade. The study sample consisted of 66 female 6th and 7th graders, 11 to 14 years old, attending public school enrichment programs for gifted students in Jeddah Province, Saudi Arabia. The author assessed levels of anxiety among gifted students to ascertain whether these levels were above the average levels of anxiety as defined by the scale used. Differences were examined according to grade level using a t-test. The findings indicate that levels of anxiety in gifted girls are higher than the average defined by the scale. Furthermore, results of the study indicate that levels of anxiety in gifted girls tend to be higher in earlier grades, i.e., the degree of anxiety in gifted 6th grade girls is higher than that of gifted 7th graders.

Keywords: Gifted, gifted girls, emotional needs, anxiety, anxiety and giftedness, gifted programs.

Introduction
The intellectual, psychological, and social needs of gifted students often differ from the needs of their chronological peers (Alnafei, 2001; Renzulli, 1992; Whitmore, 1980; Whitmore & Maker, 1985). This category of students therefore requires attention carefully tailored to those needs. Without this attention, potentially detrimental outcomes may result, not just for gifted students but for society at large—present and future (Davis & Rimm, 2004).

Care for the gifted amounts to more than merely aiding in the development of intellectual and educational ability. It also involves providing access to various advisory, social, and psychological services. Experts in the field consider this sort of attention foundational to positive intellectual growth and the means by which gifted individuals are most enabled to utilize their capabilities and energies constructively for their own good as well as for the good of society (Silverman, 2000).

One intriguing aspect of gifted is that their high intellectual ability frequently conceals the various psychological problems to which they are prone. This can be misleading to parents and educators who may conclude that gifted students enjoy a high measure of psychological health and that therapeutic interventions are unnecessary (Rimm, 1995).

One such psychological problem suffered by gifted students is a relatively high measure of anxiety. Anxiety in gifted individuals appears to spring from many factors primarily rooted in their distinguished intellectual abilities, e.g., attempts to compete with other students in order to remain at the top, desire to fulfill aspirations others have for them, a persistent inclination towards self-achievement, and a love of impressing others with their accomplishments. Above all, there are the various extrinsic pressures to excel in many activities and in many fields.

In investigating the concept of anxiety, it is evident that the presence of one or more of its symptoms, whether moderate or acute, to some degree inhibits full interaction with, or fosters maladjustment to, society (Okasha, 1992; Mosa, 2001). A child possessed of superior intellectual abilities is vulnerable to particular problems that may ultimately lead to his or her experiencing some symptoms of anxiety (Davis & Rimm, 2004).

The present study attempts to gain some understanding of the levels of anxiety in gifted children by looking at levels of anxiety in a sample of gifted girls in the Kingdom of Saudi Arabia. The study attempts to shed light on the following important issues: The extent to which anxiety exists in gifted female students in the Kingdom of Saudi Arabia, and how they compare to the average levels of anxiety indicated by the scale used; and how these levels of anxiety relate to educational stage.

These issues are of special interest to teachers and advisors working with gifted students in the schools as they underline the importance of providing gifted students with appropriate remedial,
Many studies (Dobson, 1985; Fisher, 1996; Horwitz, 1986; Ma, 1999; Maclntyre, & Gardner, 1991; Onwuegbuzie, 1998) have dealt with the relationship between anxiety and other variables (e.g. anxiety and depression, language anxiety, math anxiety). A few studies examining gifted students and their attributes have mentioned their potential psychological difficulties (Brown, 1993; Delisle, 1992; Silverman, 2000). However, no studies focusing specifically on the issue of anxiety in gifted students have received proper attention in the KSA.

According to Brown (1993), who analyzed issues considered most significant when giving psychological guidance to gifted students, the gifted population can be characterized by advantageous and disadvantageous attributes. She began by characterizing the gifted student according to the various definitions associated with "giftedness." For example, their mental ages are higher than their chronological ages; they are distinguished academically; they learn easily; they have a talent or a group of special talents in addition to other abilities; they are more comprehensively aware; and they have a broader cultural knowledge than most average students. Brown (1993) then recommended that gifted programs of any kind should pay particular attention to study skills, effective time management, and issues related to tension and anxiety. Delisle (1992) and Silverman (2000) list the challenges and difficulties gifted individuals face and that may aggravate potential psychological problems. Anxiety is typical but may be accompanied by social difficulties such as dissociation from friends, adjustment pressures, concealment of skillfulness or distinction for the sake of obtaining peer acceptance, difficulty accepting criticism, resistance to authority and prevailing modes of acceptable behavior, vulnerability to low levels of mental challenge, rejection of routine and repetitive tasks, severe competition, poor study habits, depression and disappointment in the face of daily life.

