Medication and Counseling Histories of Gifted Students in a Summer Residential Program

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Many gifted students are served through special programming. However, little large-scale information is available regarding the incidence of psychological disorders, medication requirements, and counseling histories in that population. This type of information is important to ensuring the well-being of gifted students, particularly those served through residential programming. This study reports the results of a review of medical information forms for over 1,900 gifted 8th–11th graders participating in a 3-week residential academic programs. Rates of diagnosed psychological disorders, medication prescriptions, and counseling needs are presented. In general, this sample reported low rates of psychological disorders, medication use, and counseling. Results are discussed in terms of program development and program policy issues.

This special issue of The Journal of Secondary and Gifted Education dedicated to counseling of gifted adolescents and young adults underscores the importance of the social/emotional and behavioral characteristics of gifted youth. This issue also speaks to the need of practitioners, such as administrators of gifted programs and teachers of the gifted, to obtain accurate information regarding the social/emotional characteristics of gifted adolescents. This information is important for making staffing and programming decisions, such as deciding whether and what sort of counseling services might be appropriate within a residential or school-based gifted program. The current investigation examined the prevalence of diagnosed mental health concerns and treatments among participants of a university-based summer residential gifted program.

Social/Emotional Functioning of Gifted Students

Research in the area of social/emotional functioning of gifted and talented students stems from the early work of Terman (1925) and Hollingworth (1926). Terman reported that his gifted sample exhibited lower levels of mental illness and adjustment problems and was psychologically and socially more stable than nongifted peers. Conversely, Hollingworth found evidence of social and emotional concerns and interpersonal problems among the gifted sample she studied.

Others have continued to investigate the social/emotional characteristics and accompanying behavioral difficulties of gifted students through research and clinical practice (Colangelo & Assouline, 2000; Cornell, Delcourt, Bland, Goldberg, & Oram, 1994; Gallucci, 1988; Gallucci, Middleton, & Kline, 1999a, 1999b; Garland & Zigler, 1999; Grossberg & Cornell, 1988; Kaufmann & Castellanos, 2000; Nail & Evans, 1997; Oram, Cornell, & Rutemiller, 1995; Parker, 1996; Reynolds & Bradley, 1983). Some authors have described greater vulnerability of gifted students to social/emotional difficulties (Janos & Robinson, 1985; Pfeiffer & Stocking, 2000), while others have suggested that gifted students suffer from social/emotional problems at rates similar to those in the general adolescent population (Coleman & Cross, 2001; Neihart, 1999; Robinson & Noble, 1993; Webb, 1993). Despite evidence to the contrary, gifted students are often subjected to stereotypes and persistent myths about the mental health and social characteristics related to their giftedness, such as the notions that "gifted and talented people tend to be men...
tally unstable” or “gifted and talented people tend to be odd” (Sellin & Birch, as cited in Coleman & Cross, p. 5).

Gifted children and adolescents experience the same developmental stages and developmental tasks as their nongifted peers (Robinson & Noble, 1993; Webb, 1993). They may also experience additional stressors or issues associated with giftedness, including, but not limited to, inappropriate educational programming, asynchronies in development, difficulty in finding compatible friends, identity development, and potential conflicts between balancing acceptance in a social group and fulfillment of academic talent (Colangelo & Assouline, 2000; Coleman & Cross, 2001; Fiedler, 1999; Hebert, Long, & Neumeister, 2001; Meckstroth, 1991; Neihart, 1998; Robinson & Noble).

Parents often try a variety of approaches to obtain appropriate services for their gifted child, including counseling services for the child or family to learn how to manage the concerns specific to giftedness. However, finding a practitioner who specializes in gifted children’s needs may be difficult (Alsop, 1997; Benbow & Stanley, 1996; Lubinski & Benbow, 2000; Moon, Kelly, & Feldhusen, 1997; Pfeiffer, 2001). The mental health provider must be knowledgeable about giftedness to be able to determine if the concern is related to the child’s giftedness or if it is a different sort of problem. Being able to tease apart these issues and the relationships between them is important for treatment, as counseling with families of gifted children sometimes uncovers other family issues that have been subsumed under “giftedness” (Colangelo & Assouline, 2000).

