BRIEF REPORT

Occupational Performance Needs of Adolescents in Alternative Education Programs

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OBJECTIVE. Alternative education programs are schools that accept students who have not been successful in the general education setting. This study focuses on developing a better understanding of the needs of students in three area alternative education schools.

METHODS. A needs assessment was created and distributed to the staff of each school regarding the problem areas of alternative education students. Data were analyzed descriptively.

RESULTS. Thirty-nine of 47 surveys were returned resulting in an overall return rate of 83%. The staff identified several potential deficit areas faced by the students in these alternative education programs. The most frequently identified deficits included poor time management skills, decreased healthy participation in hobbies and leisure activities, and a lack of healthy lifestyle behaviors. In addition, the staff reported that many students had cognitive deficits including reduced ability to follow multistep directions, impaired higher-level thinking skills, reduced attention span, and limited memory.

CONCLUSION. The results of this study are consistent with literature that suggests the students in alternative education settings may have underlying deficits that interfere with learning and produce misbehaviors. The alternative education programs should be further explored as a potential practice area for occupational therapists.


Alternative education programs provide learning opportunities for students who are at-risk for dropping out of or failing in the general education school setting (Katsiyannis & Williams, 1998; McGee, 2001). There are many different styles and variations of alternative education schools found in the United States (Fizzell, 1999). For the purposes of this study, alternative education can best be characterized as “educational programming separate from and alternative to the conventional high school and/or middle school. The core purpose of this growing segment of K-12 education is preventing at-risk adolescents (or recovering them) from dropping out of the K-12 system and completing the requirements for a high school diploma” (Michigan Department of Education, 1999, p. 2). The philosophy of most alternative education settings is different from that of the general education setting. Alternative schools build on the philosophy that they are working with, “the whole child, including the social, emotional, intellectual, physical, and spiritual and moral development realms of the students” (Michigan Department of Education, p. 2). Because of this philosophy, the subject matter and style of teaching is often different from the general education setting and classroom size may be significantly smaller (Katsiyannis & Williams).

The majority of the alternative school students enter an alternative education program upon the recommendations of the general education school, either because they were expelled, or because they had been labeled “at-risk” (Caram, 2001; Kallio & Sanders, 1999). At-risk students are students who display failing grades, truancy, low motivation, short attention span, low self-esteem, behavior, or discipline problems or negative encounters or both with
the juvenile courts (Caram; Kallio & Sanders). The environments or social situations of children may also affect whether or not they are more susceptible to being labeled “at-risk.” These students are disproportionately poor, disabled, bilingual, and from minority groups compared to the general population. In many cases, the students’ behaviors and difficulties with learning are manifestations of underlying cognitive and psychosocial deficits (Guerin & Denti, 1999; Weir, 1996).

According to alternative educators (Duke & Griedsdorn, 1999), many students in the alternative setting have problems in reading and learning. These problems may range from attention deficits to difficulties processing information. Students are also in need of learning how to appropriately deal with anger and conflict. Many families of students in alternative schools are dysfunctional and therefore students need counseling. The majority of the alternative settings do not employ a reading specialist, learning disabilities specialist, or guidance counselors although there is an apparent need for these services (Duke & Griedsdorn).

Despite recent legislation, there are no occupational therapists employed in any of the alternative education programs involved in this study. Since 1975, legislation by the federal government has mandated that occupational therapy services be a related service in public schools (Beamon, 1999). The 1997 Amendment to the Individuals With Disabilities Education Act (IDEA-PL 105-17) increased the scope of alternative education programs from the education of “at-risk” students to also include students who have disabilities and behaviors that need to be addressed outside of the general education setting (Rutherford & Quinn, 1999). It also stated that when students with disabilities are placed in alternative education programs, the student’s individualized education plan must be maintained. The student must be allowed to continue to benefit from services as indicated in the programs and also occupational therapy services. In addition, functional assessments of student skills should be conducted and multidisciplinary evaluation and treatment teams should be included in alternative education programs.

Literature on the effectiveness of alternative education is sparse. There are several articles referenced above that describe alternative education programs, but there are only a few studies that explore the effectiveness of such programs. Nichols and Steffy (1999) examined the effectiveness of an alternative education program on the motivation and self-esteem of a random sample of 32 students who successfully completed an urban alternative education program during the 1995–1996 school year. Students demonstrated some significant improvements in learning goals, self-regulation, peer self-esteem and school self-esteem. Students’ self-efficacy scores, however, decreased. The authors concluded that small class size may have been effective for improving self-regulation of behavior among these at-risk students.