A review of a handful of studies comparing some specific psychological issues of gifted versus non-gifted individuals (i.e. anxiety, depression, negative self-concept), however, reflects mixed results. In the United States, Beer (1991) studied depression, anxiety, exam anxiety and rigidity in gifted high school students in Kansas. The sample consisted of 27 gifted students ranging from 12 to 18 years. In this study, the degree of depression suffered by the gifted girls was found to be less than average and they scored almost average in the anxiety scales.

Also in the United States, Merrell, Gill, McFarland, & McFarland (1996) compared gifted and normal students using personal symptoms relating to depression, social withdrawal, psychosomatic disorders, and positive and negative emotional disorders as variables. The study sample (N=65), comprised of gifted and non-gifted third through sixth graders, was examined using a list of internal symptoms in addition to an instrument measuring the social and emotional traits in children. Although the study revealed differences between the two groups, i.e., the scores for gifted students were less than for the non-gifted students, these differences were not statistically significant. The discrepancy was attributed to a comparatively elevated sense of competency, credibility, and importance in gifted students.

Two Canadian studies present more negative results. Forsyth (1987) compared gifted children, French Immersion, and regular classes in terms of self-concept, anxiety, and security, using the North York Self Concept Inventory (Educational Research Services, 1971), the State-Trait Anxiety Inventory for Children (Spielberger, Gorsuch, & Lushene, 1970) and the Institute of Child Study Security Test (Grapko, 1957). In this study, gifted students, particularly girls, proved most anxious, had lower self-concepts, and yet felt more secure. Tong & Yewchuk (1996) studied 36 male and female students classified as gifted. After comparing them to a control group of non-gifted students, the researchers found the measure of
Alzahrany (2003) examined problems faced by high gifted students in the Kingdom of Saudi Arabia. The sample consisted of 443 high school students divided into two groups, i.e., those characterized by intelligence and creativity and those who were not. Their ages ranged from 12 to 16 years. One of the most important findings of this study was that students scoring high on intelligence and creativity suffered from psychosomatic problems in addition to those relating to morality, religion, house affairs, studying habits, and uncomfortable career choices after high school. After comparing highly creative students to those with lower levels, it was found that the highly creative students suffered more than others with regard to the foregoing problems.

Thus, a range of studies conducted internationally looking at the relationships between giftedness and social-emotional indicators of behavior and personality shows somewhat conflicting results. It should be understood, though, that these comparisons can only be made generally as each study incorporated its own conceptualizations of the construct under study, employed different instruments, and worked with different populations.

The Sample

This study sample consisted of 66 female students studying in the Enrichment Program for the Gifted in the schools of General Education in the Governorate of Jeddah, Saudi Arabia. Female students fell into two groups: elementary stage (6th grade) and first year in the middle stage (7th grade). The age group of these students ranged from 11 to 14 years old. Students were selected via the mandated process employed by the Enrichment Program for the Gifted. To enter the program, a pupil has to meet at least three out of five of the following criteria:

a. Advanced academic achievement (above 90%);

b. High levels of cognitive ability as determined by the Wechsler Intelligence Scale for Children-Revised (WISC-R; Wechsler, 1974) (above 120);

c. High academic achievement as measured by the General Aptitudes Scale (Alnafei, 2001)– Group Test - (a scholastic aptitude scale) (above 120);

b. High levels of creative abilities as determined by Torrance’s Tests of Creative Thinking (TTCT) (above 120); and

e. Teachers’ nominations based on Renzulli’s Scales for Rating the Behavioral Characteristics of Superior Students (at least two thirds of the total score of the selected scales).

Since the students who are selected to join the Enrichment Program for the Gifted participate in pullout programs twice a week, after school programs once a week and one weekend morning a week. There is also a four-week intensive summer program. During these programs, students work in groups on projects designed to help them develop and exercise their thinking skills, learning skills and research skills, along with personal skills and attributes such as social skills, self-efficacy, self-confidence, coping skills and leadership. It should be noted that eligibility for involvement in this program commences in the fifth grade.

This study started during the first academic semester of 2006, thus the sample of sixth graders would have received two year of services provided by the Enrichment Program for the Gifted, and the first year of middle school would have received three years of services.