Prevalence of Mental Health Concerns in the General Adolescent Population

The incidence of mental health problems experienced by children and adolescents in the schools is significant (Brown & Sawyer, 1998; Pfeiffer & Reddy, 1998). From 14–22% of children experience developmental, emotional, or behavioral disorders that moderately or severely limit their school or social functioning (Carr, 1999; Mash & Dozois, 1996). Appropriate multimodal treatments for mental health concerns of children and adolescents typically involve some combination of pharmacotherapy, individual or family counseling, and school interventions (Brown, Lee, & Donegan, 1999), although a 1999 report from the Surgeon General indicated that only a small proportion of young people with difficulties receives appropriate mental health services (U.S. Department of Health and Human Services, 1999). Accordingly, only 3% of middle school students and 0.7% of high school students are prescribed medications for psychological disorders (Jensen, Kettle et al., 1999), and less than one-third of children and adolescents with diagnosable mental disorders receive appropriate clinical or counseling services (U.S. Department of Health and Human Services).

In general, attention problems and disruptive disorders (e.g., ADHD, ADD, conduct disorder, oppositional defiant disorder) are the most prevalent concerns for children, with emotional problems (e.g., depression, anxiety) more likely to develop in adolescence (Carr, 1999). Below, we describe the most common disorders experienced by children and adolescents, along with the most frequent methods of treatment for these disorders. These issues are not without controversy. For example, some investigators have examined the identification and treatment of children with emotional and/or behavioral problems in light of socioeconomic status (Brown & Sawyer, 1998; Mash & Dozois, 1996). Our purpose here is to report the approaches commonly taken for these issues, not to evaluate their efficacy or appropriateness.

Attention-Deficit Hyperactivity Disorder (ADHD)

One common disorder experienced by children and adolescents is ADHD. This diagnosis is based on the presence of a persistent pattern of inattention with hyperactivity (ADHD) or without hyperactivity (ADD) at levels significantly higher than that of peers and negatively affecting functioning in two or more settings (American Psychiatric Association, 1994). The prevalence of ADHD in school-aged children is estimated as ranging from 2–6.3%, with boys more commonly diagnosed than girls (American Psychiatric Association; Barkley, 1996, 1998).

Treatment includes pharmacotherapy, parent training for behavior management, and classroom behavior-management techniques, either alone or in combination (Barkley, 1998). Pharmacotherapy includes the use of three classes of psychotropic drugs: stimulants (e.g., methylphenidate, d-amphetamine, and pemoline), antidepressants (e.g., tricyclic antidepressants), and antihypertensives (e.g., clonidine; Barkley; Jensen, Bhatara et al., 1999). A recent study of the treatment of 1,200 children diagnosed with ADHD indicated that 12% of children with ADHD were prescribed medication, and 30% of the sample was receiving counseling (Jensen, Kettle et al., 1999).

Conduct Disorder

Conduct disorder is one of the most frequently diagnosed conditions in late childhood and early adolescence (American Psychiatric Association, 1994; Carr, 1999). This disorder is characterized by a repetitive and persistent pattern of negativistic, hostile, and defiant behavior, which causes impairment in social, academic, or occupational functioning (American
Psychiatric Association). Rates of conduct disorder for children under the age of 18 range from 6–16% for males and 2–9% for females (American Psychiatric Association). Treatment for conduct disorder includes family-based interventions; school-based interventions; skills training to improve social skills, anger management, and interpersonal problems solving; and pharmacological interventions (McMahon & Wells, 1998).

Depression

Depression is an emotional concern that can affect children and adolescents. To meet the diagnostic criteria for major depression, depressive symptoms, including depressed mood, diminished interest or pleasure in activities, suicidal thoughts, feelings of reproach or guilt, diminished ability to concentrate, change in psychomotor activity, sleep disturbance, and change in appetite or weight, must be present for an extended period of time and must negatively affect functioning (American Psychiatric Association, 1994).

The prevalence of depression among children and adolescents ranges from 6–8% (Hammen & Rudolph, 1996). However, many adolescents may experience significant symptoms without meeting the full diagnostic criteria (Kazdin & Marciano, 1998). The incidence of depression is higher among girls than boys, with rates for girls increasing in early to middle adolescence, at around the age of 14 (Hammen & Rudolph). Adolescents with depression often experience other difficulties, including anxiety, conduct disorder, ADHD, and substance abuse (Hammen & Rudolph; Kazdin & Marciano). Treatment for child and adolescent depression includes cognitive-behavioral therapy (CBT), psychotherapy, family therapy, and pharmacotherapy with selective serotonin reuptake inhibitors (SSRIs), monoamine oxidase inhibitors, and tricyclic antidepressants (Kazdin & Marciano; Riddle, Kastelic, & Froesch, 2001).