Thurston (2002) explored the effectiveness of a “competency-based life-skills training program” for 10 groups of at-risk youth in a rural program. The program was not exclusively in an alternative education program, but included some groups run in the alternative schools. The participants were referred to the program because of socioeconomic status or behavioral problems or both. The program included 30 hours of workshops focused on communication skills, money management, dealing with conflict, assertiveness, team building, self-monitoring, study skills, problem-solving, getting and keeping a job, and self-reinforcement. Seventy-five percent of the students attended at least 8 of the 10 sessions. Participants from one group completed pre- and posttest self-assessments of social skills and three groups (n = 34) completed pre- and posttests self-assessments of self-esteem. The group that completed the social skills assessment demonstrated improved scores in cooperation and empathy. Two of the three groups who completed the assessment of self-esteem demonstrated “some improvements” in scores. The other group had a decrease in the average scores.

The aforementioned studies offer some limited support for the effectiveness of alternative education programs. The occupational needs of the students in these programs and the effectiveness of occupational therapy intervention have not been examined. A search on the topic of occupational therapy services in the alternative education setting in the medical, educational and occupational therapy literature offered nothing. This current study explores the needs of students in the alternative education setting in order to better understand the potential services that occupational therapy might offer.

Methods

Research Design

The purpose of this study was to acquire information regarding the needs of students in alternative education settings. A survey instrument was used to obtain the information from the staff of all three alternative education programs in a midwestern Midwestern town. The surveys were delivered to the three programs and distributed during staff meetings. Drop-off envelopes were left at each site and the surveys were retrieved after approximately 2 weeks. The study was approved by the human subjects institutional review board of the authors’ university and the administrators of the participating programs.

Participants

All educators, administrators, school counselors, and student support staff from the three area alternative education programs were solicited. These programs included a city, a suburban and a rural alternative education program located in the Midwestern United States. Twelve surveys were distributed to the city school and 9 were completed (75%). Twenty were distributed to the suburban school and 17 were completed (85%). Fifteen were distributed to the rural school and 13 were completed (87%).

The Survey Instrument

A study-specific survey was designed for the staff of three area alternative education programs. Because the Occupational Therapy Practice Framework: Domain and Process (American Occupational Therapy Association [AOTA], 2002) had not yet been developed, survey content was based on The American Occupational Therapy Association’s Uniform Terminology for Occupational Therapy—Third Edition
The questions, however, still fit within the occupational therapy domain of concern as defined in the *Occupational Therapy Practice Framework* including sections of the Performance in Areas of Occupation, Performance Skills, Performance Patterns and Client Factors (AOTA, 2002). Three experts—two for content and one for instrumentation—were consulted to help establish face validity. Following a pilot with an alternative education administrator, recommended changes resulted in 25 questions addressing occupational performance areas, performance skills, performance patterns and client factors.

For each of the 25 questions on the survey, alternative education staff were provided with a choice of five percentage ratings (0–20%, 20–40%, 40–60%, 60–80%, 80–100%) and asked to estimate the percentage of students who fit a particular described situation. For example, to access the perceptions of the staff regarding the students’ grooming and oral hygiene, the following question was asked: On average, how many of your students are well-groomed and practice good oral hygiene? The respondents then circled the percentage they felt best described the students in the program. The survey’s 25 questions took an estimated 10–15 minutes to complete.

Each survey was coded according to school district for the purpose of comparison and contrast amongst the city, suburban and rural setting. The Statistical Package for the Social Sciences, version 9 (SPSS, 1999) was used to calculate mean proportions and additional measures of central tendency.

**Results**

Surveys were distributed to all staff in the three area alternative schools. Thirty-nine of the 47 surveys were returned yielding a return rate of 83%. Although there was some slight variation in the percentage of problems noted among the three programs, the small n inhibited the researchers ability to make statistical comparisons. For example, a higher percentage of staff at the city school reported that the students had problems with violence (city = 33.3%, suburban = 10.5%, rural = 7.7%) and were in the program because of misbehaviors in the traditional school setting (city = 77.8%, suburban = 57.9%, rural = 46.2%). There was not, however, enough power to calculate potential statistical differences.