Instrument

The current study used the Scale of Anxiety for Children and Adolescents prepared by Alleili (2005). The scale is calibrated according to the following stages:

Enumeration of the symptoms (responses) of anxiety that have been dealt with in some references such as Zahran (1978), Goodwin (1986), and Hamed (1991). The scale includes four dimensions as follows: the emotional, mental, physical/physiological, and behavioral dimensions. It consists of a 45-item five-point Likert-type scale. After each participant completes the scale, the magnitude of their response is calculated (Maximum=225; Minimum = 45).

A score of 116 is considered the mean for anxiety according to the norms of the scale in its original form; this mean score was
determined using a population in the western part of Saudi Arabia, where Jeddah is located.

**Data analysis**

The basic framework of this study was based on using the t-test to compare between average levels of general anxiety in gifted female students and average levels in the general population of children and adolescents according to the scale of anxiety used in the present study.

The findings pertaining to the level of anxiety in female gifted students in the elementary and middle school stages are summarized in Table 1.

As noted in Table 1, there is a statistically significant difference at p<0.01 in anxiety between gifted female students in the elementary stage and those in the middle school stage, indicating higher levels of anxiety in students at the elementary stage.

The mean score of the performance of the elementary groups was ($M = 149.75$), while that of the middle stage was ($M = 132.36$).

**Table 1**: Differences in Anxiety According to Stage Level.

<table>
<thead>
<tr>
<th>Name of the Group</th>
<th>N</th>
<th>$M$</th>
<th>$SD$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female students of the elementary stage</td>
<td>52</td>
<td>149.75</td>
<td>28.12</td>
<td>2.42**</td>
</tr>
<tr>
<td>Female students of the middle stage</td>
<td>14</td>
<td>132.36</td>
<td>12.80</td>
<td></td>
</tr>
</tbody>
</table>

**t**-scores are statistically significant at $p < .01$ level.

**Conclusions and discussion**

To understand gifted students better, and thereby properly comprehend and serve these students’ needs, it is useful to assess levels of anxiety in this population to ascertain its variance from levels of anxiety in typical students.

Analysis of this study’s data suggests that the average degree of anxiety in each group of gifted females studied is elevated compared with average levels in the general population of children and adolescents described by the tool used, the mean score of which was determined in western Saudi Arabia. This suggests that female gifted students may face particular problems and difficulties that potentially cause them high levels of anxiety.

This finding concurs with other studies (e.g., Tong & Yewchuk, 1996, Delisle, 1992, Silverman, 2000, and Alzahrany, 2003). Accordingly, it is imperative to work further towards defining these problems in order to help female gifted students, either through remediation or prevention, to become more adjusted to society.

Statistically significant differences in anxiety suggest that gifted female students in the elementary grade are likely to experience higher levels of anxiety than their peers in the middle grade. This may be attributed to children’s inclination in this earlier stage towards separatism, the fact that their social circle becomes larger, and their fear of school (Zahran, 1977).

It is also important to note that the average degree of anxiety in female students in 7th grade, although lower than that of students in 6th grade, is still higher than the average levels indicated by the scale. This increase may be attributable generally to the number of pressures operating on gifted female students which maintain higher levels of performance.

The lower levels of anxiety in female students in 7th grade compared with their gifted peers in 6th grade may be attributable to the success of the Enrichment Program for the Gifted in the Schools of General Education. This program is perhaps able to decrease anxiety in the students who benefit from the services for two full consecutive years.

This phenomenon may be closely associated with curricula changes that take place as the children spend more time in the Enrichment Program for the Gifted at school. Another reason for the decrease in levels of anxiety could be the growing maturity of the female students and the development of their ability to adjust socially and psychologically.
In conclusion, the variance in levels of anxiety between gifted girls and the average levels described by the scale used, along with the variance in levels of anxiety between gifted girls of different educational stages, indicates the possible psychological and social effects of being gifted, whether they be a result of identification and labeling, self-imposed performance expectations or expectations imposed by others. This small study makes its contribution as a first step in identifying a situation which may require attention, intervention and remediation so that gifted individuals can be nurtured to achieve their highest potential, in the KSA and elsewhere. Further studies will need to carry this forward.

Recommendations

In view of the findings discussed above, the present study suggests the following:

1. A similar study be conducted using a broader sample of gifted students in different parts of the Kingdom of Saudi Arabia and the Arab world to determine more accurately the extent to which this phenomenon is spread among gifted students in relation to their peers.
2. Further quantitative and qualitative academic studies be conducted to identify possible reasons for the higher levels of anxiety in gifted students compared with those not identified as gifted.
3. Investigative studies be conducted on, a) the psychological health, and b) the psychological, social and advisory needs of the gifted in the Kingdom of Saudi Arabia specifically, and in the Arab world, generally.

References


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