Anxiety

Anxiety disorders include separation anxiety, social phobia, obsessive-compulsive disorder (OCD), specific phobia, generalized anxiety disorder, panic attack, agoraphobia, and post-traumatic stress disorder (Albano, Chorpita, & Barlow, 1996; American Psychiatric Association, 1994). The diagnosis of anxiety disorder requires fear that is more pervasive and severe than typically experienced by children and is present at levels and frequency that negatively affect functioning (Albano et al.; Barrios & O’Dell, 1998). Prevalence rates for anxiety disorders in children and adolescents range from 9–21% (Albano et al.). Treatment for childhood and adolescent anxiety disorders include systematic desensitization, modeling, contingent management, self-management, and pharmacotherapy with SSRIs and, for some of the anxiety disorders, clomipramine (Barrios & O’Dell; Riddle et al., 2001).

Serving Gifted Learners With Social/Emotional Difficulties

Given the prevalence of mental health concerns in the general adolescent population, there is a strong possibility that a comparable proportion of gifted students might suffer from similar adjustment issues, as well as additional concerns unique to gifted students. Educators need to be aware of these specific issues in order to provide or monitor the identification and treatment of social/emotional concerns and to ensure that educational programs and support services are meeting student needs (Alsop, 1997; Fiedler, 1999). Gifted students with social/emotional distress present particular challenges for school personnel and those serving students through special extracurricular programming. These students must be served with challenging academic materials in a developmentally appropriate setting, a difficult task for any teacher faced with a large group of students with varying levels of abilities, interests, and backgrounds.

For special programs, particularly residential settings, these students’ needs are critical since program staff is responsible for the well-being of children 24 hours a day. Staff provides services for students and cares for them in ways that, in a school-based program, are typically the responsibility of parents. The instructional and residential personnel of these programs must be familiar with the characteristics of normative adolescent development, the manifestations of this development in highly talented young people, and the particular issues involving gifted students with social/emotional difficulties. Staff must receive information about the unique characteristics and needs of students who require additional support without violating privacy standards. Furthermore, these programs must provide for the safe storage and dispensation of medications for both psychological and medical needs.

The issues of the safe handling of medications and provision of psychological services and interventions require, from a program standpoint, significant planning and trained personnel, as well as cooperation with parents. Students’ well-being in special programs can be compromised if a parent chooses not to fully disclose a student’s medication needs. For example, rigorous intellectual programs, although created to be exciting and interesting, require a child’s ability to focus during a long day. Parents who do not realize the intensive intellectual nature of some residential programming for the gifted may discontinue the child’s prescribed stimulant use for the duration of the program, even though that child may have subsequent difficulty attending to classwork during a 7-hour class day.
The Current Study

The major goal of this study was to obtain incidence data about common social/emotional issues from a sample of gifted adolescents. This information is valuable for two reasons. First, the information describes a sample about which there are persistent myths about mental health and social characteristics (Coleman & Cross, 2001), but little systematic, large-scale data (Kaufmann & Castellanos, 2000). Second, information about the rates of clinical diagnoses, prescription of psychotropic medications, and counseling needs will be useful for program officials in designing gifted programs to accommodate the educational and social/emotional concerns of all their participants, including those with special needs. Valid information about the social/emotional concerns of a gifted sample will help those serving gifted students anticipate the needs of their participants.

Method

Participants

Participants were students enrolled in a residential summer enrichment program for academically gifted youth conducted by the Duke University Talent Identification Program (TIP) and held at several university campuses. Students became eligible for this summer program by achieving exceptional scores on a college entrance examination, either the ACT or SAT, taken out of level, generally through the organization’s seventh-grade Talent Search. For example, a seventh grader must achieve a score of at least 500 on the SAT or 20 on the ACT to take a math course through this program; criteria vary with the specific courses. The practice of out-of-level testing using college entrance examinations has been shown to provide a useful and efficient way to identify students with very high academic ability (Lupkowski-Shoplik & Swiatek, 1999; Olszewski-Kubilius, 1998).