The only other two notable variations were the higher percentage of rural school staff that reported problems in nonverbal communication (rural = 61.5%, suburban = 31.6%, city = 33.4%) the lower percentage of city school staff that reported problems in socialization with peers (city = 55.6%, suburban = 84.2%, rural = 85.6%) and the lower percentage of suburban staff that reported problems with sequencing (suburban = 5.9%, city = 33.3%, rural = 33.3%). All other responses had a very similar pattern among the three programs.

Table 1 presents the combined responses of the three programs according to the percentage of staff that reported observed problems. Problems with time management skills were the most frequently reported with an average percentage of 86.9%. A lack of participation in healthy play and leisure activities was the second most frequently reported problem with an average combined percentage of 84.6% and problems maintaining healthy lifestyle behaviors was the third highest problem with an average percentage of 82%. Cognitive deficits including multitasking or following multiple step directions, higher-level thinking skills, such as problem solving, and retaining and recalling information were the 4th through 6th problems with 81.5%, 73.7% and 73.7% respectively. The other most frequently reported problems included coping skills or anger management (71.8%), attention span (69.3%), and poor self-concept (64.1%).

Visual impairments were the least frequently reported problem (2.7%). Violent behaviors in the classroom, although reported more frequently in the city school, had a relatively low rate of report from the three schools combined with an average of 15.4%. Proper grooming and hygiene were reported to be a problem by only 15.4% of the staff and fine motor skills were reported to be a student problem by only 18.9% of the staff. Sequencing problems also did not appear to be a major concern with only 21.6% of the staff reporting this to be an issue for the students.

**Discussion**

The primary focus of most of the studies that explore the needs of at-risk youth is on the environmental and educational factors

<table>
<thead>
<tr>
<th>Problem Areas</th>
<th>Percentage of Staff Reported as Problem</th>
</tr>
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<tbody>
<tr>
<td>1. Hygiene</td>
<td>15.4%</td>
</tr>
<tr>
<td>2. Initiation &amp; Termination</td>
<td>56.4%</td>
</tr>
<tr>
<td>3. Non-Verbal Communication</td>
<td>59.0%</td>
</tr>
<tr>
<td>4. Verbal Communication</td>
<td>58.9%</td>
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<tr>
<td>5. Health Maintenance</td>
<td>62.0%</td>
</tr>
<tr>
<td>6. Fine Motor</td>
<td>18.9%</td>
</tr>
<tr>
<td>7. Higher-level Thinking</td>
<td>73.7%</td>
</tr>
<tr>
<td>8. Socialization–Peers</td>
<td>23.1%</td>
</tr>
<tr>
<td>9. Self-Concept</td>
<td>64.1%</td>
</tr>
<tr>
<td>10. Self-Control</td>
<td>52.6%</td>
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<tr>
<td>11. Coping Skills–Anger Management</td>
<td>71.8%</td>
</tr>
<tr>
<td>12. Sequencing</td>
<td>21.6%</td>
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<tr>
<td>13. Short-Term Memory</td>
<td>30.7%</td>
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<tr>
<td>14. Long-Term Memory</td>
<td>73.7%</td>
</tr>
<tr>
<td>15. Attention Span</td>
<td>69.3%</td>
</tr>
<tr>
<td>16. Violence</td>
<td>15.4%</td>
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<tr>
<td>17. Learning</td>
<td>36.9%</td>
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<tr>
<td>18. Misbehavior</td>
<td>58.9%</td>
</tr>
<tr>
<td>19. Play &amp; Leisure</td>
<td>84.6%</td>
</tr>
<tr>
<td>20. Dressing</td>
<td>35.9%</td>
</tr>
<tr>
<td>21. Visual Impairments</td>
<td>2.7%</td>
</tr>
<tr>
<td>22. Socialization–Adults</td>
<td>30.8%</td>
</tr>
<tr>
<td>23. Time Management Skills</td>
<td>86.9%</td>
</tr>
<tr>
<td>24. Multitasking</td>
<td>81.5%</td>
</tr>
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</table>
that contribute to students’ problems (Alexander, Entwisle & Horsey, 1997; Thurston, 2002; Walker & Sprague, 1999). Many of the studies suggest changes in the environments of these students as a means for reducing at-risk status. When surveyed, however, the staff of the alternative education programs in this study identified many possible underlying deficits that could limit the academic success of these students.