Of the 1,928 participants in the 2000 summer program, 50% attended the program at the Duke University campus, 26% at Davidson University, 13% at the University of Kansas, and 11% at Appalachian State University. Seven-hundred seventy-two (40%) were girls and 1,156 (60%) were boys. Among all participants, 1,291 (67%) were Caucasian, 325 (17%) were Asian, 89 (5%) were African American, 85 (4%) were Hispanic, 10 (<1%) were Asian American, and 128 (6%) Other or Not Reported. Their ages ranged from 11 to 17 years of age, with 406 (21%) 16-year-olds, 518 (27%) 15-year-olds, 324 (17%) 14-year-olds, 530 (27%) 13-year-olds, and the remaining 8% of the students younger than 13 or older than 16.

Procedure

As part of registration for the summer program, students submitted a medical history form. Parents typically completed this form, which contained information about current illnesses, allergies, medications prescribed for the student, and emergency information and releases; the form was signed by a physician. Research personnel entered data regarding psychological diagnoses, medication use, and counseling from the medical forms into an Excel spreadsheet. For students with multiple diagnoses, all diagnoses were recorded. Frequencies and percentages of diagnoses, medication use, and counseling histories were calculated.

Analysis and Results

Of the 1,928 students who attended the 2000 summer program, 1,762 (91%) students' files contained medical history forms. Of the 166 whose files did not contain medical history forms, 12 had been sent home early or had seen a physician during the program, and it is likely that the medical forms for these students had not been refilled at the time of this study.

Medication and Diagnoses

Student medical history forms indicated that 467 (27%) of the students with these forms had been prescribed medication at the time of the summer program. The majority of prescribed medication (N = 391) was for the treatment of medical or physical illnesses, acne, and allergies. Of the medical forms reviewed, 76 (4%) included a current prescription for medication to address a psychosocial diagnosis. These 76 medical forms indicated 102 diagnoses and a total of 107 medications for psychological or educational problems. Table 1 includes all of the diagnoses that were reported on the medical forms. The rates of diagnosed conditions reported in Table 1 are consistent with the numbers reported for prevalence rates in the general population (Jensen, Kettle et al., 1999). Table 2 describes the medications prescribed to address these issues. Examples of clinical use were based on information from a Web site providing current mental health information (http://www.mentalhealth.com).

Counseling

Of the 1,762 medical forms, 143 (8%) showed that students were receiving, or had received, counseling services. Counseling was most often indicated for family issues (N = 40; 2.3%) such as dealing with parents' divorce, blended family, adopted sibling, or family counseling; depression (N = 24; 1.4%); and ADD/ADHD (N = 20, 1.1%). Table 3 presents the
Table 1

<table>
<thead>
<tr>
<th>Psychological Diagnoses Indicated on Medical History Forms (N = 1,762)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADD/ADHD</td>
<td>54</td>
<td>3.1</td>
</tr>
<tr>
<td>Depression</td>
<td>26</td>
<td>1.5</td>
</tr>
<tr>
<td>Anxiety</td>
<td>14</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Sleep problems</td>
<td>3</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Enuresis</td>
<td>2</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Tic disorder/Tourette’s syndrome</td>
<td>2</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Eating disorder</td>
<td>1</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Dysgraphia</td>
<td>1</td>
<td>&lt; 0.1</td>
</tr>
</tbody>
</table>

frequency and percentage of the reasons for which students received counseling. Parents did not describe the counseling issues that have been noted as unique for gifted students, such as addressing issues related to advanced cognitive functioning or conflicts between acceptance in a social group versus fulfillment of academic talent. This finding could be related to two different reasons. First, parents may have reported the more critical or overarching reason for counseling, such as depression, without articulating specific issues that may have included “gifted” concerns. Second, since the methodology for this study called for information from parents, we did not collect information from the children involved in counseling or the mental health practitioners themselves, either of whom would have been able to provide a more complete picture of the issues related to counseling.

Discussion

This study was conducted to determine the rates of medical and counseling interventions for psychological disorders for a group of gifted students attending a summer residential enrichment program. The results of the study suggest that a small percentage of gifted students in this program had been diagnosed with psychological issues for which they were receiving or had received medical (4%) or counseling (8%) interventions. Based on the available data, the results of the study did not produce empirical evidence that this group of talented students is particularly vulnerable to social/emotional difficulties that require clinical intervention.

Diagnoses and Treatments

*Psychological disorders.* The most frequently reported diagnoses in this sample of gifted students were ADHD/ADD,

Table 2

<table>
<thead>
<tr>
<th>Frequency of Psychotropic Medications Indicated on Medical History Forms (N = 1,762)</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stimulants (attention and concentration problems, impulsivity, distractibility, emotional lability, narcolepsy)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Methylphenidate (Ritalin)</td>
<td>24</td>
<td>1.4</td>
</tr>
<tr>
<td>Adderall</td>
<td>22</td>
<td>1.2</td>
</tr>
<tr>
<td>Dextroamphetamine (Dexadrine)</td>
<td>8</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Pemoline (Cylert)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Selective serotonin reuptake inhibitors (depressive symptoms, obsessive-compulsive disorder, bulimia nervosa)</td>
<td>2</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Paroxetine (Paxil)</td>
<td>14</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Sertraline (Zoloft)</td>
<td>9</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Fluoxetine (Prozac)</td>
<td>6</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Bupropion (Wellbutrin)</td>
<td>4</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Citalopram Hydrobromide (Celexa)</td>
<td>4</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Fluvoxamine (Luvox)</td>
<td>2</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Nefazodone (Serzone)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Antidepressants (enuresis, depressive symptoms, ADHD symptoms with emotional lability)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Imipramine – Tricyclic antidepressant</td>
<td>2</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>Antihypertensives (agression, Tourette’s disorder, panic attacks, hypertension, oppositional defiant disorder, conduct disorder)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Clonidine</td>
<td>2</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Guanfacine (Tenex)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Antixiolytics, sedatives, hypnotics, benzodiazepines (seizures, anxiety)</td>
<td>3</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Zolpidem Tartrate (Ambien)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Buspironone (BuSpar)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Antidiuretic hormones (enuresis)</td>
<td>2</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Desmopressin acetate (DDAVP)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Antipsychotic (schizophrenia)</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
</tbody>
</table>
Table 3

Reasons for Counseling (N = 1,762)

<table>
<thead>
<tr>
<th>Reason</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>24</td>
<td>1.4</td>
</tr>
<tr>
<td>ADD/ADHD</td>
<td>20</td>
<td>1.1</td>
</tr>
<tr>
<td>Stress and anxiety</td>
<td>14</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Grief counseling</td>
<td>7</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Adjustment</td>
<td>4</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Anger management</td>
<td>3</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Family issues/divorce</td>
<td>40</td>
<td>2.3</td>
</tr>
<tr>
<td>Social</td>
<td>9</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Educational issues</td>
<td>8</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical issues/concerns</td>
<td>4</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Eating disorder</td>
<td>3</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Tourette's syndrome</td>
<td>1</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Reasons for counseling not reported</td>
<td>9</td>
<td>&lt; 1.0</td>
</tr>
<tr>
<td>Total indicating counseling</td>
<td>143</td>
<td>8.0</td>
</tr>
</tbody>
</table>

This study did not uncover evidence of the counseling issues that have been described as unique to gifted students. Because parents completed the medical forms and described the reasons for counseling, we did not have access to the students' descriptions of their counseling experiences or, obviously, the practitioners' reports. If we had asked those more directly involved with the counseling about the reasons for counseling, perhaps we would have learned about the unique manifestations in gifted students of issues of identity, gender-based expectations, vocational planning, and fitting in within the educational context (Colangelo & Assouline, 2000; Coleman & Cross, 2001; Meckstroth, 1991).

We do not know whether our sample experienced these issues. For example, parents who indicated "educational issues" could have been describing underachievement, finding a social niche in school, or a struggle with boredom in classes that lacked sufficient challenge. "Social issues" could have indicated the normative challenges in developing friendships described by some gifted students (Vizzini, 2000) or the severe isolation that besets others (Gross, 1992).

Limitations

Findings from this study are limited in several ways. First, the sample may have particular characteristics that limit the generalizability of these findings. These students were eligible for the summer program by use of a clearly defined, historically sound method: scores achieved on a college entrance examination administered out of level. However, a sample of gifted adolescents chosen using a broader approach (e.g., teacher rating scales, grades) may have been more diverse in terms of the nature of psychological issues experienced. The relevant characteristics of this sample may also have been restricted by the fact that the program was residential; parents may have been hesitant to send their children to such a program if the child had more serious psychological or educational issues.

Other methodological issues limit the study's findings. These data were limited to information contained in existing documents in student files; additional information regarding the participants was not sought. Collection of additional information would have illuminated each of the areas discussed in this paper. Therefore, because of sample characteristics and other limits of the method, the rates reported here should be interpreted with some degree of caution.