According to the perceptions of the staff surveyed in this study, a major problem for the students in alternative education settings is executive cognitive functioning. Executive cognitive functioning includes processes such as, “planning, attentional control, abstract reasoning, self-monitoring, hypothesis generation, capacity to learn from experience, and motor control” (Aytaclar, Tarter, & Kirisci, 1999, p. 172). A reported 73.7% of the staff participants agreed that 60% to 100% of students in the alternative setting have problems with higher-level thinking skills. Multitasking and attaining multistep directions is another significant problem in the alternative schools, which falls under executive function. A total of 81.5% of the staff reported that only 0% to 20% of students have been successful in multitasking. This leaves the majority of students to struggle through activities that require them to attend to many separate tasks or multiple instructions. The percentage of students who practice time management skills is also low. Only 0% to 20% of students successfully practice these skills according to 86.9% of the staff leaving the majority of students deficient in this area.

Along with problems in executive functioning, students reportedly have problems engaging in healthy lifestyle behaviors. Eighty-two percent of alternative education staff reported that 0% to 20% of students practice healthy lifestyle behaviors. This means that the majority of students are not participating in activities such as healthy nutrition or daily physical fitness, which could be very beneficial to them. Students in the alternative education setting also fail to engage in healthy interests and hobbies or play and leisure. A total of 84.6% of the staff reported that 0% to 20% of students are successful in play and leisure and display healthy interests and hobbies. The majority of students are unable to successfully engage in play and leisure or have not been introduced to the concept.

The results of this study support the literature that discussed possible underlying deficits for at-risk students enrolled in alternative education programs (Caram, 2001; Duke & Griedsdorn, 1999; Guerin & Denti, 1999; Weir, 1996). This study indicates that the majority of these perceived deficits fall into the categories of executive functions, healthy lifestyle behavior, play and leisure, attention span, memory, and coping skills, which also include stress management and anger management skills. These deficits fit the profile of people suffering from underlying neurological deficits such as those caused by brain injury. Conti (2000) describes the cognitive deficits associated with brain injury as decreased attention, memory, higher-level cognitive skills, such as executive functions, time management, and regulation of personal behavior. She further explains that the behavioral problems caused by the higher-level cognitive deficits are a major concern. The results of this study indicate that 60% or more of the students were placed in the alternative education setting because of behavior problems. The behavioral problems and presenting cognitive deficits are potential underlying causes for difficulty participating in a general education setting.

The deficits presented by these students fall within the domain of practice in occupational therapy, which is a service that according to legislation should be available to students in the alternative schools. The three area schools that were surveyed currently have not employed occupational therapists. The results of this study indicate a potential need for occupational therapy services in the alternative education settings to address the deficits that these students are experiencing.

The results of this study rely on the assessments of educators, counselors, and administrators in alternative education programs. Problems, such as coordination and visual processing, might be better assessed using formal evaluations in an individual setting. Surveying the students to get their input and perspective would also enhance the depth of the study and help researchers and the community understand the opinions and thoughts on what they feel is important and what needs they feel are not being met.

The study was also limited to one geographical region. Further research that compares these results to other regions would expand the knowledge of the population of students in alternative education programs. Although the response rate was high, the sample size is small. Only descriptive statistics were used. A larger sample size would allow for comparisons among types of settings.

Some authors have explored the problems faced by at-risk students in rural (Thurston, 2002) and urban (Alexander, Entwisle, & Horsey, 1997) settings. A larger study that compares the needs of students in different settings would also further our understanding of the various needs of this population.

Occupational therapy brings a unique perspective to the school system. Occupational therapists not only focus on the context and activity demands of the setting, but also on the client factors, performance skills, performance patterns, and performance in areas of occupation (AOTA, 2002). This unique view and service could potentially benefit students with deficits in occupational performance. The effectiveness of occupational therapy intervention with at-risk students in the alternative education setting needs to be examined.

Conclusion

According to the staff surveyed in this study, the students enrolled in the alternative education programs have deficits that could interfere with the learning process. The reported deficits fall within the occupational therapy domain of concern. No occupational therapists are employed in the three programs that were assessed.

Students who are more likely to need services due to underlying deficits, disabilities, or socioeconomic disadvantage may also be more likely to attend alternative education programs where there are no services. Many students who are at-risk for dropping out of general education programs are able to successfully complete secondary education in an alternative education program. Being enrolled in one of
these programs, however, may limit the student’s opportunity to participate in essential services that could greatly enhance the student’s ability to be successful during school and after graduation. The findings of this study suggest that the alternative education systems should be explored as a potential new practice area for occupational therapists. Occupational therapists could potentially help empower these students with the skills needed not only to be successful in school, but also to be successful in a lifetime of productive contributions to society.

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References