Implications

Despite the limitations stated above, these data do provide important information to help program personnel prepare for gifted students in special programs. The relatively low rates of social/emotional difficulties and the normative nature of
the counseling issues suggest that programs need to be aware of such issues and prepared to provide for such students. However, based on this sample of gifted adolescent students in a residential program, programs may not need to expect high rates of social/emotional disorders.

This finding is important in that it adds to the body of work that suggests that gifted students do not experience social/emotional concerns at significantly higher rates than same-aged peers. The image of the highly anxious or overly perfectionistic gifted student should be replaced by the image of a gifted student who may experience sadness or worry, but who is likely to be as well adjusted as same-aged peers.

This conclusion also has implications for the selection and training of staff, as well as for the provision of other resources devoted to the well-being of gifted students. Clearly, education of staff is a critical issue. Staff must be familiar with the characteristics of normative adolescent development in order to provide a developmentally appropriate academic and social environment. Staff should be aware that a relatively small number of gifted students will have behavioral or psychological problems, and they should also receive training and guidance to address appropriately the small percentage of gifted students who reported some other exceptionality, such as physical disabilities (Yewchuk & Lupart, 2000), Asperger's syndrome (Neihart, 2000), or attention-deficit/hyperactivity disorder (Kaufmann & Castellanos, 2000), as well as gifted students who come from a variety of socioeconomic backgrounds (Borland & Wright, 2000).

The findings of this study also have implications for the development of program policy regarding the storage and dispensation of psychotropic (and other) medications. Given the importance of these psychotropic and counseling interventions, the program should have an articulated policy regarding appropriate provision of services. Policies regarding the safe storage and administration of the medications; monitoring of therapeutic benefits and side effects; communication with the student, family, and school staff; proper documentation; and self-administration of certain medications, such as insulin and inhalers, should be developed prior to students' arrival. Staff should be trained in regards to their responsibilities in the monitoring or dispensation of the medications. Concerns that parents may underreport the psychological and medication needs of their gifted students, staff must be especially vigilant in monitoring students' social/emotional behavior. Strict attention to all components of medical forms before the child's arrival (e.g., ensuring all required physician signatures) may decrease the incidence of students who do not have the records necessary to ensure their safety and well-being.

Finally, programs should develop policies and procedures regarding counseling services for gifted adolescents. Program coordinators may wish to explore the possibility of hiring a counselor or psychologist to provide full-time, part-time, or on-call services to students and staff. Providing parents information regarding the availability of services and emergency procedures may assist in the formulation of plans for students at risk for, or with histories of, mental health problems. By informing parents of the availability of services, parents and programs may be able to develop appropriate plans and contingencies and possibly avert crisis situations.

Recommendations for Further Study

This study provides useful information about the experience of academically gifted children and adolescents, but further study is warranted. The literature lacks sound, large-scale studies of the incidence and characteristics of social/emotional issues and their impact on the functioning of gifted students. To serve these students appropriately, educators must have sufficient information, such as student self-reports of emotional concerns and staff reports of student social difficulties within residential programs.

This study did not include a survey of staff perceptions of the frequency and intensity of student social/emotional concerns, so we do not know whether staff had accurate perceptions regarding the medical and psychological needs of the students. However, given the stereotypes about the characteristics of gifted students, staff misperceptions with regard to medications could foster a sense of urgency or concern regarding the incidence of emotional difficulties of program participants. This belief may result in a staff member's inaccurate classification of behaviors associated with normative adolescent development as a manifestation of a psychological problem. Assessing staff perceptions and knowledge of this area may be useful in designing staff training.

Our data suggest that the incidence of diagnosed mental health concerns was relatively low among a sample of gifted students attending a summer residential academic enrichment program. This research sheds light on the persistent myths about the characteristics of gifted students by suggesting that the students experienced mental health or adjustment concerns at levels similar to, not higher than, those observed in the general adolescent population. These results suggest that, in developing program policies and procedures, programs serving gifted students should be aware and should make staff aware of normative adolescent development. Accommodating students with mental health and behavioral concerns will be important, but program staff should expect that students with these problems will not be overly represented among the gifted. Addressing adjustment and mental health concerns of gifted students through appropriate planning and programming will lead to a more balanced and fulfilling educational experience.
References


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